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Comparing Leadership in Effective and Less Effective High Schools in Jamaica

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# **ICSEI**

Connecting teachers, schools and systems: Creating the conditions for effective learning



# **Parallel Session 1**

Wednesday 6 January 2016

15.30-17.30

## LDP Symposium

Title: Leading, learning and aligning: Keys to sustaining school improvement

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 152

Session: Parallel Session 1

Session Date and Time: 6 January 2016 15.30-17.30

Argyll Suite 1 Location:

Author/Speaker: Joan Conway

Company/Organisation: University of Southern Queensland

Co-Authors: Lindy Abawi

> **Dorothy Andrews** Cheryl Bauman Shauna Petersen

Presenting Author: Joan Conway

## Overview of symposium

This symposium explores the key concepts that enable sustainability of successful whole school improvement. Sustainability, the outcome of capacity building processes, is dependent on the development of the school community to be innovative and creative, to share and work towards aspirational goals ensuring a futures orientation. Sustainability, is also a value adding process, where the school recognises the importance of relational leadership, a key component of sustaining school success. The Leadership Research International (LRI) team at the University of Southern Queensland posits that when school communities commit to the creation and development of culturally and contextually relevant systems and processes, then sustainability through ongoing learning becomes a reality. Our current understanding, based on individual and collaborative research into school improvement processes for over a decade, is that sustainability for ongoing organisational alignment requires commitment and leadership to the capacity building of Social, Intellectual and Organisational Capital. Papers in this symposium map three keys to building capacity for sustainable school improvement as leading, learning and aligning.

Keys to Leading -the importance of social capital for leading with collective responsibility and collaborative individualism as principals and teacher leaders define their purpose (organisational capital) for whole school improvement.

Paper 1: Sustaining school improvement through Cultural-Relational Leadership the relational nature of leadership for leading learning: "School cultures...purposefully created by distributed leadership efforts that outlast the current leaders." (Bauman)

Paper 2: A Teacher Leader Capacity Building Model rethinking the importance of sustaining leadership processes: "building teacher leader capacity across all levels of an education community." (Petersen)

Keys to Learning - professional learning underpins the success of building intellectual and organisational capital as individuals and the collective create, develop and implement defined practices of quality teaching and learning. One paper presents the key to learning as deepening the schoolwide pedagogical understandings and practices.

Paper 3: 3-Dimensional Pedagogy: A New Professionalism in Educational Contexts embedding innovative and creative processes through a pedagogical framework: "acknowledgement of teachers as professionals capable of making and actioning sound decisions." (Andrews & Abawi)

Keys to aligning - culture building and the role of language are imperatives for building organisational capital enabling the aligning of all elements contributing to the success of whole school improvement.

Paper 4: The language of school alignment: Contextualised meaning systems in action the glue that aligns cognitive and structural processes in an organisation: "a contextually created meaning system is a powerful force creating long term alignment and sustainable improvement." (Abawi)

In conclusion, this symposium presents our understanding of school alignment as the building of social, intellectual and organisational capital, where the relationship of capacity building to sustainability requires deliberate and ongoing processes of leading, learning and aligning. The challenge is set for cultural knowledge and ongoing narrative to build capacity for the endurance of systems and processes that continually respond to the need for diversity and overall success. This team posits the call for heightened personal and professional ethic, responsive individual and organisational mindset, and futuristic agency for sustainable school improvement.

## PAPER 1 ABSTRACT

Sustaining School Improvement Through Cultural-Relational Leadership, Dr Cheryl Bauman, Leadership Research International, University of Southern Queensland

This paper draws from a larger study (Bauman, 2014) that explored the interconnectedness between job satisfaction of elementary teachers, school culture and student achievement in two high performing elementary schools in Canada. The focus of this paper is that school-wide approaches emphasizing lasting improvement involve sustainable leadership that encompasses the creation and on-going evolution of a culture of belonging, expectations, learning, and advocacy. Sustainable educational leadership preserves and develops deep learning for all that spreads and lasts. Hargreaves and Fink (2006) espouse that sustained school improvement is enhanced through the collective beliefs and values teacher leaders and principals hold. In the study behind this paper, teachers and principals believed that through their autonomous and collaborative planning efforts and purposeful practices, they could make a positive difference in the lives of their students. Together they believed that all students could achieve and they demonstrated this belief by continually planning and implementing a school-wide approach to advance long-term lasting school improvement.

School cultures can be purposefully created by distributed leadership efforts that outlast the current leaders. Sustained improvements must not rely on individual efforts or personalities, but rather on individuals making a collective choice to dynamically move school improvement continuously forward. Analysis of the data in the larger study revealed that teachers and principals were intrinsically motivated to improve their practices to further sustain lasting student learning. In order to be sustainable, the leadership was distributed through the school's professional community so others could carry the torch after the principal and/or teachers were gone. Illustrated in this paper is an understanding that in order to create lasting, meaningful improvements in student learning for sustained school improvement, effective teacher leaders combine both autonomy and collaboration in their work settings. The relationship between autonomy and collaboration is dynamic and circular in nature, and collaborative roles actually enriched the autonomous practice in the classroom that engage students academically, socially and emotionally. Further, the importance of collective action and distributed (parallel) leadership on behalf of both teachers and principals in order to sustain lasting change and to further enhance student learning outcome is highlighted. Both the elementary teachers and the principals were the collective forces that collaboratively led meaningful, long-term changes through sustainability in their leadership practices. This collective action captures the relational nature of leadership in a model titled Cultural-Relational Leadership (CRL) (Bauman, 2014).

## **PAPER 2 ABSTRACT**

A Teacher Leader Capacity Building Model, Shauna Petersen, University of Southern Queensland

Leadership for sustainable school improvement is at the forefront of current educational thinking and it has long been acknowledged by researchers worldwide that engaging teacher leaders in the process is paramount. Despite the evidence in the literature, leadership, and particularly the development of teacher leadership is rarely prioritised in government and system efforts to improve schools and student results. Schools face continual challenges and increased pressure to improve results via external drivers for reform. Yet the research clearly shows that deep change is derived from internal commitment - in schools, this means engaging teacher leaders. In light of these challenges, a renewed focus on teacher leadership appears very timely in building the capacity of the profession. Fostering teacher leadership potential has the

power to improve the overall professional capacity of the school by empowering teacher leaders to build their personal professional selves in addition to working collaboratively on organisation-wide solutions for improvement. It is a potentially powerful organisational resource that is not widely recognised and currently underutilised in Australian education systems. The problem remains with first, raising awareness about the power of teacher leadership as an organisational resource and second, how schools and systems can effectively implement sustainable leadership practice and engage teacher leaders in the process.

This paper reports on the findings of a doctoral study of the lived experiences of teacher leaders that had been through a school improvement process in Australian education systems. The study found that where teacher leaders were empowered, they developed their personal leadership capacity in conjunction with contributing to building organisational capacity. Leadership is a capacity building process, therefore if capacity building is to occur at the school and system level, it is clear that there must be alignment in thinking about leadership and a model for building teacher leader capacity across all levels of an education community. A key outcome of the study was the development of a model for teacher leader capacity building, highlighting three key dimensions - the personal dimension, which is grounded in one's talents and capabilities and what one thinks, believes and feels about oneself as a teacher leader; the collaborative dimension, which is grounded in a belief that capacity building is a socially interdependent and collaborative effort; and the collective intelligence dimension, which provides a focus on collective engagement in the pursuit of organisation-wide solutions for the evolvement of new pedagogical knowledge (Petersen, 2015). This paper presents The Teacher Leader Capacity Building model, enabling participants to consider the implications of the model for their educational contexts.

## **PAPER 3 ABSTRACT**

3Dimensional Pedagogy: A New Professionalism in Educational Contexts, Dorothy Andrews and Lindy-Anne Abawi, University of Southern Queensland

Teachers should no longer be working in isolation within the four walls of their classroom. A new professionalism has emerged whereby collaborative individualism is the key to effectively meeting the needs of diverse student cohorts. Whole school improvement processes such as those used in the Innovative Designs for Enhancing Achievement in Schools (IDEAS) facilitate collective engagement, enabling teachers to refine and share individual strengths as well as build capacity in areas of challenge. This type of collaborative individualism is changing the look, feel and sound of educational workplaces in many Australian schools. A 3Dimensional pedagogy evolves where teachers weave personal pedagogical beliefs and authoritative pedagogical frameworks with schoolwide pedagogical principles (SWP). These SWP's are derived by staff as a sign of their collective commitment to contextualised high yield teaching and learning practices. The focus is on meeting the needs of 'our students' in 'our context'. The SWP framework is clearly aligned to a school's vision for the future. Within the school there is a sense of energy and commitment to shared school goals linked to the enabling all students to reach their full potential regardless of their diverse learning strengths and challenges. The micro-critiquing of practice through rigorous professional discussions targeted on specific areas of need, as identified through data analysis and the sharing of anecdotal records, is regular and accepted as vital to improving student outcomes. A strong professional learning community or communities thrive. At the leadership level there is acknowledgement of teachers as professionals capable of making and actioning sound decisions. Leaders build the capacity of their staff through targeted support which translates into staff being in control of their environment. Teacher leadership is valued and consciously built. Such teacher autonomy and agency translates into teachers being prepared to take risks and try new pedagogical approaches in order to enhance learning outcomes. Teachers willingly seek and engage in further learning and freely share what works for them. Pedagogical practices are constantly refined and principles revisited. Drawn from research in Australian schools, this paper provides evidence of this new professionalism in action and how school leaders and teachers demonstrate micropedagogical deepening in action. This action provides consistency and shared understandings that enhance systemic directions and maximise student learning. The concept of micro-pedagogical deepening emerged from research conducted by the Leadership Research International team into pedagogical development, the critiquing of contextualised practice and the defining of shared approaches to practice. Practice which might appear in many forms - from shared language around literacy teaching, assessment and moderation; broadly used tools such as higher order thinking strategies; comprehensive discipline knowledge; commonly accepted editing practices and symbolism; down to the shared language of behaviour management processes and expectations. Teachers demonstrating this new professionalism find their work meaningful at a deep and professional level, both as individuals and as team members.

#### **PAPER 4 ABSTRACT**

The language of school alignment: Contextualised meaning systems in action, Lindy-Anne Abawi, University of Southern Queensland

Research conducted within numerous Australian schools indicate that a contextually created meaning system is a powerful force creating long term alignment and sustainable improvement. A school with an individualised meaning system has a strong cultural identity capable of thriving throughout cycles of change. Such a meaning system does not happen by chance. It is the outcome of a process whereby personal and contextualised pedagogical principles are articulated, authoritative pedagogies are explored via deep professional conversations, and collective commitment to a vision and set of values developed by the school community becomes well established. Several school stories will be shared in this paper. All schools have undertaken the school revitalisation process called Innovative Designs for Enhancing Achievement in Schools (IDEAS) and have journeyed through an initial phase of sharing histories, future aspirations and contextualising priorities identified by varied data sets. Pedagogical sharing and the identification and celebration of quality teaching and learning begins with teachers being asked to clearly articulate 'successful' teaching episodes and through discussion draw out from these contextually effective principles of practice. This valuing of teacher professionalism appears to be the catalyst for ongoing collaborative discussion which when articulated and refined becomes the essence of a set of schoolwide pedagogical principles (SWP). The vision, values and SWP provide the framework for action and form a shared contextually significant meta-language. Shared understanding of focus and intent heard daily reinforce and reorient the school community as a whole and as a result consistent and coherent mental maps that guide the teaching and learning journey evolve. These mental maps are used consciously and unconsciously to align ways of working both structural and cognitive ensuring sustainability. A school leadership team intent on building and sustaining a strong learning community must consciously take note of the language-in-use within the school's classrooms, staffroom/s, offices and community meeting spaces, to note whether these spaces are just physical spaces or places where relational, cognitive and pedagogical connections occur. From within each of the data sets will be shared stories, reflections and insights as recounted by a wide range of participants - staff, students, parents, and visitors to the various campuses. For shared understandings and therefore continued alignment to remain induction programs are needed, as is the articulation of ongoing school narratives. Research findings indicate that visual and verbal metaphors may promote such knowledge assimilation. The mental images work as signposts within the mental mapping of practice and enhance cognitive and structural connections by providing shortcuts which assist in the ongoing generation of shared meaning and enhancing pedagogical practice. Meaning making, 'language-in-use' and culture are entwined and organic allowing for enhancement over time. Such a language when embedded in school documents, classroom practice and administrative procedures is the elusive key to both organisational alignment and "sustainability' of school improvement.

## RCEL Roundtable

Title: Engaged Learning in Early Adolescence: A cross-cultural examination of the paradigm shifts in

Germany, Finland and Canada that have strengthened student engagement during the middle

years of schooling.

Topic: Researching the conditions for effective learning

Abstract ID: 2938

Session: Parallel Session 1

Wednesday 6 January 15.30-17.00 Session Date and Time:

Location: Argyll Suite 2

Author/Speaker: Brandy Yee

Company/Organisation: Calgary Board of Education

Brandy Yee, Anne Sliwka, Matti Rautiainen Co-Authors:

Presenting Author: Brandy Yee

Presentation Format: Round Table Discussion

## Abstract

"Engaged Learning in Early Adolescence": A cross-cultural examination of the paradigm shifts in Germany, Finland and Canada that have strengthened student engagement during the middle years of schooling Dr. Brandy Yee - Calgary Board of Education/Canada; Prof. Dr. Anne Sliwka, University of Heidelberg/Germany and Prof. Dr. Matti Rautiainen, University of Jyväskylä/Finland

With much attention worldwide currently focused on the early years of learning along with supporting students as they work towards high school completion, it is the early adolescent leaner age 11 to 15 and the middle years of learning that are often overlooked as large education systems endeavour to bolster student achievement. An abundance of current research highlights a concerning decline of student engagement in and connectedness with their learning beginning at age 11 (Association for Middle Level Education, 2010; Balfanz, 2009; Centre for Collaborative Education, 2003; Manitoba Education, 2008; McCreary Centre Society, 2009; National Association of Secondary School Principals, 2006; OISE, 2008; Rumble & Aspland, 2009; Steinberg, 2014; Willms, Friesen & Milton, 2009; Wormeli, 2011). This same research also underscores the importance of the middle years of learning in putting early adolescent learners on the path to success in subsequent grades in school, post-secondary education, career futures and the development of their overall well-being. During this round table session, a comparative approach will be utilized to examine and foster discussion related to the major paradigm shifts underway in Germany, Finland and Canada designed to target the early adolescent learner, the pedagogical methods employed by teachers for that age group, along with the organisation of the learning environments in which their formal education takes place. So far, very few studies have examined this phenomenon within a contemporary international context; further, none can be found that have crossed linguistic borders, where cultural beliefs and values connected to education have a significant impact on the emerging narratives contributing to the distinct national systems of education. Focusing on the conference strand "Researching the conditions for effective learning," this sessions will explore how curriculum reform, inclusive philosophies, instructional design and assessment practices, fostering student voice and choice, and creating new ways to engage the student community within each country context are supporting the conditions in which effective middle years learning can unfold. Finally, "next practices" and emerging evidence on these from each country will be shared in order to contribute to what is believed to be a necessary on-going discourse concerning early adolescent learners and the middle years of schooling.

## TE Innovate! Session

Title: IJburg College Amsterdam: How to attract quality teachers for an innovative professional

learning community?

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3274

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 17.00-17.30

Location: Argyll Suite 2

Author/Speaker: Pieternel de Bie

Company/Organisation: IJburg College

Co-Authors: Freek Wevers

Presenting Author: Pieternel de Bie

Presentation Method: Innovate!

## **Abstract**

## Introduction

The main objective of IJburg College is that all students learn as much as possible, about themselves and the world around them, and that every student leaves with the highest possible individual qualification. This ambitious mission requires high quality education. We put this into practice by working project-based (thematically), with a strong adult-world connection. This means that teachers from various subjects are expected to work together intensively to create coherence in the curriculum. And as we do not work with school books, all of our teachers are designers, creating project-based, digital materials. These standards subsequently attract ambitious, pro-active and enthusiastic educators. It is this body of high quality teachers that allows our mission to come to life and be realized through our students. IJburg College aims to be a 'school that learns' in order to "serve students who will come of age in a postindustrial and increasingly connected world" (Senge et al, 2012, p. 9); a school where "everyone, young and old, [will] continuously develop and grow in each other's company" (p. 4). Becoming a part of our learning community starts already during our hiring process, at the center of which is an interactive assessment evening for potential candidates. 60 candidates participated in our most recent assessment; 35 new teachers started at IJburg College in September 2015.

## Area of practice

During the Innovate! session we will explore one of the core activities of this assessment evening: the group assessment. To start, candidates are grouped randomly, each group containing teachers of various subjects as well as those applying for staff or management positions. The facilitator (one of our senior-teachers or team managers) explains our project-based education system and design process. Central to this is collaboration between various subjects teaching within the context of one theme (project) for the duration of seven weeks. Projects are introduced to students through a few key questions. At the end of each project students complete a complex assignment in which they answer these questions, with elements from all participating subjects. The candidates are asked to design such an assignment for a particular theme together, bringing their perspective subjects and standards to the table and seeking connections to the other subjects.

The goal of this activity is to determine candidate potential by looking at e.g. their ability to cooperate with others, their leadership skills, their ability to think creatively and problem solve, and their ability to connect their own subject to a theme. The session aims to show a best practice for how to attract and select quality teachers.

## Format & approaches

- 1. Brief introduction to the assessment evening and session activity (5 min.)
- 2. Participants are divided into diverse groups and asked to design an assignment (15 min.)
- 3. Groups present their findings to each other (5 min.)
- 4. The purpose of the group assessment is discussed (5 min.)

At the end of the session participants will be presented with a handout in which all aspects of our assessment evening are outlined.

# **PTM Symposium**

Title: Nordic Superintendents: Agents in a Broken chain

Topic: Policy translations and mistranslations

Abstract ID: 3011

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Argyll Suite 3

Author/Speaker: Lejf Moos

Company/Organisation: Danish School of Education, Aarhus University

Co-Authors: Chair: John MacBeath

Presenting Author: Lejf Moos

Presentation Method: Symposium

## Symposium overview

A Nordic research team has been researching school superintendence governance in a cross-cultural perspective, drawing on surveys of school superintendents in the Nordic Countries from 2008-2012. The overarching research question that has guided our studies is: How do Nordic superintendents, the political boards and school leaders see the function and the structure, the challenges and opportunities, at this middle-municipal level, in times when the political and practical context and culture is changing and being shaped with trans-national inspiration and national and local interpretations. The straight chain of governance – from state to municipality to schools – is still a powerful discourse and model, but in reality is often broken, thus leaving superintendents, with new challenges and opportunities as active agents in practice. However, traditional forms of governance are in the process of transition, in part due to transnational influences. The focus of the project is on superintendents, seen from their own perspective, and from political boards' and school leaders' perspective. On the basis of the surveys we wrote country reports and, on that basis, thematic papers that look more closely into similarities and differences between the Nordic systems and the modes of translation that pertain in each country.

In order to capture superintendents' relations, functions and positions, we drew on several theories: New institutionalism, network governance, theory of translation, power and governance, social technologies and sense-making, as well as theories as to relations between politicians and administrators. In essence we found that distinctions among policy makers, administrators and professionals are being blurred, that network governance, emphasising meta-governance and selfgovernance are gradually reformulating the chain of governance. School superintendents are at the heart of the governance of municipal education, whether this is seen as a chain or networks of governance. Because educational governance and structures in the Nordic countries are currently undergoing much restructuring and reconceptualisation at the hands of national governments influenced by transnational agencies, the research project presented here investigates the functions and relations of school superintendents in four Nordic countries: Denmark, Finland, Norway and Sweden. We are able to observe that the most influential social technologies in educational leadership and governance are evidence-based decisions, best practices, governing by indicators, standards and numbers, accreditations and certifications. New Public Management (NPM) has, therefore, has acquired a revised nomenclature- New Public Governance (NPG). We see the same tendency at the very core of education: prescribing national or international indicators, standards and procedures such as 'best practice', shifting the focus from education and teaching to 'effective' learning as measured by international tests, bypassing any discussion of the purpose of activities, nor of the circumstances and relations in which education and learning take place.

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A book on this project: Moos, L., Nihlfors, E. and Paulsen, J.M.: Nordic Superintendents: Agents in a Broken Chain, is forthcoming on Springer Book series on Educational Governance

## TE Innovate! Session

Title: Articulating practice through provenance

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3171

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 17.00-17.30

Location: Argyll Suite 3

Author/Speaker: Geof Hill

Company/Organisation: Birmingham City University

Presenting Author: Geof Hill

Presentation Method: Innovate!

## **Abstract**

Professional practice literature has acknowledged the worth of practitioners inquiring into and critically reflecting on their professional practice (Brookfield, 1998; Kemmis, 2010). This approach to inquiry is often referred to as practitioner research (Stenhouse, 1981) and its importance referred to in the professional practice inquiry agenda dubbed the 'practice-turn' (Schatzki, Cetina and Savigny, 2001). Although 'practice turn' was initially linked to organisational ethnographic studies, it recognises the need to build a broad range of methodological tools or investigative practices to enable inquirers to work within the emergent practice lens and to develop theory about that lens (Nicolini, 2009, 196). The agenda for more practicecentred approaches to investigating professional practice generated a number of methodologies, including Practice-led inquiry (Gray, 1996) a particularly challenging form of practitioner research distinguished from other forms of practitioner research by its starting or initiating the inquiry with the inquirer's own practice. It can be difficult for a practitioner to describe their practice, and more so to describe it in a way as to open it up for interrogation and inquiry. This innovate presentation explores the notion of Provenance and presents it as a strategy within practice-led inquiry to enable practitioners to articulate their practice. The term provenance has been used to describe the history of a given artefact and the artisans who have informed its making. It has also been used to refer to food growth and sourcing in agricultural production and food preparation. This presentation proposes migration of the term into practice-led inquiry to describe a process by which a professional identifies critical incidents and perhaps literature that have informed their own development of a practice (Finlay, 2002; Davies, 2008; Hill, 2014; Hill and Lloyd, 2015). Provenance thus creates a starting point for practitioner inquiry, creating a framework for interrogating one's own practice and/or soliciting other practitioners' professional stories to build meaning about how a given practice is understood and undertaken.

## **Process:**

The presentation will involve:

- 1. A brief introduction to provenance
- 2. A reflective exercise in which participants identify critical incidents in the development of their professional practice.
- 3. A pair conversation in which their provenance is interrogated by a listener.
- 4. Revision of provenance
- 5. Discussion of the value of such an exercise for professionals undertaking practice-led inquiry.

## **LDP Symposium**

Title: Leading School and System Improvement: A Comparative Analysis

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3138

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 15.30-17.00

Location: Castle Suite 1

Professor Alma Harris Author/Speaker:

Company/Organisation: University of Malaya

Co-Authors: Dr Michelle Jones

> Dr Lyn Sharratt Dr Karen Edge

Professor Carol Campbell

Louisa Rennie Gillian Hamilton

Pamela Osmond-Johnson

Presenting Author: Alma Harris

Presentation Method: Symposium

Chair: Louisa Rennie, Director Principals Australia Institute (PAI)

**Discussant:** Gillian Hamilton, CEO, SCEL

## Abstract

This symposium relates to conference sub-theme 2 (leadership development and practice to build sustained improvement) and will provide contemporary research evidence about improving school and system improvement from different contexts and countries. It will outline empirical findings about leadership and school, system performance by taking a comparative approach. All the papers in the symposium take a comparative perspective. The symposium will outline new evidence about leadership for school and system improvement. The scholarly significance of this symposium resides in the fact that it integrates contemporary comparative evidence about teaching and leading in very different education systems and provides alternative insights into the way in which improvement is understood and enacted. This session will include a combination of short, structured paper presentations. This will be followed by a facilitated discussion focused firstly, on making connections between the presentations and secondly, addressing the overarching question 'what are the implications for our current understanding of school effectiveness and school improvement from large scale comparative studies?'

## PAPER 1 ABSTRACT

Comparing Leadership: A Study of 7 Systems, Professor Alma Harris & Dr Michelle Jones, University of Malaya

The paper highlights the findings from a contemporary, comparative analysis of the approaches to building the leadership capacity for improvement in 7 very different education systems (Australia, England, Indonesia, Hong Kong, Malaysia, Russia and Singapore).

## **PAPER 2 ABSTRACT**

The future aspirations of Generation X principals in London, New York and Toronto: Exploring the relationship between retention system-level policies and practices that enhance commitment, Karen Edge Jessica Carter, Katherine Descours, Donalda Chumney, Kathleen Trong Drucker.

The paper initially provides an overview of the GCL project's conceptual framework and research approach. Second, we review the intersecting bodies of research and thinking that influenced the overall study including Global Cities, urban education, school leadership and generational theory. Third, we examine the overall social and educational policy context in each city with specific attention to the system-level structures and strategies with oversight and/or power over leadership recruitment and retention.

## **PAPER 3 ABSTRACT:**

System Leadership Matters! Dr Lyn Sharratt

The paper is a summary of recent research conducted across the US, Australia, Chile and Canada, that sought to answer the question "what leadership skills are needed to move an educational system from Good to Great to Innovate?" (Sharratt & Harild, 2015). Details from the findings will be shared on moving from a traditional leadership stance to that of becoming an Innovation Leader at the system level.

### **PAPER 4 ABSTRACT**

Systems for a learning profession: supporting teachers as educators, learners, and leaders for educational improvement, Carol Campbell & Pamela Osmond-Johnson.

This paper draws on emerging findings from an International Study of Teacher Policy involving research in Australia (New South Wales, Victoria), Canada (Alberta, Ontario), China (Hong Kong, Shanghai), Finland and Singapore. The current study identifies the importance of supporting teachers from their initial entry into teacher training and throughout their career and professional development.

## **TE Symposium**

Title: Improving the quality of teaching and learning by enhancing teacher professionalism: an

international perspective of emerging good practice in professional bodies

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3460

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30 -17.00

Location: Castle Suite 2

Author/Speaker: Anthony Finn

Company/Organisation: University of Glasgow

Co-Authors: Peter Lind

Presenting Author: Anthony Finn

Presentation Method: Symposium

## Symposium Overview

Although teaching is regularly referred to as a "profession", there is, as yet, limited agreement about what constitutes professionalism in practice. Across the world there are different approaches to:

- recruitment and professional qualifications of teachers
- induction of teachers and ongoing development of their skills, knowledge and professionalism.
- regulation and monitoring of teachers' practice and conduct

High status "professionals" generally have a secure and consistent understanding of professional expectations. Their status is built on high standards of qualification, dependence on research to develop and maintain good practice and agreement on the accountability of practice. Doctors and lawyers, for example, are professionally accountable but enjoy high esteem, trust and influence. Who would argue that doctors need not be appropriately qualified? Should this not also be the case for teachers? If the quality of student learning depends on the quality of our teachers, what steps are being taken to secure and maintain high professional standards for teachers? Is there an accepted understanding of what makes teaching "professional" and of how that standard can be promoted and safeguarded?

For example, although there is emerging evidence of countries (e.g. Finland, Ireland) developing Masters level programmes for teachers, a wide range of entry routes to teaching remains in other countries. This symposium looks at the work of professional bodies and teaching regulators in different countries. It offers contrasting perspectives on matters of importance to the quality of teaching and learning; and it shows the potential of professional bodies to develop higher standards while also securing levels of accountability which are relevant to the needs of society and fair and appropriate for practitioners. The symposium will also highlight the links between professional bodies and governments, varying from full independence (Scotland) to partnership. Presenters represent established professional regulatory bodies- General Teaching Council for Scotland (GTCS), Teaching Council Ireland (TCI), Ontario College of Teachers (OCT), Teachers Registration Board of South Australia (TRBSA). Individually and collectively, they play a central role in the development and delivery of the reform agenda for teaching. They are also supportive of system development and grounded in a commitment to sustainable school effectiveness which guarantees improved outcomes for young people. By exploring different approaches and the tensions which underpin policy and practice, this symposium will interrogate some key issues facing teachers and teaching in the 21st Century. In particular, it will provide an informed overview of work undertaken in different countries to develop the conference sub-theme Teacher effectiveness, teacher quality and professional learning. The symposium will include short inputs from each presenter, providing a focused overview of issues and questions arising from their contexts; and a panel discussion allowing optimal interaction with those attending. Prof. Anthony Finn, University of Glasgow/former CEO of GTCS, will introduce and chair the symposium.

## PAPER 1 ABSTRACT

Enhancing Teacher Professionalism: The Scottish Teacher Journey, Ken Muir, CEO, GTC Scotland

The General Teaching Council for Scotland is the independent professional body that promotes and regulates the teaching profession in Scotland. As such, it plays a key role in developing the professionalism of teachers in Scotland as they journey through the early phase of Initial Teacher Education, into their probationary period, advancing their knowledge and pedagogical expertise as their career progresses, and onto a leadership and management phase for those in, or aspiring to, formal leadership roles. At the heart of this journey is a suite of Professional Standards that were first developed in the 1990s and revised in 2013 following the publication of Graham Donaldson's report "Teaching Scotland's Future". The suite of Standards (Registration; Career-Long Professional Learning; and Leadership and Management) is underpinned by the themes of values, sustainability and leadership. They have been designed to provide a continuum for career-long learning and professional development as well as provide a framework for self-evaluation and reflection. The Donaldson report affirmed the need for a reinvigorated approach to 21st century teacher professionalism, recognising the importance of teacher responsibility for, and ownership of, their professional learning. In Scotland, GTC Scotland works in close partnership with Scottish Government, professional associations, universities and other national bodies to create and support the infrastructure to allow this reform to happen.

Alongside the Professional Standards, the paper will consider some of the key elements of that infrastructure which GTC Scotland either oversees or in which it plays a key role, including:

- Professional Update a five-year sign off by GTC Scotland for all teachers based on professional review and development focused on outcomes for a teacher's own development as well as aiming to improve outcomes for learners;
- Teacher Induction Scheme a guaranteed one-year full-time probationer post to every eligible student graduating with a teaching qualification from one of Scotland's universities;
- Professional Recognition the opportunity for a teacher to be recognised as an accomplished practitioner in a particular area, whose practice is underpinned by ongoing reflective enquiry; and National E-Portfolio - a "one-stop shop" by which teachers can document their professional learning, record its outcomes and access professional learning opportunities.

## PAPER 2 ABSTRACT

Realising the nexus: Connecting teaching, learning and research, Tomás O'Ruairc, Director, Teaching Council, Ireland

There have been a number of developments in teaching and learning in Ireland in the last 3-5 years that are seeking to bring a singular strategic focus to bear on enhancing connections between teaching, learning and research. They have taken place in a broader context of policy reform driven by both national and international factors. This presentation will give an overview of these developments, setting out their contribution to realising the vision of a sustainable, self-sustaining continuum of teacher education that has the quality of learners' experiences at its core. These developments will include:

- The review and accreditation of 69 programmes of Initial Teacher Education, covering primary, post-primary and further education.
- · The piloting and growth of a richer and more supportive process of induction and probation for Newly Qualified Teachers, Droichead [the Gaelic word for bridge].
- The publication of a draft framework for teachers' learning (CPD), Cosán [Gaelic for pathway] which is due for finalisation by March 2016.
- At time of writing, the anticipated commencement of Fitness to Teach processes before the end of 2015.
- Research Alive! a joint venture with the National Council for Curriculum and Assessment (NCCA ncca.ie) and the Centre for Effective Services (CES - effectiveservices.org). This process seeks to support the teaching profession in enhancing the connections between research, policy and practice to make a difference where it will matter the most – in the learning experiences of children, young people and adult learners.

The paper will position the contribution of enhanced teachers' professionalism to quality teaching and learning in the framework of the Teaching Council's Strategic Plan 2015-2017.

## **PAPER 3 ABSTRACT**

Improved Schools through Enhancing the Profession, Michael Salvatori

Over the course of the past several years, the Ontario College of Teachers has engaged in a reconceptualization of initial teacher preparation programs and a renewal of professional learning opportunities. The changes to both initial and ongoing professional learning have occurred in the broader context of professional regulation, and reflect trends in the national and international regulation of the teaching profession. Recent developments include:

The development and implementation of major changes to Ontario's initial teacher preparation program, including:

Doubling the duration of the program (two academic semesters to four) and the practice teaching component (40 to 80 minimum days of supervised practicum);

- the inclusion of province-wide core content reflecting teaching and learning in the 21st century, including special education, wellness, mental health and addictions, integration of technology, building relationships with students, parents and the
- community; and the development of a resource guide to clarify new program requirements for program providers
- The creation of new pathways for beginning teachers.
- The renewal of a professional learning framework for the teaching profession.

- A renewed focus on the support and development of teacher professional judgment through professional advisories on topics such as the use of social media and electronic communication, safety and learning environments and a teacher's duty to report students at risk of abuse and neglect.
- Continuing development of additional qualifications courses that reflect the diversity and context of the Ontario classroom, such as new courses on Teaching LGBTQ Students and Classroom Management.

The paper will position the professionalism and judgment of the individual teacher at the centre of a professional regulatory body.

### **PAPER 4 ABSTRACT**

The Australasian Teacher Regulatory Authorities (ATRA), Dr Peter Lind, Registrar, Teachers Registration Board of South Australia and former Director of the New Zealand Teaching Council.

The Trans-Tasman Mutual Recognition Arrangement came into force in 1998. A key element of this arrangement was that a person registered to practise an occupation in Australia is entitled to practise an equivalent occupation in New Zealand, and vice versa, without the need for further testing or examination. Responsibility for regulating the teaching profession in Australia remains the responsibility of each of the Australian states and territories and within New Zealand, a national body, the Education Council of Aotearoa New Zealand. To facilitate the movement of teachers between states of Australia and New Zealand, the Australasian Teacher Regulatory Authorities (ATRA) was formally established an incorporated association in Victoria in February 2008 by the various teacher regulatory authorities across Australia and New Zealand. This has allowed the exchange of ideas and information to enrich the work of the regulating bodies and to maintain consistent standards and processes in fulfilling key functions. It has been critical because of the regular movement of teachers across Australia and with New Zealand. This presentation will outline the key issues faced by ATRA and key developments as a result of this association.

# **Mixed Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Castle suite 3

Chair: Dr Margaret McCulloch

## **PAPER 1 ABSTRACT**

The Italian Educational Evaluation System: knowing the school's characteristics to support them, Donatella Poliandri, Francesca Fortini, Paola Muzzioli and Emanuela Vinci, INVALSI - National Institute for the Educational Evaluation of Instruction and Training

In Italy, the 2013 Act on the Educational Evaluation System (SNV) is consistent with the current school evaluation's debate (Janssens et alii, 2008; Chapman & Sammons, 2013). Schools have to comply a self-evaluation programme identifying improvements purposes; schools are also visited by inspectors and they may revised their improvement plans according to the results of external evaluation. This recent change raises questions regarding how supporting schools in the evaluation process which is a very difficult task for most schools (Blok et alii, 2008). Italian Educational Authorities propose training and support programmes, but these don't meet the schools' requirements. This contribution describes a cluster analysis model which has been used to identify homogeneous groups of schools defined by different school's management and organization models (Leithwood et alii, 1999; Ross & Gray, 2006; Hallinger & Heck, 2010). The aim is to advise the SNV on the best ways of supporting schools with specific characteristics and management models in different contexts. The sample

is formed by 412 primary and lower secondary schools, randomly selected in proportion to the schools' number presents in the three main Italian geographic areas. The analysis variables relate to two main categories: a) socio-environmental context and schools' available resources (e.g. School Size, Context's Urbanization Degree, ESCS Index, Principal's length of service); b) management practices (e.g. Places for decision making, Teachers' incentives). The cluster analysis is based on the ward hierarchy method to minimize the variance inside the cluster and create groups as homogeneous as possible within them (Ward, 1963; Everitt, 2005). Dendrogram's analysis and values of pseudoF are defined three clusters confirmed by discriminant analysis (Wong & Ho, 2003). The first cluster includes 45% of the schools, the second 22% and the third 33%. Clusters have been described using the two macro-categories identified. In order to determine some characteristics of the schools' groups emerging by the cluster process, we conducted further analyses using schools' geographical location, students' national SATs results (Reading and Math), and numerous complex indexes which simplify more information (e.g. Student's assessment, Presence of self-evaluation activities).

The Cluster 3 consists of schools located in the South. It shows peculiar characteristics of a collective leadership (e.g. involving numerous teachers in the management of school's activities, investing in teachers' training, encouraging continuous development and self-evaluation). This organizational model values professional skills which support a positive and productive atmosphere and the development of human resources, but it show the worst SATs results. The Cluster 2 shows a higher concentration of schools in the North. It is characterized by a centralized leadership model where responsibilities are shared between a limited number of individuals. This model provides a well organized curriculum, the attention on student evaluations, the cooperation with stakeholders and excellent SATs results. The Cluster 1 combines elements from the previous models. There is a prevalence of schools in the South. The Principal is more directly involved in educational matters rather than in human resources and administration. However this model is characterized by specific activities where only the Principal is involved.

## PAPER 2 ABSTRACT

Capturing effective teacher learning: A value creation approach, Daniël van Amersfoort, Femke Nijland, Marjan Vermeulen, Maarten De Laat, Welten Institute, Open University of The Netherlands

Over the last few decades scholars have found that effective teacher learning is highly complex and situated in the dynamic, social context of connected practices (Villegas-Reimers, 2003; Webster-Wright, 2009). Moreover, there is great diversity in the outcomes that flow from teacher learning (e.g. Bakkenes, Vermunt, & Wubbels, 2010; Clarke & Hollingsworth, 2002; Guskey, 2000). However, the majority of professional learning initiatives still focuses on delivering content (Webster-Wright, 2009), instead of enhancing learning (Boud & Hager, 2012). This can be partly attributed to the fact that professionals' engagement in learning is often measured in terms of attendance and attainment of cognitive learning goals (Boud & Hager, 2012). Thus, one step in creating conditions for effective teacher learning should be to find new approaches for its measurement. Such approaches should acknowledge the diversity of outcomes and leave room for both goal-directed and undirected, implicit learning. A promising approach to assessing professional learning was offered by Wenger, Trayner and De Laat (2011), who attempted to translate existing models (e.g. Clarke & Hollingsworth, 2002; Guskey, 2000; Kirkpatrick & Kirkpatrick, 2006) to grasp learning in social dynamic contexts. They propose a framework in which learning is seen as a process of value creation that travels across cycles of immediate, potential, applied, realized, and reframing value. By introducing the concept of 'value creation', they emphasize that a) learning is a creative process that is not necessarily driven by preset learning goals, and b) the relevance of outcomes depends on the attributions of the people involved. In our study we explored the framework's potential by investigating to what extent the value creation framework:

- a) covered the diversity in the outcomes of teachers' learning, and
- b) enabled capturing outcomes of teacher learning that was not goal-directed.

## Method

Our study took place at a school district for primary education which aimed to foster the emergence of teacher learning networks. Six teachers were interviewed on their experiences with and the outcomes of their network meetings. We used an interview guide that covered all cycles of the value creation framework. The transcripts were analysed using indicators that referred to the five cycles of the framework.

### **Findings**

Our analysis shows that each value cycle was reflected in teachers' learning experiences. Outcomes particularly included meaningful interactions and useful resources, although teachers also reported on changed practices, impact on student well-being, and redefining the meaning of 'good teaching'. Interestingly, teachers were often surprised by the richness of their own accounts and noted that, through the interviews, they had become aware of the impact of their network involvement.

#### Conclusions

Our study shows that the value creation framework covers a broad and diverse range of learning outcomes. The framework also captures learning outcomes that do not result from goal-directed learning, which was illustrated by teachers' increased awareness of the value of their learning. We conclude that viewing learning as a process of value creation enables us to capture teacher learning that is both authentic and effective.

## PAPER 3 ABSTRACT

How to become a teacher in Russia: Ensuring Variability of Teacher Education, Roza Valeeva and Aydar Kalimullin Kazan (Volga region) Federal University (Russia)

This paper reveals the ways of getting teaching profession in Russia. Changes in the political, socio-economic, cultural life in Russia of recent decades defined a completely different development of the national school in terms of its incorporation into current practice. Admittedly, it's not only the priorities, content, technologies and technical facilities which matter in reform movements, but teachers and students as its main designers.

The suggested Russian strategic "Conception of pedagogical education development support" (2013) is a timely step. Initial teacher training, in-service training and professional retraining lie in the heart of the reform. The idea of combining the opportunities of classical and pedagogical universities launches unique conditions for a broad scale experiment: new content formation and the organizational structure of teacher education modeling. "The teacher professional standard" was adopted in 2013. In May 2014 the "Comprehensive program to improve the professional skills of educational institutions teaching staff" was developed and approved. These documents have led to important changes in policy direction with serious consequences in terms of the structure and curriculum of teacher education. Russian Ministry of Education and Science have launched projects to develop new modules, the basic professional educational programs of undergraduate and graduate programs in the framework of the teacher education modernization project. A key objective of the paper will be to examine the structure of teacher education in Russia and the subsequent changes in it as a result of a broad scale all-Russia experiment. The article presents the new concepts and approaches to teacher education in Russia, as well as their implementation in different educational institutions. It may help the western scholars trace the main directions of research in the field of teacher education and compare with existing approaches to these issues in their countries.

## **PC Innovate! Session**

Title: Learning Together in the Midst of Transformation: A Weaving of Voices

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3073

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-16.00

Location: Staffa

Author/Speaker: Paige Fisher

Company/Organisation: Vancouver Island University

Co-Authors: Mary-Lynn Epps

Harry Janzen
Judy Halbert
Linda Kaser
Jennifer Kelly
Leyton Schnellert
Kathy Sanford
Catherine McGregor
Allyson Fleming
Lawrence Tarasoff
Scott Cobbe
Kathy Cassels

Presenting Author: Paige Fisher

Presentation Format: Innovate!

## Abstract: Learning Together in the Midst of Transformation: A Weaving of Voices

This session will offer an innovative experience for participants by sharing diverse narratives using a métissage approach that incorporates both body and voice in an aesthetic exploration of professional learning. Métissage, referred to by some as a 'decolonizing research sensibility' (Donald, 2009) offers a uniquely Canadian Indigenous approach that honours diverse voices while seeking to collaboratively explore and deepen understandings. Participants are offered an aesthetic experience that taps into the heart and mind as "We braid strands of place and space, memory and history, ancestry and (mixed) race...familiar and strange, with strands of tradition, ambiguity, becoming, (re)creation, and renewal" (Hasebe-Ludt, Chambers & Leggo, 2009, p. 9). The issue that is being explored through this métissage emerged from participation in various networked collaborative inquiry processes. A multi-faceted team of researchers, classroom teachers, teacher educators, inquiry coaches, school district leaders and government representatives is working across roles and contexts to explore their own learning in the midst of education transformation in British Columbia, Canada.

The educators involved in this richly networked learning system are all grappling with complexities of educational change through varied learning partnerships. Changes in structures and enhanced relationships between stakeholders are creating spaces of dissonance and opportunity as we move forward in learning together. An important catalyst for thinking differently has been exploring the idea of adaptive expertise (Timperley, 2012). The inquiry question guiding our reflection is: What are the challenges and opportunities made possible by working across roles and organizations in engaging in, and supporting, the shift toward adaptive expertise to enhance learning at all levels of the system in one western Canadian jurisdiction? How does this shifting landscape create learning spaces for each of us? System change in BC offers a situated perspective on learning, teaching, and ways of knowing in the midst of worldwide movements to transform education systems into responsive and reflexive entities.

As a result of deepening our understanding of assessment frameworks (Hattie, 2012; William, 2010) and inquiry processes (Timperley, Halbert & Kaser, 2014), as well as the OECD's work on Innovative Learning Environments (Dumont, Istance & Benevides, 2010), and our growing resolve to come to terms with the impacts of colonization on learners while recognizing the wisdom held by Indigenous Elders and traditions (Kovacs, 2009; Williams, 2000), we are rethinking the role of educators as the sole 'knowers' in today's classrooms. Informed by the above, the disequilibrium created by system transformation thrusts all of us into learning spaces where possibilities afforded by pursuing a shift from practice as 'routine experts', towards developing adaptive expertise (Timperley, 2012) has pushed us toward responsive and reflexive practice. The culturally responsive aspects of exploring these ideas through métissage also offers an opportunity to engage the international educational improvement community in practices that seeks to address and redress inequity and injustice by honouring diverse voices, and in particular, we feel that attention must be paid to honouring the voices and needs of Indigenous communities worldwide.

# **PC Symposium**

Title: Impact and challenges of networked PLCs

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3021

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 16.00-17.30

Location: Staffa

Author/Speaker: Cindy Poortman

Company/Organisation: University of Twente

Co-Authors: Chris Brown

Mireille Hubers Kim Schildkamp Cindy Poortman Rilana Prenger

Christopher Chapman

Presenting Author/Chair: Cindy Poortman

Presentation Method: Symposium

## Symposium overview

Teacher collaboration in professional learning communities (PLCs) can lead to increased teacher and student learning (Borko, 2004; Darling-Hammond, 2010; Stoll et al., 2006; Vescio, Ross, & Adams, 2008). According to Chapman (2014), collaboration between teachers should even be extended beyond the school: improvement in educational systems requires a shift in emphasis from within- school to between- school (and beyond-school) improvement. Networks of schools may indeed mobilize a wider range of resources and expertise than single schools. They may also provide greater opportunities for both self-reflection and collective reflection on practice and may increase engagement with more challenging and interactive forms of professional learning. On the other hand, working across organizational, geographical and professional boundaries can be a great challenge (Chapman, 2014; see also Harris & Jones, 2010). More systematic research about the way in which networked PLC's work in terms of their key features and their impact is, therefore, required (Katz & Earl, 2010; Vescio, Ross, & Adams, 2008; Chapman & Muijs, 2014; Chapman, 2015).

This symposium focuses on research about between-school PLCs, from different countries. Teachers and school leaders in these PLCs are guided by and/or working together with coaches and researchers from universities. The different papers will discuss the impact of these PLCs on the participating schools and the challenges that are experienced. Their conclusions regarding implications for policy, practice and further research will provide input for the discussant, who will reflect with the audience on the main findings from his expertise in the interaction between educational policy and practice, collaboration and system reform. This symposium will, therefore, provide an important contribution to the conference theme about connecting teachers, schools and systems and specifically the strand partnerships and collaborations, providing insight in PLCs in which different schools participate and work together with researchers to improve education.

Chair: Dr. Cindy Poortman, University of Twente, the Netherlands

Project leader of the Dutch national project 'Pilots for the development of professional learning communities', University of Twente. Co-project leader of the Datateam projects, University of Twente.

Discussant: Professor Christopher Chapman, University of Glasgow Chair of Education and Public Policy and Practice at the University of Glasgow. Director of the Robert Owen Centre for Educational Change. Co-Director of What Works Scotland

#### PAPER 1 ABSTRACT

Using Networked Learning Communities to Mobilize Knowledge for Teacher and School Improvement Partnerships and collaborations: schools, agencies, government, research, Dr Chris Brown UCL Institute of Education

This paper reports on a large, two-year knowledge mobilization project taking place in 114 primary schools between 2014 and 2016. The aim of the project is to test an innovative pilot designed to increase research use amongst primary school teachers at scale. Specifically, we are developing then exploring the efficacy of an approach that:

- Draws on the work of Stoll (2006), Earl and Katz (2005) and Katz and Earl (2010) in order to understand how researchers might form effective networked professional learning communities with school leaders, successfully centered on knowledge mobilization;
- Builds on work centred on knowledge creation (Nonaka & Takeuchi, 1995), conceptions of expertise (Flybjerg, 2001) and learning conversations (Stoll, 2012) in order to understand how researchers can best combine practitioner tacit knowledge (and their understanding of effective practice) with research and evidence on 'what seems to work' in relation to teaching and learning. In particular, we explore how socio-constructivist modes of learning can drive knowledge mobilization such that teacher practice and pupil outcomes improve as a result; and
- Employs notions of formal and informal leadership (Day and Sammons, 2013) and social network analysis method (Daly, 2010) to ascertain the role of different types of leaders in mobilizing knowledge at scale: i.e. examines the roles of formal and informal leaders working in networked learning communities in mobilizing this knowledge within their home school.

The project has been designed as a prototype for a scalable model of increasing evidence use within schools in England. It involves working with 110+ senior leaders and opinion leaders (i.e. those identified through social network analysis as being influential informal leaders) with participants supported in: 1) developing evidence-informed solutions to tackle issues related to specific teaching and learning priorities, with a particular focus on closing outcome gaps between the most and least affluent students; 2) developing approaches to mobilize knowledge in relation to and deliver/implement evidenceinformed solutions in their setting; and 3) evaluating the impact/implications of their approaches.

## Main findings and conclusion

This paper contributes to the ICSEI 2016 theme by providing insights into networked collaboration among primary school leaders (both formal leaders and those teachers who act as informal leaders) from different schools; how networked learning can translate to improved within-school practice; and meaningful and effective partnerships between primary schools and researchers. More specifically it will also allow researchers to generate new perspectives on the effectiveness of networked professional learning communities for knowledge mobilization at scale and vitally, and who best to involve in these communities if knowledge is to be mobilized at a system level.

## PAPER 2 ABSTRACT

Tell me everything! Boundary Crossing in Schools with a (networked) Data Use PLC, Mireille Hubers, Kim Schildkamp and Cindy Poortman (University of Twente) - the Netherlands

#### Issue

Data use has become increasingly important in education, as it may improve student achievement (Datnow, Park, & Kennedy-Lewis, 2013). However, teachers often do not use data effectively (Ingram, Louis & Schroeder, 2004). To support schools in data use, the data team procedure was developed (Schildkamp & Poortman, 2015). A data team is a (networked) PLC in which 4-6 teachers and 1-2 school leaders collaboratively learn how to use data to solve an educational problem, e.g., grade retention. The question is how team members can increase their school's overall level of data use.

## Theoretical framework

The schools' level of data use can be increased when team members diffuse their newly gained knowledge to their colleagues (Coburn et al. 2009). In doing so, they act as boundary crossers, because they transfer their data use practice to their colleagues' practice (Akkerman & Bakker, 2011). There are two strategies in boundary crossing: using artefacts and personal communication (Wenger, 1998). Both need to fulfil several requirements to be successful (Wenger, 1998). For example: artefacts can neither be too specific or too generic, and difficult terminology needs to be translated into easier phrasing for personal communication. Previous research hardly explicated what kind of learning takes place in boundary crossing (Akkerman & Bakker, 2011). The present study therefore focuses on the following questions:

- 1. How do data team members use artefacts and personal communication to cross boundaries between their (networked) PLC and their colleagues?
- 2. What knowledge do their colleagues gain from this?

## Method

We conducted case studies at two schools with a within-school PLC, and two with a networked PLC of teachers from different schools. These PLCs met with a coach from the university twice a month for two years, during which they worked with an eight-step cyclic procedure (Schildkamp & Poortman, 2015). All team members were interviewed twice, and their artefacts were collected. Colleagues' knowledge gains were assessed with a data-use questionnaire, administered before and after the data team project.

## Main findings and conclusions

The findings suggest that networked PLC-members did not collaborate in boundary crossing. This made one of the networked PLCs particularly vulnerable regarding their progress and continuation in the school. Although both within-school and networked PLCs varied in meeting the requirements for boundary crossing, colleagues of one of the within-school PLC members learned more about data use and were more involved in the process. However, all four teams faced difficulties, for example in translating their knowledge to their colleagues' practice. This shows that both within and across schools, boundary crossing is challenging. The results provide insight in the concept of boundary crossing and its challenges for educational practice. They can be used to further support effective and sustainable data use in and across schools, e.g., by providing educators additional guidelines for boundary crossing.

#### PAPER 3 ABSTRACT

Effects and Influencing Factors of Networked PLCs, Dr. Rilana Prenger, Dr. Cindy Poortman (University of Twente) & Dr. Adam Handelzalts (VU University Amsterdam) - the Netherlands

#### Issue

The project 'Pilots for the development of PLCs' is aimed at guiding and researching 23 PLCs in which more than 100 teachers from different schools work together to improve their professional practice. These PLCs receive guidance from an external coach from a university teacher training program. They work on the following categories of subjects: teachers' professional attitude, e.g. research skills; the development of new lesson material, e.g. concerning ICT in the classroom; or both professional attitude and new lesson material. This study aims to research impact and influencing factors of these networked PLCs.

## Key ideas

Teacher professional development (PD) programs generally share the goal of changing teachers' behaviour, knowledge and attitude, with the ultimate goal of improving student achievement (Desimone, 2009; Guskey, 1986). Before student learning can be improved, however, teachers need to have developed the related knowledge, skills and attitudes and need to have applied these. Firstly, their response towards the program needs to be positive. The first aim of this study is to research the effects of participating in a PLC on these different levels of PD: teachers' satisfaction with the PLC process and outcomes; their knowledge and attitude; and their application thereof.

Understanding the PD process in networked PLCs can be achieved by examining the contributing factors. In recent years, several studies have discussed the essential characteristics of PLCs, such as shared goal, reflective dialogue and trust (e.g. Lomos et al., 2011; Vescio et al., 2008; Stoll et al., 2006). The second aim is, therefore, to investigate the influence of these factors in our networked PLCs. We used a mixed-methods design combining quantitative survey research (teachers) and qualitative case study using interviews (teachers and coaches) and observations. In addition, PLC coaches filled out qualitative logs about all PLC meetings.

## Main findings and conclusion

Although teachers are enthusiastic about learning and developing lesson material with colleagues from other schools, teachers' satisfaction, knowledge, skills and attitudes and application thereof, has only been 'moderately' developed. On the one hand, teachers developed more awareness of their teaching subject and their teaching practice, and many also developed lesson material and research instruments. On the other hand, teachers reported not to have enough time to prepare for PLC meetings, and that not everyone (always) participated (actively) in their PLC. In addition, knowledge sharing within teachers' own schools is a challenge. The outcomes at the different PD levels (e.g. satisfaction, knowledge and attitude) appear to be influenced differently by the factors included in this study. Teacher motivation, for example, influenced all PD outcomes; however, 'trust' only influenced 'knowledge and skills' significantly.

Although teachers appreciate learning with colleagues from other schools, much remains to be done to achieve improvement of all schools involved, in addition to individual teacher learning.

<sup>&</sup>lt;sup>1</sup> Granted by the Dutch Ministry of Education

## **PTM Symposium**

Title: Educational Policies in Different Countries: Causes, Consequences and Links With School

Effectiveness and School Improvement (SESI).

Topic: Policy translations and mistranslations

Abstract ID: 3322

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016, 16.00-17.30

Location: Shuna

Author/Speaker: David Reynolds

Company/Organisation: Southampton University

Co-Authors:

Presenting Author: David Reynolds

Alma Harris Chair:

Discussant: **Andrew Hargreaves** 

Presentation Method: Symposium

## Symposium overview

Educational policies have been increasingly changed and addressed across countries as a consequence of their perceived needs to survive and prosper in an era of globalisation and resource constraints. The involvement of international agencies - historically the World Bank and UNESCO, latterly the OECD - has also encouraged this 'human capital' approach, and both the discipline of SESI and many individual members of the discipline have also played a role in acting as 'policy entrepreneurs' to governments, opinion leaders and public administrations in many countries of the world. The effect of all this has been a 'policy frenzy', but there has been little attention paid within the SESI community to evaluating the effects of educational policies in different countries, their causes, their appropriateness, their outcomes and whether there are lessons to be learned for the SESI discipline in general, and for key areas of theoretical importance within the field specifically. Specifically, it is intended to look at four contrasting countries, showing policy variability, apparent variation in the effectiveness of those policies and considerable variation in the involvement of, and relationship with, SESI. These are:

- England
- Scotland
- Wales
- The United States (North Eastern States).

Four areas will be concentrated upon in the Symposium's papers:

- These countries all show elements of simultaneous 'supply side/demand side' reforms, but also variation in this general policy orientation, with 'demand side' being the English focus, simultaneous 'supply/demand' in Wales, and more 'supply side' in Scotland and the United States region. Why is there this variation? Is there any evidence about variation in the effectiveness of these general reform orientations?
- Across all countries, do we have any evidence of individual policy areas that may be productive? If so, is there any evidence of 'context specificity' in the content of the precise policies being implemented or are there 'universal' characteristics to policies that are 'working'?

- Given that 'the way to understand something is to try to change it', what do these national change attempts tell us about our own SESI discipline and the relevance of its findings? Are there areas of our field - teachers' professional training for example and/or the interactions between the 'school' and the 'classroom' levels - that need greater attention and study? What are the SESI research implications of policies?
- Given that SESI researchers have been directly and indirectly involved in policymaking in all four countries to a varying degree, what does our experience tell us about whether to get involved in policy entrepreneurship and, if so, how? And do we now know any better how to reach and affect the lives and practices of practitioners, given that we have been engaged in directly trying to do that through policy?

### PAPER 1 ABSTRACT

Understanding Policy Trends in Scotland: Building Capability and Coherence? Professor Christopher Chapman, Robert Owen Centre for Educational Change, University of Glasgow

Public service and education reform in Scotland is considered to be a powerful mechanism for further increasing economic productivity and tackling the effects of poverty and disadvantage. The 1980 Education (Scotland) Act places the responsibility of education provided to around 675,000 students in about 2500 schools in the hands of 32 Local Authorities. Support for the development of the education system is provided by a number of organisations including: Education Scotland (improvement agency), Scottish College for Educational Leadership, General Teaching Council for Scotland work with other bodies including the trade unions (e.g. EIS) and professional representative groups (eg. ADES) within consensual policy making process which has delivered a number of key policies designed to reform the education system whilst holding true the values, history and traditions of Scottish education, including:

- Curriculum for Excellence- A curriculum where every child should know they are valued and will be supported to become a successful learner, an effective contributor, a confident individual and a responsible person within a broad traditional Scottish curriculum that supports challenging learning and preparation for life.
- Teaching Scotland's Future- made over 50 recommendations relating to the development of the workforce. The aim was to create a high quality teaching profession underpinned by high quality career long learning, from initial teacher education through to senior leadership that would support the implementation of Curriculum for Excellence.
- Scottish Attainment Challenge- This is a recent policy designed to close the attainment gap. Local Authorities receive additional resources to implement targeted improvement strategies. The National Improvement Framework is designed to enrich and standardise improvement data to inform decision-making within the system.

This paper will offer an analysis of the extent to which the above policies are grounded in the EEIR research base, fit for purpose within the Scottish educational context and the extent to which their implementation, progress and impact are being monitored. Specifically, the paper will address the following questions:

- How can systems balance the competing tensions and unintended consequences unearthed by moving from a supply to demand side system?
- What evidence is there that the direction of policy travel in Scotland has been productive?

The paper will also draw out broader lessons from the Scottish experience for other systems pursuing similar pathways in an attempt to reform their education systems and relate this experience to inform the field of EEIR.

#### **PAPER 2 ABSTRACT**

States of Success: Exploring and Explaining Different Causes and Contexts of Similar High Performance in New England States Amid A Pervasive High Performance Educational Reform Movement, Shanee Wangia

A global educational reform movement (GERM) (Salhberg, 2012) is sweeping the globe and most nations, including the United States (US), have been unable to resist submission to its press for standardization and accountability. Some would argue that Massachusetts (MA) is one such state that has attained and maintained success through compliance with GERM. MA surpasses all states in the worldwide acclaim it receives for its educational success, consistently ranking first among US states on national and international exams and in the top 5 and top 10 of all participating systems on PISA and TIMSS respectively. In contrast, Vermont (VT) and New Hampshire (NH) are equally successful states that have achieved excellence through resistance to pervasive reform movements. Both states have consistently forfeited millions of dollars in federal funding for their refusal to comply with federal stipulation attached to national reforms. Their strategies have been more compatible with what Hargreaves and Shirley (2012) describe as democratic and inclusive Fourth Way strategies.

### **Objectives:**

- 1. Identify, analyse, and critique the differing policies and initiatives that have been associated with these states' status as educational high performers
- 2. Examine the impact of contemporary reforms on states' efforts to effectively serve diverse learners
- 3. Analyse the impact of imposed austerity and funding shortfalls on states that reject Race to The Top and No Child Left Behind funding because of the GERM-like conditions that are part of the federal funding requirements.

#### Overview:

This session describes the varied policies and initiatives that have contributed to each state's educational success and the unique challenges that educational leaders face in achieving and sustaining excellence and equity in the context of federal funding conditions and/or shortfalls that undermine the progress and directions which some states are seeking to sustain. This paper applies and extends internationally comparative explanations of high performance in diverse settings (Barber, Chijioke & Mourshed, 2011; Barber & Mourshed, 2007; OECD, 2011) to hitherto overlooked intra-state comparisons within the US. It presents findings that indicate there may be multiple ways to achieve and sustain excellence and equity, that attributing success to a single preferred ideological approach may be presumptuous, and that different definitions and determination of success might therefore be designated on diverse and differentiated criteria.

## PAPER 3 ABSTRACT

Wales: From Performance Based Reform to Transformational Supply Side Reform? David Reynolds, University of Southampton

Because of poor PISA performance in 2010 & 13, Wales has adopted every tenet of the international 'performance based' reform paradigm of demand side action, involving:

- Putting individual school results into the public domain to promote parental choice using the information;
- Testing core subjects and publishing results for LAs and overall for Wales;
- Devolving ownership of change to the school and the professional level, within nationally steered and controlled parameters.

Overall the Welsh system remains 'stuck' - attendance levels have improved but the follow through into improved academic achievement is hard to see in public examination figures and achievement results. Welsh Government is expecting (at best) an unchanged PISA performance in December 2016.

It is argued that many of the tenets of the demand side reform paradigm may not be suitable for Wales, and countries like Wales, since:

- A rural population means that most educational consumers/parents do not have realistic choice of school;
- Research suggests that the increment in achievement from demand side policies may be small;

There are suggestions that the 'decentralisation' promoted by PISA data may have been oversold, both practically and empirically.

It is further argued that emergent Welsh novel 'supply side' reforms may be more appropriate and effective. Examples are given of these policies emerging from Wales, involving:

- Moving beyond school-to-school transfer of good practice to a focus upon schools benchmarking against their own internal best practice, to make their best their standard;
- Providing educational professionals with bodies of knowledge about best practice in the 'core' areas of teaching and instruction;
- Going 'beyond school' to link schools with their local communities.

Conclusions are drawn concerning the contents and possible effects of 'radical producerism' or 'transformational supply side' policies, much needed as enthusiasm for demand side policies wanes internationally, consequent upon the recognition of their minimal effects. These replace earlier simplistic supply side formulations (Reynolds, 2008).

Speculations are given concerning the possible role of the existing Educational Effectiveness and Improvement Research (EEIR) knowledge base (Chapman et al, 2015; Reynolds et al, 2014) and the need for changes in the EEIR paradigm to potentiate this new policy focus. Attention is also given to the difficulties of involvement of EEIR persons in policy making in countries drawn to non-EEIR, non-rational paradigms of educational change.

### **PAPER 4 ABSTRACT**

Education Reform in England and the Promise and Possibility of the Self-Improving School System: Implications for SESI Research and Scholarship, Dr. Karen Edge, UCL Institute of Education

### Introduction

The current English educational policy landscape is underpinned by an explicit, national-level commitment to engineer and foster a school-led education system - now commonly referred to as the Self-Improving School System (SISS). The SISS is designed to place the power to and responsibility for improving the overall education system in the hands of local schools via their governors, leaders and teachers. The SISS is a decentralization strategy is predicated upon a notion that schools with more autonomy and freedom from the 'shackles' of the middle tier will be more innovative and able to serve their local communities. Within this conception of improvement, schools will have the resource, space and incentive to create new ways of working that will translate into both school and system-level gains in teaching, learning and student outcomes. As a relatively new concept, or possibly simply decentralization by another name, the evidence base supporting the rationale for the SISS remains relatively unexplored. Similarly, the evidence on the early influence of SISS on schools, professionals, students and the system remains in its infancy. The promise and possibilities vested in the system remain unproven and, in many circles, contested. The paper aims to create a deeper understanding of the evidentiary origins and potential influence of the SISS. To contextualize the SISS within the greater education system, the paper create a contemporary picture of the range of policy innovations and interventions that have emerged alongside or within the overall SISS discussions. The emerging policies, and subsequent policy analysis, is presented in four categories that represent the overarching priorities and shifts in recent English education reform. Within each category, the paper reviews evidence related to the rationale and influence of the each policy strand including:

- 1. structural reorganization and new forms of schools;
- 2. accountability infrastructure renewal of inspection and testing metrics;
- 3. teaching and school-level influences related to new curriucula and school-level responsibility for wider policy issues (eg. Extremism); and
- professionally-focused interventions moving teacher training beyond universities, fast tracking and removing leader certification requirements; and,
- democratisaion of educational expertise via social media, government nudge, university marginalization and advocacy.

The second aim of the paper is to reflect on the overall policy context as it relates and informs the SISS and to examine English policy context in light of both current and historical SESI contributions. Finally, based on current policy trajectories and SESI alignment, the paper posits several questions to challenge the current SISS design and ambitions and suggest possible strategies by which SESI professionals can positively influence future policy and practice.

## **RCEL Symposium**

Title: Transformation: Can It Be Done?

Topic: Researching the conditions for effective learning

Abstract ID: 3395

Session: Parallel session 1

Session Date and Time: Wednesday 6 January 2016 16.00-17.30

Location: Jura

Author/Speaker: Dale Mann

Company/Organisation: Interactive, Inc.

Presenting Author: Dale Mann

Presentation Method: Symposium

## Symposium overview

## Overarching theme

School transformation has been more aspirational than actual. The symposium will report two comprehensive initiatives:

- 1. A US school district has coupled high expectations for students with rich opportunities to learn. The result for this majority-minority district has been dramatic improvement in test scores, graduation rates and student engagement at the same or less expense than other comparable American districts.
- 2. The UK has recent experiences with school improvement in a "challenge" mode that includes interventions dealing with resourcing, collaboration and coordination. Lessons from that experience are prospectively being applied in Scotland and Wales. That experience will highlight the opportunities, tensions and dilemmas of school improvement.

Chair: Tony Townsend, Professor, Institute for Educational Research, Griffith University, Brisbane, Australia

Discussant: J.E.C. McBeath, Professor Emeritus, University of Cambridge, Cambridge, UK

## **PAPER 1 ABSTRACT**

Pedagogical, Financial and Leadership Aspects in Transforming a Majority-Minority Public School System. Middletown, New York is recognized as a national exemplar of transformative school improvement, Kenneth Eastwood, Ed.D., Superintendent of Schools, Middletown, New York.

The district's superintendent will describe:

- 1. The pedagogy and interventions
- 2. The political environment for school leadership
- The financial challenges and solutions.

## **PAPER 2 ABSTRACT**

Documentation of the Transformation of the Middletown Public Schools, Dale Mann, Ph.D., Professor Emeritus, Columbia University and Managing Director, Interactive, Inc. and Charol Shakeshaft, Ph.D., Director, CS Evaluation Services and Professor, Virginia Commonwealth University, Richmond, Virginia.

The evaluators will share the evidence of effectiveness, including changes in test scores especially for children from lowincome, non-native speaking English families. The data will include performance metrics for each of the district's major teaching/learning initiatives.

- 1. Blended learning
- 2. Two-year kindergarten
- 3. Promotional markers/Mid-point classes
- 4. Math specialists among elementary teachers
- 5. Third grade mastery class
- 6. 1:2:1 mobile devices: teachers and students
- 7. Instruction rigor in the high school
- 8. A new teacher recruitment simulation
- "Big data," a learning management system

## **PAPER 3 ABSTRACT**

Rising to the Challenge: Learning the lessons from improving schools in challenging contexts? Christopher Chapman, Ph.D., Director, Robert Owen Centre for Educational Change, University of Glasgow and co-director What Works Scotland.

The current wave of 'Challenge' type initiatives within the United Kingdom can be traced to education policies developed by government between the late 1990s and 2000s:

- 1. The Schools facing Challenging Circumstances Initiative (Targeted resourcing)
- The Leadership Incentive Grant (LIG) (Targeted resourcing and collaboration)
- The City Challenge (Targeted resourcing, collaboration and co-ordination).

Contemporary developments in Wales and Scotland draw lessons relating to targeted resources, collaboration, coordination and context to develop approaches that fit with local system values, history and culture: however, implementation will be a major factor in determining success. The paper will highlight the core elements which have informed contemporary 'Challenge' type initiatives in Scotland and Wales and reflect on a number of opportunities, tensions and dilemmas for undertaking this type of work within the Scottish context.

## SE Paper session

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Barra

Chair: Dr Beth Dickson

### PAPER 1 ABSTRACT

An attempt to review the 18 years of school self-evaluation in Greece. What is finally crucial in school self-evaluation? George Bagakis, University of Peloponnese, Greece

It was 1997 when for first time the concept of school self-evaluation began to be widely discussed in the Greek educational community. This happened within the framework of the "European Programme of School Self Evaluation" with the participation of the Greek Pedagogical Institute. As is well known, this programme took place in the 15 member states of the European Union and was co-ordinated by Professor John MacBeath.

In the same direction, as a continuation of this programme, a Greek programme of school self evaluation was realized afterwards, until 2000, supported by the European Social Fund for Greece. It was focused on experimentation in eleven schools of primary and secondary education. Two more programmes followed, co-ordinated again by John MacBeath: From 2002 to 2005 three Greek schools of secondary education and a Greek university participated in the international programme "Carpe Vitam: Leadership for Learning", in which methods of school self evaluation were used with the aim of connecting leadership with learning. From 2004 to 2005 Greeks participated in the European Programme "Bridges Across Boundaries". The programme focused on four new members states of the European Union from the ex-Eastern Block and had a similar framework with the

European Programme of school self evaluation of 1997. Afterwards, in 2009, the programme "International Teacher Leadership" was realized, with the participation of Greek schools of primary and secondary education and a Greek university and was co-ordinated by David Frost. In this programme methods of school self evaluation were used with emphasis on educational leadership and on the portfolio of teachers' professional development. In 2010, with the support of European Social Funds, a big programme of school self evaluation started in Greece for schools of all levels. Gradually 600 schools participated voluntarily until 2013. The same programme became obligatory in 2014 but in 2015, the same programme, which had encountered a lot of resistance, was "frozen" by the new government that resulted from the elections of January 2015. In this presentation is attempted a critical review of this school self-evaluation long experience in Greece. Central elements in this review consist the type of support team of school self evaluation, the perception of the role of the critical friend in each school, the framework of formation of the focus of development in schools, the scale/number of participating schools, the obligatory or the catholic framework of school self evaluation implementation, its relation -if any- with external evaluation. In the different programmes of school self evaluation in Greece, different perceptions for the implementation of the previous elements seem to determine the good application or the degeneration of school self evaluation.

## **PAPER 2 ABSTRACT**

School Evaluation Indicators: Effective Practice for Improvement and Learner Success: Using the evidence about what matters most in improving student outcomes to develop indicators of effectiveness for external and internal evaluation in New Zealand, Ro Parsons, Education Review Office

The New Zealand Education Review Office (ERO) evaluates all New Zealand schools on a regular cycle. In response to the Organisation for Economic Development (OECD) Review of Evaluation and Assessment: New Zealand (2012) ERO reviewed and revised the school evaluation indicators. This paper reports on the systematic, evidence-based approach to the revision of the underpinning theoretical framework and the school evaluation indicators. From an evaluation perspective ERO's role encompasses accountability (including compliance with regulatory requirements), improvement and knowledge generation purposes. Since its establishment ERO's approach to evaluation has shifted from an accountability orientation to an improvement orientation, integrating external and internal evaluation. The primary purpose underpinning the revision of the evaluation indicators was to promote improvement. Developing indicators with an improvement orientation requires a deep understanding of the theory of change, the use of evidence in a cyclical process and the on-going development of evaluative capacity building.

The approach involved four phases:

- multiple, systematic reviews of domain specific and cross cutting research bases to identify significant influences on student outcomes from schooling.
- revision of the underpinning conceptual framework, development of the theory of action and the identification of the indicators and associated effective practice, drawing on the evidence base developed in Phase 1.
- twelve case studies of schools showing an improvement trajectory in outcomes for Māori and Pacific students and exemplary internal evaluation.
- trialling and investigation of the use and usefulness of the indicators in self-selected schools.

Throughout the revision process an Academic Experts Group provided critical commentary and advice.

The theoretical framework for School Evaluation Indicators: Effective Practice for Improvement and Learner Success and the associated evaluation indicators and examples of effective practice, are drawn from the current research and evaluation evidence about what matters most in improving outcomes from schooling. The outcome indicators represent the vision of the New Zealand curriculum that as an outcome of schooling, every young person is a successful "confident, connected, actively involved, lifelong learner." The Māori concepts, manaakitanga, whanaungatanga, ako and mahi tahi, provide a lens through which to evaluate the cultural responsiveness of schools in promoting equitable outcomes. The process indicators are organised in terms of six key domains that promote school effectiveness and improvement:

- stewardship
- leadership of conditions for equity and excellence
- educationally powerful connections and relationships
- responsive curriculum, effective teaching and opportunity to learn
- professional capability and collective capacity
- evaluation, inquiry and knowledge building for improvement and innovation.

For each domain, evaluation indicators are identified and illustrated by examples of effective practice. The findings from the case studies were used to interrogate and validate the evaluation indicators framework and the indicators.

The revision of ERO's school evaluation indicators exemplifies a systematic, evidence-based approach. This paper extends understandings of the relationship between evaluation and improvement and the development of evaluation indicators. School Evaluation Indicators provides a common frame of reference for external and internal evaluation.

Preliminary evaluation findings highlight the usefulness of the indicators in both contexts.

## PAPER 3 ABSTRACT

School self-evaluation in Italy: an accountability issue or a challenge to improve? Sara Romiti, Donatella Poliandri, Isabella Quadrelli, Letizia Giampietro, INVALSI - National Institute for the Educational Evaluation of Instruction and Training

School self-evaluation is being charged both with requests of accountability and expectations of improvement (McNamara & O'Hara, 2009; Janssens & van Amelsvoort, 2008). In most European Countries it has been observed a shift from an idea of self-evaluation as a process controlled and internally managed by schools for improvement purposes to a practice of "hybrid" self-evaluation where schools use self-evaluation models (frameworks, tools, indicators) produced by an external authority (OECD, 2013). This trend can be placed within the increasing centrality placed on self-evaluation processes by national systems of educational quality assurance in order to fulfil accountability and improvement objectives. In Italy, the 2013 Act on the Educational Evaluation System established that schools have to carry out self-evaluation and use their results to issue an improvement plan; afterwards they are visited by inspectors and their improvement plans may be revised according to the findings of external evaluation. The emerging Italian Self-evaluation model includes: a common framework for internal and external evaluation; an evaluation form and indicators provided by central authorities that schools must use for producing a self-evaluation report; the opportunity for schools to add self-produced evidence they consider relevant for the self-evaluation process; publication of self-evaluation results. This model is highly structured and centralized. Without a true and wide engagement of the schools, self-evaluation process could become just a formal and bureaucratic task. Furthermore, the publication of self-evaluation reports introduces a strong element of accountability which may distort the self-evaluation process by fostering opportunistic behaviour. In 2013, 290 self-selected schools participating to a pilot study carried out self-evaluation using a former version of this model. A content analysis of the school self-evaluation reports shows that the self-evaluation reports are often of low quality. Regarding the use of indicators, not always schools have been able to interpret data. Moreover, schools used additional data and evidence to supplement the centrally produced indicators only to a limited extent. Internal participation to the self-evaluation process was mostly limited to the principal and the support staff. These findings are in line with other studies, which show that school performance data are under-utilised (Schildkamp & Visscher, 2010) and self evaluation reports present significant shortcomings (Blok et al., 2008).

According to our research findings and as stated in the literature we highlight three key challenges for development of Italian Evaluation System. First of all, schools need to make sense of the whole process of self-evaluation, carrying out a shift from self evaluation approach as an external necessity to one perceived as an internal and meaningful necessity (Schildkamp et al., 2012; Van Hoof et al., 2009). Secondly, there is high need to training in assessment literacy, in order to raise the skills of school staff to support good collection, use and interpretation of data for school improvement (Nusche et al., 2012). Finally, it's important stimulating and supporting peer review among schools, in order to share effective practices that contribute to raise school empowerment on self evaluation process (Chapman & Hadfiled, 2010).

# **PTM Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Rockall

Chair: Dr Jenny Reeves

## PAPER 1 ABSTRACT

Remaking a policy instrument in the educational field - Developing an idea of school transformation, Hongda Lin,

University of Helsinki, Center for Research on Activity, Development and Learning

This study aims to understand the generation of an idea in an expert group remaking a policy instrument for school transformation. Policy instruments have made important contribution to our understanding of political systems, public policy, governance changes in national and international settings (see, e.g., Hood and Margetts, 2007).

Nevertheless rising issues in recent years, like governance change and infra-national organizations operations, have brought the reconsideration to the policy instrument. Lascoumes and Le Galès (2007), for example, point out the problems of "functionalist" in instrumental approach, and propose political sociology approach for policy instrument study. However, the weight of idea generation in this instrumental approach is underestimated.

The political sociology approach to policy instrument overlooks the potential of imagined activities born together with the new birth of instruments. This study adopts otherwise the approach of Cultural Historical Activity Theory, assumes that the contradiction embedded in the policy instrument as the source leading to transformation.

To demonstrate this viewpoint, this study analyses the meeting data in a case of School Actualization Program (SAP) in Taiwan, which is a national policy program aimed to improve quality of senior high schools. An expert group has been built up for taking care of the SAP. Two meeting records of this SAP expert group are selected out of 22 meetings held during 2008-2010. This study encodes data by three levels of policy instrument - policy instrument, techniques, and tools - which is hierarchized by Lascoumes and Le Galès (2007), and investigate the evolution of their relations in the discussions.

Three results are found in the analysis:

- · the idea generation is based on the actors' experiences of problem confrontation by instruments adaption;
- the manifestation of idea generation in the discussion is a constant return process between policy instruments, techniques, tools and terms, revealing the repeating problems and possibilities of problem resolving;
- A new idea in its beginning is represented as a new relationship between artifacts. This representation is the candidate to make the prototype of new policy instrument.

## **PAPER 2 ABSTRACT**

The Influence of Social Media on Education Policymaking: A Social Network Perspective, Alan Daly, Jon Supovetz, Miguel del Fresno, University of California, San Diego

This study examines the new role of social media in educational politics and policymaking and explores questions as to the ways, social media advocacy may influence the political and policymaking process. The interrelationships between politics and policymaking are complex. Coalitions arise around a perceived problem or need in society and foster a constituency. These alliances are often fluid. The priority for any particular action rises or falls due a host of factors, including the grit and determination of key actors, the particular combination of allies, and unpredictable external events and circumstances. Social media are adding a new ingredient into this longstanding mixture. Social media are online platforms focusing on synchronous and asynchronous interactions with a local and global reach unprecedented in human history. The Internet and its architecture have enabled the development and use of these platforms, which are designed to support interactions and give rise to a complex interplay between communication and social practices and technology infrastructure. Twitter is a central element on the social media landscape and represents an intersection of media and medium. Because of the trail of messages recorded on Twitter, social network analysis (SNA) is a useful means for analyzing the discussions. SNA is a method that allows for the analysis of the structure of networks as well as the social role of actors within these systems. In this way SNA provides useful visualizations and metrics to portray network structure as well as identifying key actors. This study aims to identify overall social structure of political conversations about a major educational reform movement in the United States. The education reform we use as the example in our analysis is the current standard-based education reforms in the US. The Common Core State Standards (CCSS) are the most expansive reform of our generation in the United States and they are swirling with controversy. This study examines how social media - enabled social networks are influencing the political environment within which policy is being developed and enacted.

More specifically, the study examines four central research questions. First, we ask how the CCSS is being portrayed on Twitter? Second, we explore what the social networks on this issue look like on Twitter. Third, we explore who are the influential actors in the Twitter debates and what are their arguments. Finally, we examine the largest question of all: How are social media-enabled social networks changing the discourse in American politics that produces social policy? General findings suggest that social networks around the CCSS are persistent and active, and show no sign of slowing down. Debate over this major education reform remains vibrant and is often takes the form of a proxy war about broader cultural disagreements over the future direction of education. The growth of a social media-savvy network of activists has given rise to a new and influential faction in the struggle for political influence that seem to be changing the dynamics of the policy making and sustaining process.

#### PAPER 3 ABSTRACT

Moving from Pupil to Learner: Translating a New Curriculum in Classrooms, Jenny Reeves and Val Drew

In recent years there has been an international policy drive to extend practices associated with the discourse of lifelong learning in adult education into the schools' sector (OECD, 2007; Yates & Young, 2010, Priestley & Biesta, 2013). At its heart is a switch to developing children and young people as 'learners' where 'learners' are conceived as persons who are able to direct and manage their own learning. Students in schools will become learners through acquiring generic 'skills and aptitudes' which will allow them to actively build their own skills and aptiutudes across the curriculum and throughout their lives. The switch to a constructivist pedagogy, which the title 'learner' signals, is contrasted with the transmissive pedagogy implied by describing children and young people as pupils. This paper forms part of a study that seeks to examine how curriculum policy is implemented through a 'succession' of translations from when and where it is published by government to when and where it is realised (or not) in classroom practice (Reeves 2013, Reeves & Drew 2012).

Prior to 2004 the common term for referring to children in Scottish schools was 'pupil', a word that was studiously avoided in favour of 'learner' in the series of documents published by the Scottish Government to support the introduction of the Curriculum for Excellence (CfE) from 2004 onwards. This change in nomenclature, signalled an attempt to bring about a substantive alteration in the relations between children and young people, their teachers and the curriculum. The paper explores how a number of teachers and their students made sense of the new curriculum in their classrooms. In so doing it asks: In what ways did these teachers and students adopt the discourse (language, materials, procedures) associated with the new curriculum? What were the benefits and difficulties that these actors encountered in this course of adoption? How were these benefits and problems negotiated, accommodated or avoided in practice? The study was based on data derived from eighteen professional enquiries into students' learning, carried out between May 2010 - June 2011 in eleven secondary and seven primary schools in Scotland. These enquiries, were undertaken by teachers who were on a Master of Education (MEd) programme. The sources of evidence for the study consisted of: interviews with the MEd participants who instigated the enquiries, and, in the case of collaborative projects, a colleague and a school manager; the reports written by the teachers on the MEd and the portfolios of evidence submitted with the reports. The study illustrated a range of effects that occured as practitioners (students and teachers) adopted classroom practices that were new to them. In particular the paper examines the shifts in interrelations between teachers, students and the curriculum opened up by the use of practices such as peer assessment, collaborative learning techniques and classroom enquiry. The paper raises a number of issues with regard to:

- sustainability and the discursive placement of imported tools and procedures
- what counts as content in a curriculum
- making the classroom more humane and democratic.

## **PAPER 4 ABSTRACT**

Do increased professionalism and school autonomy explain the success of the world's leading education systems? Multiple pathways - the case of Singapore, Professor Clive Dimmock and Cheng Yong Tan

In recent years, the availability of international comparative data on student performance has led to a proliferation of analyses on the developmental trajectories of education systems around the world. In the barrage of published findings emanating from these studies, there is a discomforting articulation that all education systems, regardless of their sociocultural and political contexts, will inexorably converge in their developmental trajectories. Two organisations in particular - OECD through its PISA 2012 report, and McKinsey & Co. through its reports on the progression of education systems to 'greatness' - claim two characteristics in particular are associated with system improvement trajectories: these are increasing teacher professionalism, and greater school autonomy. For example, McKinsey & Company in its high profile report 'How the world's most improved school systems keep getting better' argues unequivocally that as education systems progress to 'greatness' (the highest level of development in its four-stage typology), teachers will become more professional and enjoy increased autonomy and decision-making over curriculum and pedagogy to improve student learning, and school principals and leaders will expect more school autonomy over human and financial resources. This paper challenges these assumptions on the basis of the concept of 'naive empiricism', defined as algorithms of simplistic, reductionist assumptions based on data sets and analyses that are inadequate in what they purport to measure. It does so through reference to Singapore, a highly successful education system, according to these measures using international achievement tests.

The paper argues (based on evidence of teacher, principal and system-level relationships and practices) that in the tightly controlled education system of Singapore, rated as 'great' by a McKinsey&Company report on its performance trajectory, that despite reasonably high levels of professionality, teachers and principals remain largely circumscribed and curtailed in exercising their professional discretion, and that most strategic decision-making power and control over resources remains in the hands of powerful policymakers and bureaucrats. What matters is not so much the degree of teacher and principal/ school professionalism and autonomy, as the extent to which practitioners are able to exercise them. Hence, the OECD and McKinsey et al. models of teachers exercising higher levels of professionalism and principals leading increasingly autonomous schools do not fit well as accurate explanations for Singapore's success.

While teacher professionalism and school and leader autonomy do not fit well as explanations for Singapore success, our evidence is that other non-school factors contribute significantly to student performance. Among these are - competent policy makers, tight-coupling and alignment of all parts of the system, and a socio-cultural premium on educational achievement, including intense parental engagement in education and private-home tutoring. Our argument is that International agencies that purport to explain how different education systems achieve success in terms of two educational characteristics - teacher professionalism and school autonomy, while ignoring broader socio-educational-cultural, political and economic factors is illustrative of 'naive empiricism'. Rather, there are multiple pathways to success.

## **PC** Roundtable

Title: Learning Through and For Practice: A radical reform of the concept and practice of student

teacher professional experience premised on a cognitive apprenticeship model and deeply

embedded in a strong collaborative and democratic Partnership.

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3376

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Malin

Author/Speaker: Rosa Murray

Company/Organisation: University of Edinburgh

Co-Authors: Rosa Murray

Mary Andrew

Presenting Author: Rosa Murray

Preferred Presentation: **Round Table Discussion** 

### **Abstract**

#### **PERSPECTIVE 1**

Learning Through and For Practice forms part of the radical approach that Edinburgh University has taken in response to the requirement within Teaching Scotland's Future (TSF 2010) that 'exploration of theory through practice has to be central to all placement experiences'. Graham Donaldson, the author of TSF, argued that the traditional Scottish BEd be phased out and that Teacher Educators develop new and innovative models of Initial Teacher Education (ITE) programmes which would enable a continuum of support for teacher learning from ITE, through Induction and throughout a teacher's career. At the heart of this teacher education reform was the concept of strong collaborative partnership working with Local Authorities and schools which would begin to address the problem of the perceived disconnect between university teacher educators and schools. This roundtable discussion will focus on the distinct nature of the University of Edinburgh Teacher Education Partnership and how this has informed and shaped the new MA Primary Education and the radical approach to student placement within the MA programme, based on Zeichner's theory and understanding of a deeper relationship between academic and practitioner knowledge in support of student teacher learning. (Zeichner 2010). This radical approach has implications for teacher education in terms of continuing this depth of learning as a continuum throughout a teacher's career. There are also challenges to Teacher Educators to engage deeply with partners as co-creators and co-developers of learning programmes which were typically only within the academic domain of the university.

#### **PERSPECTIVE 2**

The University of Edinburgh Teacher Education Partnership (UoE TEP) was established in September 2013 to develop new and improved ways of working between Moray House School of Education and its six partner Local Authorities. This is a strategic partnership formed to implement and establish the Teaching Scotland's Future (TSF) partnership recommendations. Significant development has taken place in the UoE TEP particularly in the progression of all four areas of the Teacher Education Continuum: Initial Teacher Education, Early Phase Professional Learning, Career-Long Professional Learning and Educational Leadership.

This discussion will focus on the strengths and challenges of forming and implementing real democratic and inclusive partnerships and how this contributes to the development of a culture shift across a range of stakeholders and to enhancing the agency and learning of all those involved in the partnership. We will also discuss how partnership working is contributing to a more strategic use of the expertise and resources available within the Local Authorities and the University to provide deep professional learning experiences for teachers within the four areas of the professional learning continuum including a specific focus on Masters level learning as envisaged in TSF.

## PTM Innovate! Session

Title: "The Trinidad and Tobago Case Study: A Strategic Research Agenda (SRA) improving

Educational policy and practice through mobilised evidence"

Topic: Policy translations and mistranslations

Abstract ID: 3381

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 17.00-17.30

Location: Malin

Author/Speaker: Hannah Katwaroo

Company/Organisation: Ministry of Education

Co-Authors: Ria Collingwood-Boafo

Shalini Maharaj Hannah Sammy Antonia Wall

Presenting Author: Hannah Katwaroo

Presentation Method: Innovate!

## **Abstract**

Trinidad and Tobago's Education system has always been strongly influenced and challenged by a diverse mix of historical, socio-economic, institutional and cultural factors. In an attempt to better understand and treat with these competing factors that influence educational policy and practice, the Ministry of Education (MOE) has adopted a greater thrust towards engaging in and with research. This research paper will feature the indigenous Strategic Research Agenda (SRA) of the MOE, that is, its origins, concept and most importantly, instrumental purpose in closing the evidence-to-practice gap at all levels of Trinidad and Tobago's Education system.

The MOE's four research strategies -

Strategy #1: Building the MOE's institutional, organisational and individual research capacity,

Strategy #2: Prioritising areas of research,

Strategy #3: Communicating and contribute to new knowledge and data,

Strategy #4: Leveraging and establishing sustainable partnerships with key stakeholders,

and their linkages to current programmes, activities and student outcomes will all be interrogated. Furthermore, the MOE's emerging practice of knowledge mobilisation which is being implemented to support the SRA and ensure that evidence is being translated into policies and practices that have a measurable and meaningful impact will be explored during this presentation.

## **TE Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Hebrides

Chair: Susan E. Elliott-Johns

### **PAPER 1 ABSTRACT**

Making the Case for Reflection in Teacher Education as Professional Learning, Dr Susan E. Elliot-Jones, Nipissing University

While the concepts of 'reflection' and 'reflective practice' recur frequently in the literature and discourses of teacher education and classroom practice – including the relevance of reflection to ongoing professional learning for teachers and school leaders - the concept still appears to be somewhat vague and, in my experience, is often interpreted very differently. In my current work (research and practice) as teacher educator I prioritize encouraging teacher candidates (and experienced teachers with whom I also work) to move towards becoming reflective practitioners, i.e., individuals who can meaningfully

connect reflection to personal action and classroom pedagogy. For example, I will purposively design course components to include both classroom learning activities and assignments for evaluation that require in-depth discussion, critical inquiry, and reflection. Over time, I have found it increasingly beneficial to allocate class time to clarifying what I mean by reflection, my rationale for including opportunities for teacher candidates to reflect, explicit explanation of my expectations for reflection as part of coursework for professional learning, and the sharing of illustrative examples. Similarly, workshops conducted with more experienced teachers routinely include strategies that seek to promote meaningful reflection on learning/experience. This paper presentation will first make a case for the necessity of clarifying what we actually mean by 'reflection' and its significance in learning and teaching. The presenter will then explore and discuss the potential for reflection and reflective practice to richly enhance professional learning and, in turn, improve student achievement in contemporary classrooms.

#### **PAPER 2 ABSTRACT**

Learning without limits: how a narrative of growth is driving professional learning that makes a difference to the quality of teacher practice, Heather De Blasio, Wilderness School

According to Hattie (2014), a narrow focus on high achievement as the major indicator of quality education, can lead to the wrong questions and the wrong answers. It can also lead to the misplacement of scarce resources at the cost of other reforms. Exploring the nexus between effective professional learning and effective teaching, this paper reports on a whole school improvement initiative (Kindergarten to Year 12) that eschews deficits and sources of failure. Instead, in a school where high 'achievement' is already entrenched, it focuses on how a narrative of growth and progress, based on the Assessment for Teaching model developed by the Assessment Research Centre at the University of Melbourne (Griffin ed. 2014), can point the way forward. Reporting on the promising early impact of the initiative, which involves the creation and implementation of developmental progressions describing what growth and progress look like in academic and non-academic disciplines, the paper wades into the debate that all students can learn and improve if teachers identify what they are ready to learn (Griffin ed. 2014), and act accordingly. The alignment of the model's developmental learning principles with the professional learning program, whereby teacher readiness is identified, monitored and targeted with developmentally appropriate support (Krathwohl, Bloom & Masia, 1964), will be shown to support universal take-up and also have a significant impact on teacher's thinking and classroom practice. Underpinned by notions of "reciprocal" accountability (Elmore, 2002), the approach to this professional learning initiative is predicated on time and recognition: time to build shared knowledge and learn with and from each other, and recognition of the strengths and expertise already within our ranks. This paper details how the initiative is being undertaken, barriers and enablers, teacher perceptions of the impact on their thinking and classroom practice, and student perceptions. It also examines its potential transferability to other systems and schools.

### PAPER 3 ABSTRACT

Mentoring and coaching in education: unpacking the terminology, Trista Hollweck, Unibersity of Ottowa

International educational research has shown that high quality induction, mentoring and coaching for beginning teachers can enhance development and retention of highly effective teachers and ultimately, increase student success (Darling-Hammond & McLaughlin, 1996; Fletcher, Strong & Villar, 2008; Wang, Odell & Schwille, 2008). Although induction, mentoring and coaching have grown internationally in popularity as a means to address teacher professional learning, the programs vary greatly in terms of effectiveness (Feiman-Nemser, 2012; Ganser, 2006; Mullen & Fletcher, 2012). Whereas the majority of the literature deals primarily with how to introduce and practice mentoring and coaching, there is a dearth of research that provides scrutiny on what actually happens in mentoring and coaching practice. For those empirical studies that do exist, the focus tends to be primarily on beginning teachers and their experience (Bullough, 2012; Cullingford, 2006; Ganser, 2006). Concomitantly, the terms mentoring and coaching are conceptualized in a variety of ways in the educational research literature. Although there has been some work done to clarify these terms, conflicting interpretations and usage remain (Mullen & Fletcher, 2012; Curee, 2005). As highlighted by the United Kingdom's Centre for the Use of Research and Evidence in Education (Curee, 2005), the language remains "confused, overlapping and sometimes involves 100% reversal of key terms" (p.6). Clearly more work in this area is needed. This study unpacks the terminology in the international educational literature and adds to the discussion by outlining how these terms are conceptualized in Canada's Western Québec School Board (WQSB).

The terms coaching and mentoring are often used interchangeably in the literature, however, there have been foundational steps taken to differentiate them (Mullen & Fletcher, 2012; Curee, 2005). Building on this work, this study introduces Wenger's (1998) communities of practice theory as a way to examine mentoring and coaching terminology. As a social theory of learning, Wenger (1998) outlines four key interconnected and mutually defining components of communities of practice that are necessary to characterize social participation as a process of learning and of knowing. These components include meaning (learning as experience), practice (learning as doing), community (learning as belonging) and identity (learning as becoming). Applying this perspective to the conceptualization of mentoring and coaching in the WQSB, mentoring can be conceived of as focusing on the navigation the school and district culture (learning as belonging) and the formation of a teaching identity (learning as becoming). On the other hand, coaching focuses on the practice of teaching (learning as doing) and what it means to be a teacher (learning as experience). It is this study's view that by interweaving the theories of coaching and mentoring and Wenger's (1998) communities of practice theory, a powerful conceptual framework is presented to analyse the experience of mentor-coaches in the WQSB. Specifically, this study examines how a mentoring and coaching program impacts veteran teachers' professional learning, identity and practice, as well as, the overall school and district culture.

## **LDP** Roundtable

Title: Leading change being a novel principal: critical incidents during the first year

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3120

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Orkney

Author/Speaker: Luis Ahumada

Company/Organisation: Pontificia Universidad Católica de Valparaíso

Co-Authors: Carmen Montecinos

Veronica Leiva

Presenting Author: Luis Ahumada

Presentation Method: Round Table Discussion

## **Abstract**

Understanding the challenges faced by novice principals seems paramount to the development of induction programs that support workplace learning. The current study examines these challenges in a sample of 13 newly appointed principals working in schools serving a high-poverty student population. Participants reported critical incidents faced during their first year, revealing their quest for legitimacy. Whereas some legitimated their authority, others legitimated their leadership. These findings are discussed through Weisbord (1976) model for organizational change.

Objectives or purposes In the Chilean context, new principals are hired with the explicit task of leading, rather than administer their schools. In the current study we examined how 13 novice principals address this function during the first year on the job and the critical incidents they experience during this challenge. The main purpose of this paper, therefore, is to portray how new principal deal with critical incidents leading organizational change at their schools.

Perspective(s) or theoretical framework The research on newly appointed principals has shown that the arrival of a new school leader is a challenging experience as well as an opportunity for renewal and change (Crawford, 2012; Northfield, 2013). Jacobs, van Witteloostuijn & Christe-Zeyse (2013) makes a warning about the risky and multifaceted aspects of organizational change. Since change affects all organizational aspects, including strategy, internal structure, processes, attitudes and culture; principals need to realize that change it's not easy and quick. To properly plan for change, Al-Haddad & Kotnour (2015) proposes aligning the change type and change method to achieve the desired change outcomes. Particularly relevant to the current study is the Weisbord's (1976) Six-Box Organizational Model for organizational change. Weisbord's model establishes a systematic approach for analyzing relationships among variables that influence how an organization is managed. In the last years, leadership literature has increased the attention in the critical incidents associated with leading change in schools (Lenarduzzi, 2015; Yamamoto, Gardiner & Tenuto, 2014). Accordingly, the paper's focus is on new principals facing critical incidents during the process of organizational change.

Methods, techniques or modes of inquiry Two semi-structured, in-depth interviews were conducted with the principal at the school. The study employs narrative plot analysis (Daitute, 2014), to portray the challenges school leaders face as they perform their work, the nature of the context within which these challenges arise and the strategies school leaders adopt to deal with the complexities of the critical incidents they experience.

Results and/or conclusions/points of view The narrative plot included in the paper portray the context of the school, the challenges encountered and the strategies implemented to deal with the critical incidents. These narratives are organised on six areas of formal and informal activity proposed by Weisbord (1978) model: purposes, structure, relationships, rewards, leadership, and helpful mechanisms.

Connection to the themes of the congress This presentation is aligned explicitly with strand 2, "Leadership development and practice to build sustained improvement". More specifically, it has relevance to understand key implications for "leadership development and practice within lasting school improvement efforts".

## **Mixed Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Science Centre Tower Base North 1 Location:

Chair: Dr Stephen McKinney

## PAPER 1 ABSTRACT

Developing cooperative learning pedagogy in initial teacher education, Wendy Jolliffe, University of Hull

This paper will examine research into supporting teachers in implementing cooperative learning, with a focus on pre-service (initial) teacher education. Cooperative learning defined by Johnson and Johnson as 'the instructional use of small groups in which pupils work together to maximise their own and each other's learning' (1999: 73), has a number of theoretical roots including cognitive developmental theory (Piaget, 1950; Vygotsky, 1978) and social cognitive theory (Bandura, 2000). Principally it is related to social interdependence theory developed by Deutsch (1949), which he stated existed when individuals share common goals and understand each individual's outcomes are affected by the actions of the others. This pedagogy has been subject to extensive research identifying its academic and social benefits (Kyndt et al., 2013; Johnson & Johnson, 1989; Sharan, 1990; Slavin, 1996), but there is more limited research into its implementation, particularly in initial teacher education. Starting from recurrent themes in the literature into professional development in cooperative learning and the more limited existing research into pre-service teachers, this paper will examine the work undertaken by one higher education institution. Research over five years explored the impact of training in cooperative learning on student teachers'

understanding, attitudes and practice in the classroom. Indicators of successful transfer are provided, however the many demands on trainee teachers and the barriers of working in schools where cooperative learning is largely undeveloped, show that although students were universally positive about the use of cooperative learning as a particularly inclusive strategy, only a few were able to develop this extensively. The paper will conclude with a review of factors that supported those students who were more successful. This may provide indicators for others in developing initial teacher education programmes.

#### PAPER 2 ABSTRACT

Impact of the Education Welfare Priority Zone Program on school adjustment of South Korean elementary school students, Junyeop Kim, Hongik University

This study examined the effects of the Education Welfare Priority Zone Program (EWP) of South Korea, particularly focusing on its impacts on elementary school students' adjustment to school life. The South Korean government first launched the EWP in 2003 by benchmarking the Education Action Zone from the UK and the Zone d' Education Prioritaire from France. The EWP provides intensive supports to students living under poverty and simultaneously improves the overall environment surrounding the school. EWP schools select students who are subject to Priority Support (PS) based on their socioeconomic circumstances and provide whatever support necessary and available to the children. The program also supports a variety of small-scale, after-school programs for children from poor households in the local community (MOEHRD, 2005). Although several studies have demonstrated that the EWP is effective in improving students' academic achievement, little is known about its effects on students' non-cognitive aspects such as school adjustment. In this study, we extended the literature by exploring the effects of the EWP on students' perceived emotional support and cultural experiences that may help them better adapt to their school life.

To examine the effectiveness of the EWP on students' school adjustment, which was measured with students' class attitudes, social skills, and problem behaviors, we collected survey data from 43 EWP and non-EWP schools for 3 years from 2009 to 2011. Using data from 1,237 elementary school students, we examined the mediating effects of perceived teacher interest toward students, participation in school activities, and social capital through networks within the local community between the EWP participation and school. In our model, we also controlled for family income, parental occupation and level of education measured by the Ganzeboom scale, whether the student receives free school lunches, basic livelihood security, and whether the student is from a single- or no parent family (Ganzeboom & Treiman, 2003). These variables are used to estimate a propensity score, which is then matched to achieve a balance between the treatment and control group. Both principal stratification and the propensity score approaches were employed to estimate the effects of the EWP program.

The findings can be summarized as follows. First, for those who were eligible to receive PS, being in EWP schools and receiving PS resulted in increases in their perceived teacher interest and support. This increased level of concern has shown to directly and indirectly improve elementary students' class attitudes and social skills. Second, for the student group which was not eligible for PS, simply attending EWP schools but not receiving PS did not result in any appreciable improvement. However, regardless of EWP participation, it was found that perceived teacher interest and support positively affected students' problem behaviors as well as their class attitudes and social skills. Suggestions for improving EWP implementation were also made based on these findings.

## PAPER 3 ABSTRACT

Understanding the nature and impact of bullying in primary schools, Vanessa Scherman, Rachel Annunziato and Se-Kang Kim

Bullying is a reality in the daily lives of the many learners (Neser, Ladikos & Prinsloo, 2003), the result of which has serious implications for both the victim and the bully, in the short and the long term. On the part of the victim, physical and psychological stress is prevalent which leads to the inability to maintain successful relationships, may be the cause of depression and the development of a negative self-esteem. Children who bully have a tendency to develop maladaptive social skills that result in poor adult adjustment and are likely to transmit poor social skills to the next generation (Crothers & Levinson, 2004). Furthermore, academic performance also suffers (Cross et al., 2011) and within an environment where the improvement of educational outcomes is vital, the role of peer victimisation cannot be disregarded (Juvonen, Wang & Espinoza, 2011). As a worldwide phenomenon, bullying has received attention from within the academic world as well as the media. This presentation will explore the nature of bullying taking place and the impact on Grade 4 performance of two pilot schools (n=200). The schools form part of a broader research project drawing on a mixed methods intervention design. The schools were purposefully selected based on geographic area and the prevalence of bully taking place. The

bullying instrument draws on established bullying questionnaires and includes items on the nature of bullying, frequency of bullying as well as items exploring the subjective well-being of participants. The Annual National Assessment results will be used for academic performance. Descriptive and inferential statistics are used to explore the nature of bullying while regression analysis is used to explore the relationship between bullying and achievement. Data collection is still underway, the results will be reported and discussed within the context of the need to effectively measure bullying especially within a school improvement agenda. Implications for the main study, which includes 30 schools randomly selected and matched on school characteristics, will also be presented.

# **Mixed Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Science Centre Tower Base North 2

Dr Deirdre Torrance Chair:

## **PAPER 1 ABSTRACT**

Using the dynamic approach to improve quality of teaching: the effects of a three-year professional development program Charalambos Charalambous, Leonidas Kyriakides, Margarita Christoforidou, Anastasia Panayiotou, Bert Creemers, University of Cyprus

Among the various systems and paradigms employed in teacher education and development, the Holistic or reflective Approach (HA) and the Competency-Based Approach (CBA) are considered as the dominant approaches to teacher professional development. Both approaches have been criticized extensively and there is little empirical evidence to support their effectiveness in promoting effective teaching. This paper presents a Dynamic Approach (DA) to teacher professional development (see Creemers, Kyriakides & Antoniou, 2013) which is based on research findings revealing that teacher factors of the dynamic model of educational effectiveness can be classified into stages of effective teaching, structured in a developmental order and associated with student outcomes. Thus, this approach suggests that teacher professional development should be focused on how to address specific groupings of teacher factors in relation to student learning rather than to an isolated teaching factor (as proposed by the CBA) or to the whole range of teacher factors (as implied by the HA), without considering the professional needs of teachers. The DA lies between the two dominant approaches and aims to overcome their main weaknesses. The integrated nature of this approach is attributed to the fact that, although the content of the DA refers to teaching skills that were found to be positively related with student achievement, participants are also engaged into systematic and guided critical reflection on their teaching practices.

Four experimental studies demonstrated that one-year courses based on the DA have a significant effect on improving teacher effectiveness. A study measuring the sustainability of the DA revealed that during the year that no intervention was offered, the teaching skills of teachers who were offered DA had neither improved nor declined (Antoniou & Kyriakides, 2013). Taking in mind the argument that it is easier for a teacher to improve than to maintain a standard of excellence, this study investigates the impact of DA when it is offered for more than one year.

Specifically, a sample of 106 teachers was randomly allocated into two groups: one experimental group which received a professional development program based on the DA for three consecutive years and one control group. Teaching skills were measured at the beginning of the intervention and at the end of each year. Multilevel analysis revealed that teachers employing the DA improved their skills during each year that the intervention was offered but no change in the skills of the control group was observed. Differential effects for teachers situated at different levels are also reported. Implications of finding and suggestions for the duration of programs based on DA are drawn.

## **PAPER 2 ABSTRACT**

Students' perception of teacher support and monitoring, Sigrun K. Ertesvåg, University of Stavanger

#### Objective and theoretical framework

Research on educational effectiveness and instructional quality has shown that classroom processes are an important source of variation in students' learning (e.g. Creemers & Kyriakides, 2008; Hamre & Pianta, 2005; Hattie, 2009). Teachers are charged with managing the instructional, affective and behavioral tone of their classrooms, and their influence on students social and academic development may result from interactions with students as a group (class) or individually (Roland, 1999). Accordingly, the notion of interaction between teacher and student in the classroom as a context for providing students with the opportunity to engage in insightful leaning processes, has recently gained currency in educational research. Prominent theoretical models of instructional quality that describe the most important aspects of instructionally quality have been developed (e.g. Kunter & Baumert, 2006; Pianta, Hamre, & Allen, 2012; Wubbels et al., 2015). In this study classroom interaction is understood as a three dimensional concept of teachers emotional support, monitoring and instructional support (Ertesvåg & Havik, submitted).

The aim of this study is to explore the relationship between social (e.g. bullying, off-task behavior, aggression, mental health, SES) and academic achievement, and the three aspects of classroom interaction. Moreover, to discuss the implications for practice and teacher training.

#### Results

Data were collected from students in 85 classrooms in ten Norwegian schools participating in a national initiative on improving classroom management. A web-based questionnaire were used and data from the first data collection was included. A total of 1571 students in grades 5 to 10 (ages 10-15) participated. Multilevel modeling revealed a negative association between several of the social and academic factors at individual level and one or more of the three aspects of classroom interaction even after classroom-level factors were controlled for. For example students who bully others perceived less emotional and instructional support, but not less monitoring than their peers. Similar, students experiencing mental health problem reported less support and monitoring than their peers on all three aspects of classroom interaction. However, the association between gender and aspects of classroom interaction were weak, indicating no difference in boys and girls perception of teacher support and monitoring. Analysis on the association between students' perception of teacher support and monitoring and academic achievement will be performed during the fall semester and included in the paper.

#### Conclusion

The results indicate that teachers account for at least some of the variations in students social and academic outcome. Moreover, the results shows that students at risk for poor social and academic outcomes report the weakest relationships with their teachers. Accordingly, the students whom the relationships may be of greatest benefit, experience the least support and monitoring from their teachers. In light of the serious long-term consequences of e.g. behavioral problems and/ or poor academic achievement, the negative associations for at risk student is of concern. Implications for practice, as well as pre-service and in-service training will be discussed.

#### PAPER 3 ABSTRACT

The Effects of Teacher Factors on Students' Cognitive and Metacognitive Skills: a study testing the validity of the dynamic model, Andria Dimosthenous, University of Cyprus

This study investigates the impact of teacher factors included in the dynamic model of educational effectiveness (i.e., orientation, structuring, questioning, teaching modeling, application, management of time, teacher role in making classroom a learning environment, and assessment) on students' cognitive (i.e., mathematics) and metacognitive (i.e., prediction and evaluation) skills. The dynamic model takes into account the new goals of education and related to this their implications for teaching and learning. It is based on traditional views on learning and instruction such as direct learning and teaching which emphasize not only the role of teacher as instructor responsible for providing knowledge and skills but also the specific behaviors he/she should apply. The model also takes into account new ideas on learning and instruction associated with constructivism which give emphasis to independent learning and the construction of knowledge by the learner. An integrated approach in defining quality of teaching is therefore adopted.

Five longitudinal studies (including a study conducted in six European countries) and a meta-analysis of teacher effectiveness studies revealed that teacher factors are associated with student achievement. However, none of these studies was concerned with metacognitive learning outcomes. While metacognition has generated a lot of interest and research in education, the educational effectiveness paradigm has not yet permeated into this field. Thus, the study reported here search for the effects of teacher factors on both cognitive and meta-cognitive student learning outcomes.

A stage sampling procedure was used and 15 primary schools in Cyprus were randomly selected. All grade-4 and grade-5 students (n=924) of the 53 classes of the school sample participated in this study. Written tests in Mathematics and the "Metacognitive Skills and Knowledge Assessment - MSA" tool were administered to students at the beginning and at the end of school year 2013-2014. The MSA tool takes into account the theoretical framework of Brown and is based on comparisons between student's estimation about their performance and their actual achievement in various tasks. The MSA tool was translated and adapted in Greek and CFA analysis revealed that MSA could be used to measure only two dimensions of regulation of cognition (i.e., prediction, and evaluation). All students completed a questionnaire measuring teachers' classroom behavior that had been developed to test the validity of the dynamic model.

Multilevel SEM analysis was conducted to search for the effects of teacher factors on student achievement in mathematics and on students' metacognitive skills. At the lowest level (i.e., student level), age (as expected) was associated with prior achievement in both mathematics and metacognitive skills but younger students made more progress in mathematics. Moreover, girls were found to outperform boys in metacognitive skills. A reciprocal relation between students' cognitive and metacognitive skills was identified. At the classroom level, all teacher factors but management of time had an impact on students' final achievement in mathematics but only four factors (i.e., modeling, assessment, questioning, and dealing with misbehavior) were associated with students' metacognitive skills. Implications of findings for research on effective teaching and for teacher professional development are drawn.

## **RCEL Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Science Centre Clyde 1

Chair: Jule Hildmann

#### PAPER 1 ABSTRACT

Psychometric Research and Arts-based Programming as a Context for Effective Learning, Jennifer Godfrey Anderson, Heather McCleod, Bahar Haghighat

This study investigates the impact of a curriculum-based interdisciplinary program situated in a community based gallery, museum, and archives complex. The program values slowing down and immersion in a novel and engaging learning environment. Each week is unique and is developed by the classroom teacher in consultation with an on-site educator. This research investigates the program's impact on children's engagement, sense of confidence, and academic achievement as well as the impact of the program on teachers' practice.

Research shows that strong collaboration between schools and museums is important (Berry, 1998; Blume et al., 2008; Cochrane, 2004; Dewey, as cited in Hein, 2004; Henderson & Atencio, 2007) and museums promote many forms of literacy including content, expressions, printed texts, and more, allowing for connections between the written text and the outside world (Eakle, 2009; Eakle & Dalesio, 2008; Ortuño, 1994; Schwartz, 2008). Interactive learning, active learning, informal learning, out-of-class learning, and experiential learning go beyond traditional methods (Dewey, as cited in Ansbacher, 1998; Eshach, 2007; Howley, Howley, Camper, & Perko, 2011; Kratz & Merritt, 2011; Lundahl, 2011; Shanklin, 2009; Talboys, 2010; Wiseman, 2002; Falk, as cited in Viadero, 1998b). Experiential programs promote observation and reflection and involve critical thinking skills (Adejumo, 2010; Cochrane, 2004; Constantino, 2008; Jacobs, 2011; Tallmadge, as cited in Lundahl, 2011; McMillan and Wilhelm, 2007; Yost & Vogel, 2012). Deep and meaningful learning involves cognitive and affective components and Dewey argued that for museums to offer effective experiences they must focus on what they intend visitors to know and what they intend visitors to feel (as cited in Ansbacher, 1998). Therefore, museums as educational centers should combine information and feeling.

Phase one of this research involved an online survey of students, teachers, parents, and parent volunteers, and a focus group with teachers. Phase One showed that the benefits of experiential student learning and the arts included the promotion of observation and reflection, the learning involved both cognitive and affective components, and there was a powerful impact on teacher practice. Based on a request from the funding agency to provide numerical data on student achievement as a result of the program, Phase Two narrowed the focus to assess the impact of the program on student knowledge and attitudes of core curricular areas and provincial program goals. Phase two highlighted an increase in student attention to and understanding of curricular subject areas, as well as, an increase in understanding of the larger goals of the curriculum such as aesthetic expression, citizenship, communication, personal development, and problem solving.

Navigating the tensions between psychometrics and arts-based programming, as well as the positioning of experiential educators and researchers, required a collaborative, flexible, and creative process. This paper explores the development, results, and tensions encountered in creating a measurement instrument for an arts and museum-based school program and reflects on what these tensions can help to illuminate regarding alternate educational settings and the changing goals and expectations of public education systems internationally.

#### PAPER 2 ABSTRACT

Quantitative longitudinal studies of school improvement: State of the art, methodological challenges and potentials, Tobias Feldhoff, Falk Radisch, Linda Marie Bischof

The aim of school improvement is to "enhance student outcomes as well as strengthening the schools' capacities for managing change" (Hopkins et al., 1994, p. 3; Sammons et al., 2014; Stoll, 2009). To achieve these goals, a highly complex and lasting improvement process is needed which incorporates diverse reciprocal and interdepend actions and strategies on different levels. To reach a better understanding of the relation between school improvement capacity, teaching and student outcomes and to broaden our knowledge base, we need studies that appropriately model the complexity of school improvement. which use complex designs and methods of analyses. The choice of designs and methods has an influence on the insights that are possible.

Therefore, this paper aims at giving a systematic review of quantitative longitudinal studies in current school improvement research (Feldhoff, Radisch & Bischof in press). The aims of the review are: 1. analyzing which aspects of the complexity of school improvement processes - and to what extent - are addressed in designs and methods of analysis in quantitative longitudinal studies that investigate the relation between schools' capacity to managing change and student outcomes. 2. Deriving need for further research and giving guidelines how designs and methods in further studies can reflect the complexity appropriately.

We developed a framework of the complex nature of school improvement processes described by six characteristics that guided our analysis: (1) the longitudinal nature, (2) the indirect nature, (3) the multilevel phenomenon, (4) the reciprocal nature, (5) differential development and nonlinear effects and (6) the variety of meaningful factors. In a second step, an analytic rubric was developed to evaluate how many articles sufficiently considered the six characteristics.

We considered in our systematic review papers which include a concept of capacity to change and examine the relation of schools' capacity to change and student outcomes. Our search was limited to papers that were published in international peer reviewed journals within the last 15 years.

The results show that only 13 of longitudinal studies exist, that examine the relation between schools' capacity to change and student outcomes.

Taken together, across all studies we found that none addressed all the characteristics of complexity outlined as standard. With respect to measurement points, all studies at least partially comply with the standard. Apart from only two studies, that did not consider the multilevel structure, all other studies take at least the student and school level into account. At the same time, we noticed that many characteristics of complexity were neglected altogether. This was observed for longitudinal criteria (justification of number and spacing of timespans and duration of period of observation, measurement invariance), reciprocity, differential effects and diversity of outcomes. We especially need further research on the dynamic interaction of the factors in building school' capacity to change and on the reciprocal interactions between schools' capacity to change, teaching quality and student outcomes as well as their change. All in all the paper shows the necessity and the potential of longitudinal studies for further school improvement research.

#### **PAPER 3 ABSTRACT**

Supportiveness-focused Evaluation in Promoting Effective Learning, Ruofei Tian

With the dual foundation of accountability and systematic social inquiry as the roots of evaluation (Alkin, 2013), evaluation questions commonly asked in education generally focus on "How well" or "How effective" a student or a teacher is. This action research done in a 6th grade classroom demonstrates a shift in the focus of evaluation which started with the needs assessment of students who were poor in math and the classroom math teacher's needs assessment in her effort to support the students in their learning. At the end of the semester, the research team evaluated the validity and size of supports that the classroom math teacher gave to her students and that the 6th grade math teacher group gave to the classroom math teacher in her effort to support the students.

The study found that among the many other key elements of creating conditions for effective learning, supportivenessfocused evaluation serves as a guidance by embedding in the school culture the evaluative thinking of "how supportive" as part of ongoing attention (Patten, 2014) to teaching and learning. The supports given down from the 6th grade math teacher group to the classroom math teacher and from the classroom math teacher to the students under supportivenessfocused evaluation are no longer what "I support you to meet what I think you need" but what "I support you to meet your real needs". Thus makes the supports given to improve teaching and learning more targeted, contextualized and therefore more effective. The philosophy behind supportiveness-focused evaluation is a belief on the goodness of human nature. Every one (students as well as teachers) longs to thrive and is willing to do his/her best to gain acceptance in family, school and society. The responsibility of school education is not to make judgment about what the students are or will be but to support them in their learning and thriving as they grow up. To give such a support is undoubtedly a great challenge for a teacher to meet alone and the teacher too needs supports from other teachers even his/her principal to fulfill it. When the teachers are evaluated by their supportiveness to each other and to the students, genuine collaboration among teachers in investigating, challenging and extending their current views (Muijs et al, 2014) and framing together their own professional learning in their efforts to support the students becomes possible. Thus effective learning happens.

## **RCEL Paper Session**

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.00

Location: Science Centre Clyde 2

Chair: Val Corry

#### PAPER 1 ABSTRACT

The gendered pattern of educational attainment amongst the most academically able pupils in the 16 to 18 age range in one Scottish secondary school: the views of boys and girls analysed using a grounded theory approach, Val Corry

There is evidence across Scotland of a gap in performance between some boys and some girls demonstrated by their educational attainment in the more demanding levels of external examinations: groups of girls performing significantly more highly than groups of boys at the same level of study. This is not just a national issue but one that is also in evidence internationally. Historically this phenomenon has been explored at a system level using quantitative data, and several educational researchers have drawn conclusions and made recommendations for practitioners and others to begin to consider and address the gender issues in educational achievement. This doctoral study aims to build on the work of these researchers but from a different stance.

A central issue in the area of gender equity in education is the lived experiences of different groups of pupils in schools. The stance taken in this research is to consider the learning of selected pupils (who are high attaining, or who have the potential to achieve highly academically) from the senior year groups in one school through exploring the pupils' personal experiences, views, perceptions and opinions about learning: the factors that facilitate and hinder progress in learning and attainment. The lived experiences of these selected pupils were explored through interviews with some boys individually, and groups of boys and groups of girls. Group interviews were employed to consider transferability and generalization of the findings. A limited number of open-ended questions were used to aid discussion.

The paper reports on a grounded theory approach, using methods developed by Corbin and Strauss (2008) and Glaser (1992; 2008) and supplemented by techniques advocated by Charmaz (2014), to analyse the outcomes of the interviews. The method of sampling, the protocols of the interviewing process, the methodology employed and the ethical considerations are explained and discussed. The advantage of grounded theory is that it is 'grounded' in the issues themselves. This approach is in accord with the post-modernist stance of multiplicity of views and diversity. This study does not set out to test a hypothesis or a theory using the data gathered (a positivist stance) but aims to develop concepts from the qualitative data, building a theory if possible. The interpretative approach adopted makes no attempt to select factors that could be influencing the phenomenon: rather exploring widely to seek understanding from the perspective of the subjects. The aim with grounded theory is to develop links between the data collected, developing categories that ultimately give rise to an explanation of the question being researched: in this case "What are the factors that influence or hinder the learning of academically able boys that could give some insight into their perceived 'underperformance'?"

The interim findings suggest that peer pressure, the gender of the teacher, and single gender groupings are not consistent factors. Motivation, interest, relevance of learning and competition would appear to have some significance.

#### PAPER 2 ABSTRACT

Promoting STEM Achievement for African American Male Success, Ayanna Johnson, Vinetta Jones, Kenneth Anderson, Mahammad Mahmood, Rosalie Boone, Gerunda Hughes, Larry Suter, Linnell Edwards, Oral Grant, Casilda Maxwell

The number of African American males entering college to pursue STEM fields is small and dwindling. While African American males comprise 15.4% of the US population they only receive 5% of STEM bachelor degrees awarded (NCES, 2009). The success of our nation's economy is dependent on having a racially and ethnically diverse workforce trained in quantitative and technical fields. Identifying and evaluating school related factors connected to math and science achievement so that African American males in high school can be directed towards success in STEM subjects in the classroom are needed.

The model discussed is the Four Factor Hybrid Model that consists of four achievement factors: engagement, capacity, continuity, and guiding functions (Boykin & Noguera, 2011). Each factor described focuses on the achievement levels specifically for Black males in the classroom to excel in STEM subjects (Jolly, Campbell, & Perlman, 2004). Each factor embodies certain achievement functions such as determining the interest level of math and science, rigor of the subject, and various institutional opportunities afforded to the students (ECC Trilogy Model & Boykin/Noguera model). Participants included (N=517) undergraduate students (Female= 346, Males=170) in math category courses at Howard University in Washington, DC. Undergraduate students were given a 47-item questionnaire on a 4-point Likert-scale entitled the Conditions for Black Male Success in STEM Survey (CBMSSS). Each question corresponded to one of the four factors of engagement, capacity, continuity or guiding functions. The students were asked to reflect back on their high school experience in responding to each question on the CBMSSS questionnaire.

The predicted hypothesis is to evaluate the interaction of factors proposed in the Four Factor Hybrid Model and determine what combination of factors are most effective for classroom learning (Appleton, et.al, 2006). An ANOVA analysis will be used to determine an interaction among the four factors and a multiple regression (hierarchical method) will be performed to determine which combination of the four factors predicts the highest achievement using GPA as an achievement indicator. The expected outcome is engagement will yield the highest interaction result of the four factors and engagement and capacity combination will yield the highest predicted achievement outcome (Boykin & Noguera, 2011).

Additionally, teachers can utilize the CBMSSS as an academic instructional support tool to evaluate how to increase these four factors in classroom instruction and various assessments and interventions. In doing so, participants can use this tool as a formative assessment for preventative measures of low achievement. Also, educators will gain an understanding as to how to be more intentional and transparent about the value of assignments given to students, so that students find more meaning behind it and are encouraged to complete it (Conner and Pope, 2013). By incorporating research of the conditions for effective learning, a better understanding of how these four factors in classroom instruction will become essential to the increase of more African American males to receive higher achievement in STEM subjects.

### PAPER 3 ABSTRACT

A Case for Transdisciplinary Research and Education, Tyler S. Thigpen

Right now, the majority of K-12 schools, colleges, and universities across the globe make use of a subject-centered approach to research and education, where emphasis is on gaining content knowledge, developing skills and making discoveries within disciplines, and advancing academic levels. Students in this system usually encounter potentially related standards from the disciplines in different classes, at different times in the school year, and with few connections between the content areas. And researchers usually explore, advance, and analyse questions depending on their discipline. The hope in our current system is twofold: Young people who command the disciplines will be "educated," thus enabling them to contribute meaningfully to society; and researchers who systematically devise theories and applications within the disciplines will make important discoveries and interpretations, thus contributing to the stock of human knowledge and providing solutions to our world's most pressing problems. But as celebrated as our hope in a subject-centeredness has been both in research and education, the approach has serious drawbacks.

In the K-12 realm, students grow increasingly disengaged with school as they grow older (Gallup, 2012). For example, a disturbing proportion of U.S. students—seven out of 10 in some national studies—is uninterested in school, primarily from lack of perceived relevance (Yazzie-Mintz, 2010). And in higher education, studies reveal that graduating students, even the engaged ones, are ill prepared for career opportunities. As an example, McKinsey surveyed 8,000 employers, education providers, and young people in the U.S. and revealed a burgeoning gap between the number of job applicants with the necessary entry-level skills and the number of college graduates who cannot find work (Mourshed, 2012). Researchers and tenured professors interviewed for the study esteemed their contribution to students' preparation for real-world work much higher than did employers and even students themselves. Employers, on the other hand, listed five critical skills, in order of importance, that most graduates lack but that remain critical for solving contemporary problems: teamwork; spoken communication; hands on training; written communication; and problem solving (Mourshed, 2012). Subject-centeredness in research and education allows for specialization; but too often it bores students, promotes compartmentalized thinking, fortifies intellectual barriers, and snuffs out the kind of cross-disciplinary and cross-cultural epiphanies that are critical for addressing the world's greatest needs.

What we need now is an approach to research and education that overcomes both hurdles - low student engagement and inadequate preparation – at once. What we need now is a relationship-centered trajectory that captivates students' interest and that includes, but ultimately rises above, the disciplines and highlights the relationships between them. What we need now at scale is a transdisciplinary approach to research and education. Grounded in case studies and research investigations, this Paper will explore definitions (e.g., from UNESCO, Nicolescu Basarab, and others), exemplars (both K-12 and undergraduate programs in the U.S. and abroad), benefits (with an emphasis on engagement, collaboration, and results), and challenges (e.g., disciplinary pedagogy, the cumulative nature of mathematics, and general change management) of transdisciplinary research and education.

# **PC Symposium**

Title: Leadership for changing times: models for public sector practice

Topic: Partnerships and collaborations: schools, agencies, government research

Abstract ID: 3140

Session: Parallel Session 1

Session Date and Time: Wednesday 6 January 2016 15.30-17.30

Location: Science Centre Auditorium

Author/Speaker: Anton Florek

Company/Organisation: Virtual Staff College

Co-Authors: Karen Seashore

Boudewijn van Velzen

Wilfried Schley

Michael Schratz (Discussant)

Presenting Author: Anton Florek

Preferred PMethod: Symposium

## Symposium outline

This interactive symposium will provide 4 examples of thematic practice from a number of distinctly different national systems, which aim to develop the individual and organisational leadership qualities of those in senior leadership positions in public services for children, young people and families, using these as a stimulus for discussion and reflection.

## 1. Leadership in a contested space

This presentation will describe a key theme identified in research published in 2013 by the Virtual Staff College namely, the influences of paradox and chaos that are associated with increasingly turbulent times and characterised by the acronym VUCA, describing the combination of volatility, uncertainty, complexity and ambiguity facing leaders today.

The presenter will argue that the last 25 years of the slow transformation towards New Public Management in the UK, has fostered the dominance of process targets reinforced with ever-expanding compliance and regulation. This has shaped public service leadership but now proves to be ill-designed to respond effectively to a VUCA world. Using the outcomes of new research commissioned by the Virtual Staff College in 2015, this new approach to leadership in public services will be explored.

### 2. Alternative organizational paradigms

While it is inevitable that, as public agencies, many schools will continue to be part of large state-run bureaucracies, it is critical to address emerging and historical alternatives. These include: (1) the increasing engagement of private sector and for-profit organizations in managing schools; (2) homeschooling, which in those countries where it is legal is increasing rapidly; (3) the community schools movement, which creates multiple sources of ownership beyond the traditional educational system; (4) teacher or parent managed independent schools e.g. charter schools, free schools, etc; and (5) competing bureaucracies, which arise in countries where there are both religiously affiliated and non-religious schools, where the government "rights" to govern religious schools are often limited by statute. The implications of these trends for improving traditional bureaucracies will be discussed.

### 3. Sharing governance: from rhetoric to reality

This presentation will provide an overview of a case study of practice where the president of an islamic school board in The Netherlands decided to share governance responsibilities with the directors of its 11 schools. The presentation will not only highlight the structural changes that are necessary but also reflect on the cultural dimensions that will be decisive for the success of the new model.

### 4. It's the end of change as a managerial technique

This presentation will aim to challenge our current concepts of managing personal and organisational change. Using examples of collaborative learning from the Austrian Leadership Academy, the presenter will outline the usage of the INTUS Methodology of Performance Simulation to improve professional competence in contexts such as school development, teacher training and educational learning.

Through these case studies and an interactive symposium format we hope to engage conference participants in discussion and comparative dialogue, to share experiences, learn together and discuss opportunities for collaboration and, through contrasting local, national and international perspectives, consider the implications for their organisational and professional practice.

# **Parallel Session 2**

Thursday 7 January 2016

11.00-13.00

## **TE Symposium**

Title: The teacher journey in Scotland

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3209

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Argyle Suite 1

Author/Speaker: Tom Hamilton

Company/Organisation: The General Teaching Council for Scotland

Co-Authors: Ken Muir

Norrie Mckay Charlaine Simpson Ellen Doherty, Jacqueline Morley Vikki Robertson

Presenting Author: Tom Hamilton

## Overview of symposium

GTC Scotland (GTCS) is the Professional Statutory Regulatory Body (PSRB) for teaching in Scotland. GTC Scotland was formed in 1965 but since 2012 it has been an independent body which determines school teaching qualifications, sets the standards for teachers and accredits all programmes of initial teacher education. It encourages professional enquiry and career-long professional learning for all teachers. GTC Scotland has a Council of 37 members with a majority of elected registered teachers representing the profession, drawn from the following sectors: Primary schools, Secondary schools, head teachers from both these sectors, colleges and universities. The remaining 18 members consist of 11 members nominated by various organisation including local authorities, colleges, universities, parents and the two main churches, and 7 appointed lay members whose role is to reflect the public interest. The Council is overt in expressing its values of fairness, integrity, trust and respect, professionalism and sustainability and endeavours to take these into all aspects of its work. The independent GTC Scotland aspires to:

- · maintain the confidence of the public through effective governance and by always working in the public interest
- · be a world leader in professional education issues
- · maintain and enhance standards of learning and teaching
- · actively promote teacher professionalism

and has the following aims:

- To contribute to improving the quality of teaching and learning
- To maintain and improve teachers' professional standards

The independent GTCS has the following functions:

- Keep a register of teachers
- · Establish and review the standards of education and training appropriate to school teachers
- · Establish and review the standards of conduct and professional competence expected of a registered teacher

- Investigate the fitness to teach of individuals who are, or are seeking to be, registered
- Maintain a scheme of Professional Update for teachers

The current Teacher Education Standards are:

- The Standards for Registration (Provisional: gained at the end of initial teacher education; and Full: gained at the end of a probation period, and thereafter acting as the baseline standard for competence)
- · The Standard for Career-Long Professional Learning (a voluntary and aspirational standard for accomplished teaching)
- The Standards for Leadership and Management (Middle Leadership, Headship)

The three papers of the symposium will explore the role of GTC Scotland in developing and then maintaining teacher quality and professional learning in the Scottish education system.

Paper 1 will detail GTC Scotland's approach to Initial Teacher Education (ITE).

Paper 2 will explain and exemplify the GTCS role in Teacher Induction.

Paper 3 will explore how GTCS is developing career-long professional learning for teachers.

#### PAPER 1 ABSTRACT

The General Teaching Council for Scotland and its approach to Initial Teacher Education, Tom Hamilton

Issue: What can a Professional Statutory Regulatory Body do to encourage high quality Initial Teacher Education?

The general role of the General Teaching Council for Scotland will be outlined and then more specifically explored in relation to Initial Teacher Education (ITE). Professional Statutory Regulatory Bodies are, by definition, set up by legislation. The relevant legislation for GTC Scotland is the Public Services Reform (General Teaching Council for Scotland) Order 2011. (http://www.legislation.gov.uk/sdsi/2011/9780111012246/contents) It defines the role and remit of GTCS and gives the organisation substantial statutory powers. All teachers in Scottish state schools are legally required to be registered with GTC Scotland. The Council also has regulatory powers to deal with any issues regarding the conduct and competence of teachers, the ultimate sanction being removal from the register. For ITE the legislation gives the GTCS the role of determining what constitutes a Teaching Qualification (TQ) and setting the parameters for programmes leading to TQs. GTCS does this through issuing a set of Guidelines for Programmes of Initial Teacher Education (http://www.gtcs.org. uk/web/FILES/about-gtcs/guidelines-for-ite-programmes-in-scotland.pdf) and by publishing the Memorandum on Entry Requirements to Programmes of Initial Teacher Education in Scotland (http://www.gtcs.org.uk/web/FILES/about-gtcs/ memorandum-on-entry-requirements.pdf), which sets minimum qualification requirements for students wishing to enter ITE. All ITE programmes are university led in Scotland and they must be accredited by GTC Scotland.

The GTCS also sets the Teacher Education Standards which define Scotland's expectations of what teachers are and do. GTC Scotland has developed a model of the teacher which recognises the complexity of teaching in the 21st century and this model, linked to contemporary thinking on teacher professionalism, underpins the complete set of Standards but can clearly be seen in the Standard for Provisional Registration which can be found at (http://www.gtcs.org.uk/web/FILES/thestandards/standards-for-registration-1212.pdf). GTC Scotland's approach to Standards will be explained. Its model of the teacher and the thinking on teacher professionalism which has influenced GTC Scotland will be explored. (Reference will be made to various educational researchers and theorists such as Stenhouse (1975), Fullan (1993), Mahony and Hextall (2000), Sachs (2003), Darling-Hammond and Bransford (2005), Pollard (2008), Cochran-Smith and Lytle (2009), Menter et al (2010).)

The partnership approach used by GTC Scotland to consult on, review and revise the ITE Guidelines, the Entry Memo and the Standards will also be considered. (Forde et al, 2015).

The paper will conclude with an outline of current work on GTC Scotland's approach to its ITE accreditation processes and give critical consideration to possible future developments in the ITE field in Scotland

#### PAPER 2 ABSTRACT

The General Teaching Council for Scotland and its approach to Teacher Induction, Norrie McKay and Charlaine Simpson

Issue: What can a Professional Statutory Regulatory Body do to encourage high quality Teacher Induction?

Teachers in Scottish state schools are legally required to be registered with GTC Scotland. New teachers graduating from an ITE programme in a Scottish university must meet the Standard for Provisional Registration (SPR) and, during a probation period, move on to meeting the Standard for Full Registration (SFR) (http://www.gtcs.org.uk/web/FILES/the-standards/ standards-for-registration-1212.pdf). Most choose to do this through the Scottish Teacher Induction Scheme (TIS) but some (personal circumstances) will choose to use a Flexible Route. Because registration of all teachers in Scottish state schools is legally required, teachers Qualified Outside Scotland but wishing to teach in Scotland must also register with GTC Scotland and they too have to meet requirements to gain Full Registration. The paper will explore how the SFR builds on the SPR and, once achieved, thereafter constitutes a baseline Standard for competence for all teachers. The history of TIS will be outlined and then its operation explained. It is a national scheme, instituted in 2002, funded by the Scottish Government which guarantees a new teacher a post in a school, a reduced teaching load and an allocated supporter. (Details at http:// in2teaching.org.uk/teacher-induction-scheme/teacher-induction-scheme.aspx a dedicated website for the scheme.) The TIS is supported by the Scottish Negotiating Committee for Teachers which is a tripartite organisation representing the Government, Local Authorities (which run schools), and Teacher Unions. GTC Scotland has a key role in the allocation of graduating students to Local Authorities and then provides help, support and advice to the new teachers once they have taken up posts. As well as administering the scheme GTC Scotland sets the Standard which has to be met and has a crucial role in awarding Full Registration to those that meet TIS requirements. GTCS has evaluated the TIS and worked in partnership with other stakeholders to improve it over the years it has now been running.

GTCS has carried out its own research and contributed to that of others on how the scheme has operated. From this work, critical consideration will be given to what the scheme has contributed to teacher effectiveness, teacher quality and professional learning. (Reference will be made to Pearson and Robson (2005a,b,c) Clarke et al (2007), Matheson et al (2011)).

The remainder of the paper will consider the Flexible Route, what it offers to those choosing it and what might be done to support them better in the future. Consideration will be given to the needs of those Qualified Outside Scotland and how they might be better supported. The paper will conclude with a consideration of what lessons the Scottish experience of teacher induction might offer the wider international community and its various approaches to teacher induction including those advocated by the European Commission (European Commission, 2010) and the OECD (OECD, 2012).

### PAPER 3 ABSTRACT

The General Teaching Council for Scotland and Career-long Professional Learning, Ellen Doherty, Jacqueline Morley and

Issue: What can a Professional Statutory Regulatory Body do to encourage high quality career-long professional learning for teachers?

Much research (eg Day et al 2006) has looked at the career progression of teachers and clearly beyond the early phase of teacher education it is necessary and positive still to support and further develop teachers. However, research has suggested that professional development for teachers is often fragmented (OECD, 2005) and may not particularly meet the needs teachers themselves identify (OECD, 2014).

Following the McCrone Inquiry (Scottish Government (2000) A Teaching Profession for the 21st Century,) a Scottish approach was to offer the opportunity to un-promoted teachers to become Chartered Teachers which involved further study at Masters level and the meeting of the Standard for Chartered Teacher (Scottish Government, 2002). Donaldson in his report Teaching Scotland's Future (Scottish Government, 2010) was lukewarm about the Chartered Teacher programme and then McCormac in his report Advancing Professionalism in Teaching (Scottish Government, 2011) recommended it should be discontinued, which the Scottish Government duly did. However, one of Donaldson's recommendations was that a Standard for Active Registration should be developed and this coupled with work the GTCS had been involved in considering the concept of Accomplished Teaching (Forde, 2011) influenced the development of the Standard for Career-Long Professional Learning (GTC Scotland, 2012). The Standard for Career-Long Professional Learning states that it:

"...describes the advanced professional knowledge and pedagogical expertise that registered teachers will develop and maintain as they continue to progress in teaching and the education profession. The standard provides an opportunity for teachers to progress, enrich, develop and enhance their practice, expertise, knowledge, skills and professional values. It will support teachers as they develop as reflective, accomplished, and enquiring professionals who are able to engage with the complexities of teaching and learning, the changing contemporary world of their learners, and the world beyond the profession and its institutions, in order to enhance the learning experiences for all learners.'

Underpinning it are the core principles of practitioner enquiry such as teachers having an enquiring disposition, thinking critically and questioning their own educational beliefs, assumptions, values and practices, creating knowledge to enhance, progress and leading the learning experiences of all their learners. It also suggests the need for teachers to work collaboratively with colleagues.

However, this new Standard is significantly different from the traditional conceptualisation of a Standard. It is a Standard which is voluntary rather than mandatory and is aspirational, meaning that teachers may choose to strive to meet it throughout their careers - which, linked to other GTCS developments, addresses Donaldson's Active Registration.

This paper will explore and analyse how GTC Scotland is taking forward the implementation of this innovative form of Standard and how teachers in Scotland are being supported to embrace their professional responsibilities in developing their career-long professional learning.

## **PC Innovate! Session**

Title: Developing an international network of schools

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3199

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 12.30-13.00

Location: Argyll Suite 1

Author/Speaker: William Stroud

Company/Organisation: Long Beach High School, New York, USA

William Stroud Presenting Author:

Presentation Method: Innovate!

## **Abstract**

ICSEI provides an opportunity and forum for the development of an international network of secondary schools, public and private, whose purpose is to connect practitioners, students, school leaders, researchers, and community organizations in the development of high quality schooling for each student in a school community and to foster understanding and cooperation across nations and cultures. There is currently a noticeable absence of student voice in the ICSEI conferences, and the network could provide a mechanism for students to work alongside educators to participate in a movement for school effectiveness and instructional improvement. Goals of the network would include the development of academically

well-rounded and accomplished students who are multilingual, knowledgeable about key international issues that will impact the quality of life over the next generations, compassionate, and have educational experiences that develop students' potential to become powerful, active adult citizens. The network would focus on personal character development, physical health, and emotional well-being as well as intellect. Cooperating schools can demonstrate the power of integrating common curriculum frameworks, evidence-based instructional practices, and local educational and cultural resources in order to exceed the achievement standards of national systems. Design principles might include the following:

- · A Focus on Teaching and Learning
- **Evidence-based Practice**
- Collaborative Leadership
- Focused Professional Development
- High Expectations for Students and Educators
- Group Practice and Internal Accountability
- **Character Development**
- Community-mindedness and Local Partnerships
- Internationalism

Common curriculum units can be developed, and cooperating schools would be able to determine implementation timelines. These units will designed to integrate academic subject content with global issues that impact the quality of life of people in all countries of the world; for example:

- Climate change and environmental sustainability
- Biodiversity, development, deforestation, and species reduction
- Access to water across the globe
- Food production, nutrition, and health care
- Oceanography and the reduction of the world's fisheries Internationalization of economic production and responsible consumption
- Issues of war and peace and displacement of local populations
- Response to natural and socio-political disasters
- Alternative models for sustainable development that use features of the local cultures and whose goal is to benefit the entire community.

Students and educators would be able to collaborate electronically through video conferencing, and an annual meeting and showcase for the work can take place as a part of the ICSEI conferences.

### Project Timeline (draft):

Stage 1 (Year 1)

- Creation of a Design Team that would include teachers, administrators, students, university faculty, researchers, and support organizations
- Identification of a set of guiding principles and practices for the network
- Review national standards and assessments to determine the compatability with network principles and curriculum standards
- Proposal of a business plan that would allow for network sustainability
- Recruitment of group of 6 10 schools that would meet at the 2017 ICSEI conference
- Development of a network growth timeline and research agenda
- Presentation of the network at the 2017 ICSEI conference

## LDP Innovate! Session

Title: A practical exploration of the Teacher Leaders Capacity Building Model

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3159

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.00-11.30

Location: Argyll Suite 2

Shauna Petersen Author/Speaker:

Company/Organisation: University of Southern Queensland

Shauna Petersen Presenting Author:

Presentation Method: Innovate!

## Abstract

Leadership for lasting school improvement is at the forefront of current educational thinking and it has long been acknowledged that deep change is derived from internal commitment. In schools, this means engaging teacher leaders in the process. Fostering teacher leadership potential has the power to improve the overall professional capacity of the school by empowering teacher leaders to build their personal professional selves in addition to working collaboratively on organisation-wide solutions for improvement. It is a potentially powerful organisational resource that is not widely recognised and currently underutilised in Australian education systems. How schools and systems can effectively implement sustainable leadership practice is an ongoing challenge. The problem remains with first, raising awareness about the power of teacher leadership as an organisational resource and second, how schools and systems can find effective solutions for sustainable leadership practice and engage teacher leaders in the process.

An Australian doctoral study explored the lived experiences of teacher leaders that had been through a school improvement process in Australian education systems. It was found that where teacher leaders were empowered, they developed their personal leadership capacity in conjunction with contributing to building organisational capacity. Leadership is a capacity building process, therefore if capacity building is to occur at the school and system level, it is clear that there must be alignment in thinking about leadership and a model for building teacher leader capacity across all levels of an education community. A key outcome of the study was the development of a model for teacher leader capacity building, highlighting three key dimensions - the personal dimension, which is grounded in one's talents and capabilities and what one thinks, believes and feels about oneself as a teacher leader; the collaborative dimension, which is grounded in a belief that capacity building is a socially interdependent and collaborative effort; and the collective intelligence dimension, which provides a focus on collective engagement in the pursuit of organisation-wide solutions for the evolvement of new pedagogical knowledge (Petersen, 2015). This Innovate! Session is a practical presentation and exploration of The Teacher Leader Capacity Building Model, enabling participants to reflect, discuss and explore in more detail each of the three aspects of the model for their educational contexts in a mini-workshop style format. In the spirit of the model, collaborative and collective intelligence dimensions will be explored using cooperative learning strategies within the available time for this session.

# LDP Paper session (A)

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.30-13.00

Location: Argyll Suite 2A

Chair: Stephen McKinney

#### PAPER 1 ABSTRACT

Educational policies in Brazil: a case study on principals' perception, Paulo Garcia, Leandro Prearo, Maria do Carmo Romero and Marcos Bassi

In Brazil, in the past decades some reforms were initiated discussing the democratization of access, and the quality of education. As the result, one of these policies was the creation of the Basic Education Development Index (IDEB), Decree n° 6.094/2007, aiming at monitoring the quality of Brazilian education. This index, which varies from 0 to 10, combines school flow (taking into account dropout numbers, and student' failure rates), and students' achievement on the subjects of Language (Brazilian Portuguese) and Mathematics. This overt focus on these two subjects could take students, teachers, and school communities to overvalue them in detriment of other subjects, given that all schools are individually ranked on the basis of this index. In addition parents have access to these grades, schools that get higher grades are more valued and recognized by its community, and teachers receive an extra bonus - accountability policies. (Assis; Amaral, 2013).

This case study investigates principal' perception about IDEB. A group of 37 principals was interviewed in 2014, (17 public primary schools, seven municipalities) with high performance on IDEB. These schools are located in "Grande ABC" region, one of the richest areas of Brazil. We gathered information on principal' profile (gender, age, education background), and strategies to deal with and increase IDEB rate. Data analysis involved a grounded theory approach (Strauss; Corbin, 1998). Results showed, in terms of profile, that most of principals were female (almost 85%), average age 45 years old, all majored in pedagogy, and with more than five years of experience as principal. Related to strategies to deal with IDEB rate, results showed that principals were creating reinforcement strategies in Brazilian Portuguese and Mathematics (PM), pedagogical games that involved topics of literacy and numeracy, and all of these had the objective of increasing the study time in PM. Considering that the time is a category that affects students' performance (Schiefelbein; Simmons, 1980), it seems to be a good strategy. Principals were also involved in many districts' policies to deal with IDEB: some districts (3) were using tests in PM three or four times a year (students in fifth and ninth grades), in order to analyse students' achievement, and to prepare them for the national tests. The data analysis enabled finding new strategies to increase student' achievement. Principals (almost 70%) were creating educational projects to motivate students to read more, and using tests in PM twice or three times a year in their schools, to analyse students' achievement, and to prepare them for local and national tests. Almost 70% of principals said they were feeling pressure from districts to achieve higher scores on IDEB, and that they were using many strategies focusing only in PM, given that high position on IDEB meant that school would be more valued by the community. One of the consequences of this over-emphasis in PM has been the curriculum reduction only to the themes that are tested (Baker, 2010). This data is relevant for future discussions between schools and education departments along with public policy debates.

### **PAPER 2 ABSTRACT**

The Italian model of school evaluation: Aspects promoting principals' improvement efforts, Graziana Epifani, Donatella Poliandri and Elisabetta Prantera

In the last years substantial investments have been made in evaluating the quality of the education the schools provide (Eurydice, 2015; Ocse, 2013). Self-evaluation and school inspections (Chapman and Sammons 2013; Vanhoof and Van Petegem, 2011; McNamara and O'Hara, 2008; Janssens and van Amelsvoort, 2008; Scheeerens, Glass, Thomas, 2003) are used to monitor and improve the educational quality of schools in many countries, they may promote the increase of educational quality in schools, leading to better student achievement (Gustafsson, Ehren, Conyngham, McNamara, Altrichter, O'Hara et al., 2015; Nelson and Ehren, 2014; Klerks, 2013; Dedering and Müller, 2011; Whitby, 2010; Luginbuhl and Webbink, (2009); de Wolf and Janssens, 2007; Hoffman, Dijikstra, Hoffman, 2006). In Italy an experimental approach of school evaluation based on Self-evaluation and Inspection was carried out by INVALSI in project called "VALES - Evaluation and School Development". The model proposed starts from the idea that Self-evaluation and Inspection are

connected with each other, based on a common framework providing to schools rubrics and indicators, which in turn lead to school improvement. Inspections are conducted in two days, with teams composed by two inspectors, and carry out using tools provided by INVALSI. This study focuses on principals' perception about model's efficacy, aiming to analyse how these main phases of the project (Self-evaluation and Inspection) were perceived by principals and verify what factors (such as the motivation for the participation to the project, the perception of the characteristics of inspection report) had an effect in motivating evaluation and improvement at school. The sample of the project was formed by 287 Italian selfselected schools, mostly placed in the southern regions, which participated to Self-evaluation in 2013 and Inspection in 2014. An on-line 5-point scales Questionnaire was administered to principals at the end of the project; it is composed of 5 sections related to the different phases of the project (1. Agreement and motivation for the participation to the project; 2. Self-evaluation; 3. Inspection; 4. Perceived results of the project; 5. Questions for principals enrolled from the current scholastic year). Scales are mostly characterized by unidimensional structure with an adequate level of internal consistency (Crombach's alpha above 0.68). Our results show that tools developed by INVALSI support the several phases of the model proposed. Principals positively judge organizational aspects and the involvement of the various actors engaged. The selfevaluation and inspection reports are perceived helpful in improving knowledge of the school and identifying the objectives of improvement. SEM and Regression models are used to investigate how the several factors related to Self-evaluation and Inspection have an impact on promoting evaluation and improvement at school.

#### PAPER 3 ABSTRACT

Principal efficacy and strategic direction mediating between values and school improvement, Allan Walker and James Ko

Local research results in Hong Kong have indicated that setting direction and working coherently with school-based management policy aimed for decentralising the personnel and financial controls to school leaders on one hand, and centralised quality assurance framework in the accountability context. Accordingly, the principals provided staff and the school with a clear and strong sense of purpose and integrated school priorities with the government policy agenda (Walker & Ko, 2011; Ko & Walker, 2014). Some local proponents of argue that decision making decentralized to school level offered mult-level school autonomy (Cheung & Cheng, 1997), with the strongest positive effect at the department or team level (Cheng & Cheung, 2003). A flattened pattern of leadership resulted from greater teacher participation and/or teacher leadership permits a greater room for negotiation among members of the curriculum development team to generate and implement innovations and school-based policies (Law, 2011). Inexperience in managing financial, personnel, curriculum matters among new stakeholders means that the principal would be the most influential changing agent in shaping the strategic direction of schools (Cheng, 1992; Ko & Walker, 2014). Effective principals can visualise a realistic time frame for policy implementation, contextualise mandated policies as actions for meaningful changes in the school, charge the school mission with emotional appeal with impact, and align resources allocation pedagogical innovations with the ultimate moral purpose of teaching (Ko & Walker, 2014). The transformative role of the principal in school is evident in school restructuring and school improvement (e.g., Leithwood, 1994; Leithwood & Jantzi, 2000; Ogawa & Bossert, 1995; Sammons et al., 2010; Yu, Leithwood & Jantzi, 2002) and in shaping and developing positive, energetic organizational culture (Deal & Peterson, 1999; Leithwood & Riehl, 2003; Sergiovanni, 2000). Thus, this study explored the interplay of the principal's values, efficacy, and strategic direction in aligning resources allocation with instructional quality and curriculum innovations. Evidence for the study was provided by 164 senior teachers of 41 schools to two separate surveys, along with student achievement data in language and math averaged over 3 years. Path analytic techniques were used to address the objective for the study. Perceived efficacy and strategic direction of principals mediated between their values or senses of moral purpose and other leadership practices (i.e.., Resources Management, Teaching, Learning and Curriculum, and Quality Assurance & Accountability) that ultimately impacted on school improvements that enhanced students' academic overcomes (Figure 1). These results suggest that principals were most likely to be the key change agents in school because their values and efficacy strongly built the confidence and sense of collective efficacy among staff by emphasizing the priority they attach to achievement and instruction, by providing targeted and phased focus for school improvement efforts, and by building cooperative working relationships among teachers.

### PAPER 4 ABSTRACT

Exploring School Principals' Leadership Functions: A case study in the Republic of Tatarstan (Russia), Diana Sabirova and Ramil Khairutdinov

The report investigates modern trends in the school management system. It focuses on the innovative format of schooling. Basic concepts - leader, non-leader - are studied from the point of view of educators in the Republic of Tatarstan. Attention is given to the analysis of the main functions and challenges of the leader of a school. One of the trends of modern Russian school is a transition from a traditional functional model of school management to the personality-oriented model. The success of school reforms largely depends on the competence, personal and business qualities of its principal. At present

time, when schools become more autonomous and independent in choosing their way of development, the role of the school principal becomes more significant. A number of studies discloses the fact that a large part of school administrators are hardly prepared for a new type of administrative activity. The analysis of research on school management allows us to allocate the following activities of the head-leader: awareness of the needs to reform school; clear vision of the future of undertaken activities; prospects of school teaching staff development; cultural and educational role of the leader in the development of the team; organization of corporate decision-making in accordance with the requirements of national and local educational authorities; ability to combine different types of school management: technical, humanistic, educational and cultural. The main components of a school principal's leadership functions can be regarded as personal leadership qualities, the level of maturity of the school team; social impact on the society; managerial competence and culture.

## LDP Paper session (B)

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.30-13.00

Location: Argyll Suite 2B

Chair: Margaret McCulloch

#### PAPER 1 ABSTRACT

Principals' practices when planning for change, Jaana Nehez

This paper focuses how principals' practices in improvement work are formed and why it might be hard for principals to do what they are expected to do according to policy documents. Principals in Sweden are responsible for improving their schools in line with the ideas in the national education act. In previous research however it has shown to be hard for principals to motivate, initiate and lead school improvement. A suggested way for them to overcome some of the challenges has been to come together for collaborative reflections and to support each other. Dialogue has been suggested as a strategy to learn from each other and together. The study takes its departure from ten upper secondary school principals' improvement work concerning enterprise education and has an action research approach. The study rests on Kemmis' and Grootenboer's (2008) theory of practice architectures. According to the theory a practice is formed by sayings, doings and relatings that hang together in a project. A project is what a practice is aiming for. How a practice turns out is also dependent on cultural-discursive, material-economical and socio-political arrangements. By analysing the projects in the principals' improvement work I show what situations principals are trying to uphold and what dilemmas they are trying to solve. By analysing the arrangements I show why some practices overshadow other practices. The research object was the arena where the principals met to discuss, reflect on and to work with their improvement work.

The empirical material, created during one year, consisted of field notes from observations, transcripts from focus group conversations with the principals about their process, and of principals' as well as mine written reflections during the collaborative research. The findings show that what becomes meaningful for principals to engage in is not formed by the aim of the planned change; it is formed by already existing practices competing about space and by arrangements constraining principals' possibilities to work with planned change. Six different practices competed on the arena where the principals where supposed to work with the improvement work. Three of them, "understanding what enterprise education is about", "leading the improvement work" and "changing the organization to support enterprise education" enabled the intended practice of creating conditions for enterprise education. The other three "avoiding upset teachers", "taking care of everyday problems" and "pretend that you are doing well" constrained the intended practice. The cultural-discursive arrangements like abstract ideas of what the principals' were supposed to created conditions for as well as social-political arrangements like asymmetric relationships between the principals and expectations from the local school board on quick solutions enabled practices that constrained the planned change. The study presented in the paper contributes to knowledge about planned change and it contributes to the discussion about what kind of arrangements could support principals to motivate, initiate and lead school improvement. It also shows the importance of practice analyses in school improvement processes.

#### PAPER 2 ABSTRACT

Dynamics of collaborative leadership in educational change, Aini-Kristiina Jäppinen

Professional learning communities (PLC) have been widely accepted as effective with respect to good atmosphere, adequate leadership practices, and functional working practices (Bar-Yaakov & Tubin, 2014; DuFour, 2004; DuFour & Eaker, 1998; Hord, 1997, 2009; Leclerc, 2012; Lomos, Hofman & Bosker, 2011; Stoll & Louis, 2007; Toole & Louis, 2002; Thoonen, Sleegers, Oort & Peetsma, 2012; Tubin, 2011). However, the outcomes for school improvement on these areas normally depend on case-specific issues. To be able to identify less culturally and contextually bound issues, three PLC settings of excellence were examined in Canada, Finland, and Israel (Jäppinen, Leclerc & Tubin, 2105 online). The Finnish case concerned a one-year study about development of collaborative understanding and functional pedagogical practices in a vocational education organization after a big merger. The Israeli case was a one-year study about how to enhance and develop mathematic curriculum and strengthen mastery of certain grades in a public high school. The Canadian study was executed during three years as to how to implement new teaching practices in an elementary French-language school. Each case was followed up by an individual researcher in guaranteeing, in this way, their excellence as an exemplary PLC setting.

The basic supposition was that these three PLCs would provide a source for finding common ingredients for school improvement and effectiveness beyond culture and context. For this, the single cases were combined to a common database. Several common Skype discussions were then conducted during a couple of years when the joint data base was carefully scrutinized and analysed. To find such ingredients that would go beyond culture and context the notion of 'collaborativeness' was exploited. Collaborativeness is a systematic and shared development process consisting of efforts, ideas, and activities that aim at achieving synergy (Hallinger & Heck, 2011; Jäppinen, 2014; Olivier & Hipp, 2006; Surowiecki, 2004; Vescio, Ross & Adams, 2008). By combining the three cases' data sets and applying a special TenKeys® model of collaborativeness (Jäppinen, 2012, 2014; Jäppinen & Ciussi, 2015; Jäppinen & Maunonen-Eskelinen, 2012), through a qualitative content analysis (Denzin & Lincoln, 2008) ingredients of collaborativeness beyond culture and context were distinguished that were considered particularly essential. The crucial factor proved to be a dynamic relationship between mutual and deep learning that led to an organization-wide, continuous change and learning process engendering new modes of thinking. This dynamic relationship between mutual and deep learning beyond culture and context was found to possess a real power to change the school culture from within. The relationship was realized through five different ways: authority, hierarchy, and control which promote self-reflection and encourage trial and error; capacity building in terms of collective intelligence and synergy creation; quality and quantity time for processing information and interpretation and integration of former and new knowledge; nurture by training, surprising, stirring, and inspiring; and respect, equality, and trust as collegial support and positive attitudes.

### **PAPER 3 ABSTRACT**

Embedded Webinars for School-Specific and School-Run Staff Development, Tanja Westfall-Greiter, Christoph Hofbauer and Barbara Pitzer

In the context of nationwide school reform, collaboration with all system actors is key for ensuring that reform has a positive, sustainable impact on practice and school development. Professional learning is key, in particular when upskilling and reskilling teachers is necessary for the reform agenda. This poster presents an innovation in Austria, whereby a Webinar programme with a focus on a key area of reform was developed in collaboration with the local school inspectorate to provide up to 200 schools with access to experts in the focus area deemed most essential for the region. These "eLectures" are embedded in so-called pedagogical conferences, regular mandatory staff meetings oriented to school quality development. Participating schools are provided with online support between the eLectures. A virtual course room for school principals enables them to focus on their leadership challenges and learn from and for one antoher, while teaching staff and teacher leaders are networked in their own virtual space and can exchange experiences from practical experiments conducted between sessions. In particular, in a system such as Austria's with a relatively low degree of formal accountability, the prototype presented here is a viable, cost-effective alternative to foster horizontal accountability and professional learning in a mid-sized region or even nationwide.

#### **PAPER 4 ABSTRACT**

Principals in action. Enhancing principals' abilities, enhancing students' learning? Lisbeth Gyllander Torkildsen and Jaana

The objective of the paper is to discuss structures and findings from the EU funded Principals in action project. The aim of the project was to improve student learning outcomes, and to reduce the gap in performances, thereby raising the equity. Based on a hypothesis that sustainable changes in the practice of student learning are dependent on changes in other practices (e.g. the practice of leading), the project focused on developing leadership skills. A review of international research studies on successful schools and school systems was made. In order to work more methodically when developing leadership skills, a connection between skills and abilities and five goals were made. During the projects the school leaders worked with raising their:

- 1. ability to implement structures and systems for sustainable school development.
- 2. analytical skills.
- ability to secure good use of resources and competences. 3.
- ability to base their development work on proven experience, research result and use a scientific approach.
- ability to implement changes.

A sixth goal was expressed as a hypothesis that exchange of experience between Swedish and Norwegian school leaders would help improve the skills of the school leaders and consolidate knowledge on how they could work more systematically with school development. The sixth goal was apparent in all activities during the project.

The dialogue conference model was used to consolidate a transnational network level of school development engaging 30 school leaders from Sweden and Norway. A dialogue conference is a forum where network learning has a central place. The conference can be seen as a constructivist learning situation, a practice that engages participants in ongoing dialogue with others. Through these dialogues new ideas may emerge independently, or as a development of previously theories or ideologies. Four dialogue conferences were held during a period of two years. Between the conferences the school leaders worked on development project at their own schools. Several methods and models aided the mutual capacity building. The project was followed by a research team. Qualitative data was gathered through focus group interviews, observations and school leader log books. Quantitative data derived from final subject grades in Swedish/Norwegian, Mathematic and English. The findings highlight the connection between school leaders' abilities to create conditions for sustainable school development in several practices, and students' performances. At the school leader level the findings indicate enhanced leadership skills and better implementation of change. The latter is interpreted as a consequence of sounder analysis of the school's challenges. At the school level structures that promote learning and development were established. Findings also indicate that at the project level joint methods and models aided the mutual capacity building. Mirroring their own leadership against school leaders from a different context, meant that the school leaders both embraced new aspects related to school leadership, and that they were able to verbalize, and thus become aware of aspects of their own school leadership context. Building professional learning communities may therefore be a viable way to enhance development.

# LDP Paper session (A)

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.00-12.30

Location: Argyll Suite 3A

Chair: Tony Finn

#### PAPER 1 ABSTRACT

Leadership as an Imaginative Act of Hope: Influencing School Culture and Climate Through Five Potent Ps, Brendan Browne, John Novak and Denise Armstrong

Contemporary educational leaders face conflicting demands and an infinite number of ways to be vulnerable. Leaders can be easily pushed and pulled in incompatible directions. An integrated framework can provide educational integrity and a coherent and defensible position to operate from as an educational leader. This paper explores the Five Ps of educational leadership as a framework for the creation of inviting school culture and climate. For an approach to take hold it needs to resonate with an educator's deepest intuitions, provide a defensible intellectual position, and lead to creative and ethical practices. For educational leaders charged with leading in ways which encourage educational living, an appealing, coherent, and useful theory of practice focuses the quality, consistency, and directions of messages. Invitational leadership aims to make schools places that intentionally call forth educational living for all through the Five Ps. Everything and everyone in a school either adds to or takes away from student success and the quality of life of the educational community. This is especially true of educational leaders. In invitational schools, leaders work with people to promote and design places, policies, programs, and processes that intentionally communicate care and competence. Just as everything in a heath care unit should promote positive health, everything and everyone in a school should encourage flourishing educational lives. This is best accomplished through the intentional consideration of the impact and influence of the Five Ps of educational leadership: People, Places, Policies, Programs, and Processes. School cultures can be powerful structures which do not change easily. Many schools are "stuck" (Stoll & Fink, 1996) and when visiting these schools you may believe you are hearing the warning from The Borg from Star Trek "You will be assimilated. Resistance is futile." There can be significant resistance as those who have tried to change a dysfunctional culture have often been assimilated or eliminated. An invitational leader uses a multi-faceted strategy to change attitudes, behaviours, and cultures because despite persistent resistance to change, most people want to work in places that provide exciting, satisfying, and enriching experiences. Such places work by focusing on the development of the Five Ps: people, places, policies, programs, and processes. An inviting approach to educational leadership has high aspirations, but being more than aspirational, it needs to focus on down-to-earth details. Viewing education as comprised of people, places, policies, programs, and processes enables leaders to celebrate successes and develop plans to apply consistent pressure to that which needs improvement. Considering the Five Ps as a finger on a human hand, the first P to be considered is people, the thumb which enables grasping to take hold. This paper explores the Five Ps: people, places, policies, programs, and processes as an educationally defensible theory of practice, and a practical approach to educational leadership intended to influence culture and climate in contemporary schools

### **PAPER 2 ABSTRACT**

The potential of Co-operative Trust Schools for leadership development and sustained school improvement, Sue Swaffield and David Frost

Changes of school leaders brought about for example through retirement create challenges not only of recruitment but also of sustaining and building on valued ways of working such as inter-school collaboration. A group of primary schools and their linked secondary school in England facing this situation found support through the Co-operative Schools movement. The schools had a long history of working together, and with several headteachers (principals) approaching retirement they sought to secure and develop this relationship. Attracted by Co-operative values, the governing bodies and headteachers of eight schools formed a Co-operative School Trust. In so doing they became part of a little known phenomenon in England that has seen the number of such schools grow to over 1000 since the first one was established in 2008.

This paper arises from a small-scale study focused on perceptions and practices of leadership in this Co-operative Trust. It draws on data gathered through a teacher questionnaire, headteacher semi-structured interviews, and discussion with school governors to investigate two main areas. It explores reported leadership practices in relation to Co-operative values (including democracy, equality and equity) and Leadership for Learning principles (particularly shared leadership). It considers the apparent contradiction that constructing new configurations of leadership within the Co-operative Trust model was initially associated with a diminution of teacher agency. These two strands lead to a discussion of the potential for schools to use the Co-operative Trust model to develop leadership practices and build sustained improvement across a whole family of schools and their communities.

#### PAPER 3 ABSTRACT

Coaching educational leadership for aspiring principals: The use of formative feedback and self-assessment, Jan Robertson

This paper will present the findings of two pieces of research based on the National Aspiring Principals' Programme in New Zealand. Each year over 200 aspiring and potential leaders are selected from digital applications for a place in the programme. The year's leadership learning is underpinned by a coaching paradigm, and the leaders each have an experienced leader coach and a peer coach, who assist them to critically reflect on their leadership of transformative change in their schools. Key dispositions are essential for effective educational leadership: the disposition to learn, culturally responsive practice, moral purpose to address inequity and develop future-focused learning spaces, efficacy and agency, and the understanding of the multi-faceted role of the principal. How leaders learn these dispositions have been an essential part of our knowledge creation, and intentional coaching using research-based tools has been key to this process (Robertson & Earl, 2014). The National Aspiring Principals' Programme (NAPP) is based on the research underpinning effective professional learning. Drawing on the international knowledge base, the aspiring principals' leadership learning experiences on four key principles of professional learning:

- Personalised, self-regulated, reflective meta-cognitive learning
- Connected and networked leaders sharing and creating knowledge
- Coaching leadership capacity in self and others
- Inquiry-focused leadership and learning, informed by research and evidence. (Earl & Robertson, 2014).

The methodologies designed for these aspiring leaders learning have been professional learning groups (regional and online), national meeting (residential and online), peer and group coaching, connected online system-wide communities of learning for modules on the role of the principal, school-based inquiries to reflect on leading people in transformative change, digital portfolios of leadership reflection, and formative self-asessment tools. There is a major emphasis on developing self, through deep, critical reflection on practice. The formative self-assessment and self-directed personalised learning have been supported and challenged through coaching relationships. The participants complete a self-assessment at the beginning of the year to identify strengths and particular areas for development throughout the year. The Evidence Plan sets out the capabilities for the different levels of achievement. The experienced coach and leader co-construct this self-assessment at three points during the year. Additionally, this year 38 participants trialled the use of an internationallynormed self-assessment tool, used in 11 other countries as a reflective tool, combined with group coaching (e.g. Aas & Vavik, 2015; Huber & Hiltmann, 2011; Robertson, 2008). This paper will present the New Zealand research on this selfassessment tool.

### PAPER 4 ABSTRACT

Developing a pedagogical prototype to gear school change - on the process of a formative intervention approach research, Peiying Chen, Feili Chen, Hongda Lin, Wei-Ying Lan and Paul Hsu

Shared or distributed leadership approaches have advanced the understanding of the zone of school development intersecting between leaders and teachers (Hauge, T. E.; Norenes, S. O. & Vedøy, G., 2014). "Concretive" actions of professionals (Gronn, 2002) and their joint efforts in leadership (Woods et al. 2004) have been captured to describe leadership geared toward changing the reciprocal activities involving leaders and teachers. These conceptual frameworks lay the ground for this paper to explore the process of fostering a new pedagogical prototype within the zone of school leadership development.

Specifically, this paper focuses on intervention research at a Taiwan senior high school aiming to develop a sustainable function and form of school leadership against the backdrop of high leadership turnover and a new national curriculum reform that represents a significant shift in educational philosophy. The intervention, designed by the research team, intends to develop a dynamic framework for setting and implementing a school vision that is focused on constant improvement and is comprised of the following three goals: the first one is creating a shared vision within the school community; the second goal, grounded in the first, is to develop and prototype a new form of curriculum structure and leadership function; and the third goal is developing systems and structures, such as a board of school design, to ensure continuity despite changes in leadership. The Change Laboratory method used in develop work research (DWR) (Engeström, 2007, 2015) guided the intervention design and implementation at the case school. This method development is based on Cultural Historical Activity Theory.

By following its principle of double stimulation, the research team designed eight sessions with prompts and tools developed from ethnographic work and theoretical resources to stimulate the process of collective resolution. On average, each session lasted 1.5 hours and, in total, the sessions involved 65 school students and 165 teachers from six teaching disciplines. The research team collected data from this process, and analysed the cultural models as well as historical changes of the case school.

In our present finding, we mark two major tensions embedded in teaching models and schooling infrastructure. The first one rests between innovative teaching exemplified by a project-based learning classroom and traditionally subject-oriented pedagogy. This tension is visible in parallel lists of materials that teacher created for supporting their innovative actions and the materials that teacher used for maintaining their practice. The second tension is hidden in the school curriculum timetable comprised 27 experimental elective courses and original obligatory courses. Our cultural model analysis reveals that students are more motivated for independently learning in elective courses than obligatory ones. Based on these two sets of tension, the research team are designing questions and developing a hypothesis of pedagogical prototype as two stimulates for following intervention sessions.

## LDP Paper session (B)

Session: Parallel Session 4

Session Date and Time: Thursday 7 January 2016 11.00-12.30

Location: Argyll Suite 3B

Chair: Deirdre Torrance

#### PAPER 1 ABSTRACT

Social Red Bull: Exploring Energy Relationships in an Educational Leadership Team, Alan Daly, Yi-Hwa Liou and Chris Brown

Educational leaders have long been expected to be not only effective leaders, but also motivators who can move change efforts forward. Although there has been attention paid to the role of "effective" leaders, much less work has contributed to social-side of "affective" relations within and between educational leaders. The limited educational research on the socialside of the improvement equation has traditionally focused on technical aspects: e.g. skills, training, etc. In network parlance, these are referred to as instrumental ties (e.g., expertise, knowledge, etc.), and while these work-related ties are a necessary condition for improvement, we argue that by themselves they are insufficient. Conversely expressive or affective aspects of relationships, are vitally important, but are even less studied than instrumental relations, in terms of educational change.

In this paper we explore impact of "energy relationships" within a district leadership team. Specifically, we examine the qualities and characteristics of "energizers" to contribute to our understanding about the conditions necessary to support these key individuals. Our US sample comprises a team of educational leaders (central office leaders and principals) who are successfully serving a large population of traditionally marginalized students. "Energy" in this work is considered an affective resource often occurring in interpersonal interaction and via which others feel more motivated, inspired, and connected to the individual or organization. "Energizers" are individuals who inspire and motivate others in terms of individual or organizational goals and often serve to weave together networks. In the business and management literature (e.g., Cross & Parker, 2004), energizers have been associated with empowerment, greater goal attainment, and being able to promote complex change—all important aspects of the work of educational effectiveness. Our study therefore serves to fill gaps in the educational leadership literature by focusing on both the importance of relationships and their interplay with expressive "energy" ties.

Results indicate that energizers are typically in the central office with a few principals playing roles as energizers, suggesting the energy relationships are not equally distributed in the system. We also found a few isolates in the energy network, indicating that while the majority of leaders are connected with each other for energy relations, there is a very small number of the leaders that do not identify anyone in the leadership team with whom they are connected for energy from anyone on the team. Findings from the multilevel P2 social network models suggest that characteristics such as leader efficacy, perceptions of climate, and job satisfaction are predictors of the formation of energy ties across the team. Specifically, our models suggest that district leaders who are relatively new to the district, have more job satisfaction, and perceive more of an innovative climate seem to account for most of the energizers in the system. By building on and augmenting the generally limited understanding of expressive relationships among educational leaders and how we might develop and support such relationships, we hope to raise the larger discourse around this topic in the field.

#### PAPER 2 ABSTRACT

Voices of School Leaders From Across the World: What factors help and hinder the work of social justice leaders? Deirdre Torrance, Christine Forde, Ian Potter, Pamela Angelle

Leadership of and for social justice is attracting growing international attention (Bogtoch 2008, Blackmore 2009, Ryan, 2010). Leadership is being positioned as highly influential on social justice practices within schools, influencing pupil outcomes with a particular focus on marginalised students (Theoharis, 2007). This brings with it key implications for leadership development and practice, within lasting school improvement efforts. Headteachers play a key role in such endeavours and yet, to date, little is understood about the practice of social justice leadership (Ryan, 2010). The International School Leadership Development Network (ISLDN) is a network of researchers and practitioners sponsored by the British Educational Leadership, Management, and Administration Society (BELMAS) and the University Council for Educational Administration (UCEA) that has been working together for several years, collecting data from interviews with headteachers/principals in more than 20 countries.

The ISLDN is exploring two strands: one looking at high needs schools and the other at social justice leadership in schools. This paper draws from various contributions to the work of the ISLDN network. Increasing emphasis has been placed on both leadership and social justice within educational theory, policy and practice at a global level. Headteachers are being held to account for socially just school practices but schools are located within unjust local, national and international contexts. This paper explores factors that help and factors that hinder the work of social justice leaders in different international contexts. Both educational policy discourses around leadership and social justice (Angelle et al., 2015; Forde 2013, 2014; Forde & Morley 2014; Torrance and Forde, 2015), as well as system-level data are drawn from. Key contextual information and data from contrasting international contexts are highlighted, to stimulate discussion as to the extent to which policy rhetoric and practice realities are aligned in the practice of social justice leadership. A number of factors that help and hinder the practice of leadership for social justice are identified at meso (school and local authority) and macro (national) levels. Key themes emerging from the interview data are presented to exemplify those factors from the headteachers' perspectives of practice realities.

Social justice leadership is inherently a political process with headteachers engaged in challenging injustice, mediating, negotiating and selecting courses of action. Arguably, headteachers have power and authority to empower others and to change practices. However, whilst individual headteachers can exercise a values based commitment to social justice in their own practice, and in developing the practice of the schools they lead, the extent of their influence is constrained by the meso and macro levels of the school system and of society as a whole. Headteachers leading for social justice need professional development and on-going support in order for their influence to have an impact on lasting school improvement efforts.

#### PAPER 3 ABSTRACT

Imagining and implementing new approaches to leadership development in Scotland - the role of the Scottish College for Educational Leadership (SCEL), John Daffurn, Clive Dimmock, Annette Beaton and Jackie Purdie

This paper will explores the process of establishing SCEL by exploring the evolution of the idea of a college for leadership, the outcomes from the scoping exercise and the current development agenda of SCEL. It then examines specifically the Fellowship programme and the importance of building leadership capacity at system level. Scottish education is undertaking a programme of far reaching reform following the Donaldson Review of initial and continuing teacher education, Teaching Scotland's Future (Donaldson 2011). Across the sector relating to curriculum and assessment, teacher education, leadership, professional regulation through professional standards and a new 'active registration / professional update' scheme, constitute significant, systemic change. The final recommendation of the Donaldson Report (2011: 101) was the establishment of a college for educational leadership to support leadership development at all levels in Scottish education. This was in part a response to longstanding concerns about issues related to access and quality assurance in leadership development opportunities available to teachers in different parts of Scotland.

Scotland is not alone in establishing an organization dedicated to leadership development in education with the National College in England (Bush, 2004) a notable example but there are also well established organization such as the New York Leadership Academy and similar entities in other USA states (Augustine et al. 2009), the Ontario Institute for Education Leadership (IEL online) and the Austrian Leadership Academy (Schratz and Petzold, 2007) being other examples. Work has been undertaken to scope out and establish SCEL which has now been 'operational' since September 2014. SCEL's initial developments include: first, the revision of the Framework for Educational Leadership (FEL); second, a review of existing provision for the Standard for Headship and third, the introduction of a Fellowship programme for experienced headteachers in schools and heads of early learning and childcare centres to support their capacity to contribute to system level leadership. The FEL will be launched in September 2015 as will the new qualification for headship - Into Headship. The SCEL Fellowship programme is progressing to a third cohort which will start in November 2015. The programme's design principles are underpinned by the model of professional learning that integrates reflection on practice, cognitive development, experiential learning and collaborative learning. There is an expectation that SCEL Fellows become champions for leadership and the teaching profession.

## **LDP Symposium**

Title: Trust and verify: The real keys to school improvement

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 2930

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Castle Suite 1

Author/Speaker: Dean Fink

Company/Organisation: Dean Fink Consulting Associates

Presenting Author: Dean Fink

## Overview of symposium

The proposed symposium intends to report on five years of research across seven countries around themes of trust and distrust and school improvement. Because of the rather broad nature of the reseach, it cuts across all of the conference themes but most particularly it address issues 1 through 4 with a heavy emphasis on theme 2.

- 1. Teacher effectiveness, teacher quality and professional learning
- 2. Leadership development and practice to build sustained improvement
- 3. Partnerships and collaborations: schools, agencies, government, research
- 4. Policy translations and mistranslations

Leaders today are caught between two competing paradigms of educational policy. In countries like the United Kingdom and the United States, and increasingly in some Canadian provinces like Ontario, a production model built around audits, markets, test scores, and narrow managerial conceptions of leadership drive educational policy. Within this model school leaders are increasingly pressured to be instructional leaders and somehow magically raise test scores. As one Ontario principal explained, "all my superintendent is interested in are my school's scores on EQAO. He asks about nothing else. If for some reason like an influx of special education students my scores are down I am told 'get them up', if they are at or above the board's average he wants them higher. Absolutely nothing else matters". A second orientation is a professional model of education that still exists in most Canadian provinces, including Ontario, and Nordic countries, particularly Finland. As Petri Salo and his colleagues explain. Today, principals find themselves at the centre of professional crossfire, between, on one hand, management practices built on efficiency, accountability and consumer orientation and, on the other, a collegial culture of trust and professional traditions built on ideals of democratic citizenship (2014, p.5). This in broad brush strokes is the essence of our research and the symposium.

Beginning with the available literature on trust we developed a 30 item survey that addressed issues of institutional and relational trust and distrust. Each item required a respondent to indicate the items importance and to what extent it existed in their setting. Colleagues in seven countries (Australia, Canada, Finland, Lithuania, Sweden, the United Kingdom (England) and the United States administered the survey to representative samples of principals and teachers and then interviewed cadres of principals and teachers based on a few generic questions as well as questions arising from each nation's survey. The country colleague will then developed his/her national case.

#### PAPER 1 ABSTRACT

Canada at the Tipping Point, Dean Fink

Two unique features differentiate Canada and its educational system from most other national systesm: its federal government plays a very limited role in pre university education and Canadian teachers' unions remain very strong. The constitutional limitations on the Canadian federal government prevent it from imposing the kind of conformity in curriculum, student assessment and teacher and principals' qualifications and evaluations that one sees in Australia, United Kingdom and most of the United States. Moreover, the unions in the name of teacher professionalism continually battle with provincial governments over professonals' working conditions. As the president of a union in Ontario stated concerning a contemporary dispute with his province, we're looking for improvements "that reflect a tangible appreciation on the part of government and the school boards of the value and the significance of the work we do." The strength of the unions has enabled Canadian teachers to be reasonably well paid, experience decent working conditions and have a voice or at least some influence in most policy issues. Teaching is still a prized job in virtually all Canadian provinces and attracts high quality graduates. Importantly, teacher supply is not an issue generally in Canada. The challenges to the profession of New Public Management are, however, only an election away in most provinces. Politicians of the political right would love to weaken the unions and bring in right to work legislation and follow their American brethren by instituting most of the trappings of the production model. Their motives are more ideological and for the most part have little to do with educational improvement since Canadian students do reasonably well on virtually every international measure of educational accomplishment. Canada would fit our definition of a high trust, high distrust system - a calculative and negotiated relationship. While teachers are generally trusted in Canadian society, there exists a reciprocal wariness between teachers and their unions on one side, and policy makers and society in general on the other.

Canada is at a tipping point. Will it buy into the American and British production models or stay with its historical and largely successful professional model of educating its young? Can provincial governments respect the professionalism of its teachers and principals while responding sensibly to demands for accountability, financial restraint, and demands for easily understood 'results'. Will unions recognize government's needs for financial discipline in a struggling economy and reconnect to its professional roots or remain confrontational and militant? Our research addresses these questions among others.

### **PAPER 2 ABSTRACT**

Finland: Trust under Pressure, Torbjorn Sanden

Like Canada, teaching in Finland is still considered a prestigious job and attracts high quality applicants. Its unions are strong and schools and teachers enjoy a considerable degree of autonomy. Of our seven countries in this study, Finland is the prototype of the professional model of education and our best example of a high trust, low distrust society. But the title of this paper, 'Finland - trust under pressure', suggests there are dark clouds hovering on the horizon. The world wide recession that began in 2008 has hit Finland particularly hard. Its forest industries have suffered from a lack of demand on the world markets and its manufacturing, particularly its most renowned industry Nokia, have experienced serious difficulties. Calls for marketization of the public sector and greater emphasis on the private sector indicate that Finland will experience both internal and external pressures to rein in its public services and put them on a privatized path (Crouch 2015). New Public Management is already a factor at the university level (Salo, 2014).

A growing body of research on Finnish school leadership (Salo, 2007; Sandén, 2007; Vuohijoki, 2006) has reported on the vulnerable state and complexity of the principal's task. Discussions among school leaders indicate that the job proves increasingly laborious. This study reveals signs of professional distrust, or professional distance, between principals and their superiors. Principals don't seem to get the endorsement and support they expect from their superiors. Principals wish for a more supportive, strategic and coaching leadership from their superiors and the higher administrative district levels. The data also support the notion that principals need more confidence in their cooperation with parents. The findings also highlight the importance of reconsidering the principals' role as a gatekeeper and inspirer. Slow change and some degree of unreceptiveness to global trends (Sahlberg, 2007) seem to be appreciated by both teachers and principals, and form a sustainable base for school improvement. Even though all Finnish principals are qualified as teachers, the relationship between teachers and principals seem to be characterized by a certain professional distance, or relational distrust. It appears that teachers are indecisive about what principals know about effective teaching and contemporary learning

theories. Their observation relates as well to the statement that teachers urgently need gate keepers. The claim illuminates the demanding balancing act between active instructional leadership styles versus professional teacher autonomy. The data also support the widespread Finnish perception that investment in equal quality public education for all contributes to high trust communities. This study and data account for teachers and principals experience trust in a time of change, on the basis of two trust dimensions; institutional and relational trust. The study also strongly supports the literature that identifies trust as a core resource for school culture and improvement.

## PAPER 3 ABSTRACT

Sweden: A post modern cocktail, Lars Svedberg

Finland's next door neighbour Sweden led the world toward the marketization of state education but now finds itself at an educational crossroads. Sweden presents a bewildering picture of a high trust society that has implemented a complex mixture of public and private education into what this paper calls 'a post modern cocktail'. The question about 'who you can trust' is particularly topical now in Sweden when the former citizen in the Welfare State gradually has been transformed into a customer in an educational marketplace. The learner is increasingly conceptualized as a consumer and education as a consumer good. With comparatively limited standardized testing, and finance and policy still under municipal control, it shares common features with its easterly neighbour Finland. But the introduction of 'independent schools', some for profit, that educate approximately 15% of students as competition for state schools, both funded from the public purse, has profoundly changed the educational landscape to the point that the Swedish government has appointed a commission to address Sweden's response to an OECD policy review that challenged Sweden to "urgently reform" its school system in light of its plummeting PISA achievement scores. Its recommendations included raising the status and salaries of teachers, placing higher expectations on students and improving the integration of immigrants, who on average score lower than native students. "I used to look at Sweden as the model for education," said Andreas Schleicher, director of OECD's education unit. "But it was sort of in the early 2000s that the Swedish school system somehow seems to have lost its soul." Most disturbing to many Swedes is the growing inequality in educational experiences for children. As the present Minister of Education stated "Instead of breaking up social differences in the education system, we have a system that's creating a wider gap between the ones that have and the ones that have not (Weale 2015)." The political left calls for the dismantling of the voucher system that supports the independent schools, while the political right advocates greater regulation on student and teachers and more oversight of both. It would appear that the cocktail is in for some major modifications of its ingredients. The high trust, low distrust system older Swedes remember, has moved in the direction of an underperforming low trust, high distrust society as teachers and government look to right the educational ship.

### **PAPER 4 ABSTRACT**

Lithuania: Faster than Hungary. Slower than a Lifetime, Egle Pranckuniene

Few nations have experienced the profound economic, social and economic changes that Finland and Sweden's Baltic neighbour Lithuania has undergone in the past 25 years. Its capital city Vilnius for example has changed from shabby rundown, dreary city with a rundown and crumbling historical centre in the early 1990s to a vibrant modern European city with a refurbished 'old city', modern shopping centres and, at least on the surface, a vibrant economy (Khan, 2015). For many, the replacement of the restraints and predictability of the low trust Soviet system with the vicissitudes of the global market place have brought opportunity and improved life styles for some. But this transformation has not been without costs. Markets are the best way societies have found to distribute goods and services but they do not do so equitably and as a result the gap between the rich and poor in Lithuania has widened considerably and the distrust between the state and the citizens is constantly growing due to its market-oriented policies. The older and more vulerable find themselves worse off in this brave new world and many younger people are leaving to find opportunies elsewhere. As a result Lithuania is losing some of it best and brightest.

Lithuania's educational leaders sought to model their newly independent country after Finland's nation building strategy after its independence 1917 by using education to stress its language, culture and national identity. But Finland's independence was never buffeted by the vagaries of contemporary international capitalism. The three periods of contemporary Lithuanian education previously identified by Vaicekauskienė, (2013), reflect the compelling and often conflicting social forces faced by contemporary Lithuanian educators. From 1990-1997 they aimed for humanization, democratization, modernization and from 1998-2002 for continuity and accessibility of education and equal of opportunities for all. Since then however, these goals have lost some of their lustre in the pursuit of cost-effectiveness, quality defined in terms of test scores and data-driven management. "Lithuania and other Baltic states have become laboratories in which the

speed of social change and cultural transformation is measured and tested (...) these societies have developed 'faster than history' - faster than history but slower than a lifetime. People often complain that their lives and careers have been ruined by the rapid social transformation. They take it as a tragedy, arguing (not unreasonably) that their lives, energies and careers have been wasted, if not completely spoiled. A human lifetime proves to witness the sweeping change of a society (Doskis, 2005)." While Lithuania's educators continue to develop an educational system that looks more like Finland's than Sweden outside pressures suggest that the reverse may be happening.

#### PAPER 5 ABSTRACT

The United Kingdom (England) - Reform in a hurry, Tom Whittingham and Craig Hammonds

A significant influence on many jurisdictions throughout the western world has been England and its transition over the course of twenty years from a rather decentralized high trust professionally oriented educational system to one with all the trappings of a production model. While twenty years seems like a long time, the title of this paper 'reform in a hurry' captures the prevailing feeling among British educators over that period. If examined at any given point in the twenty years, the change process seems frenetic, unfocussed, often contradictory, and confrontational. Looked at from the longer perspective however, the direction of the British system towards a production model looks focused and inexorable.

Successive governments continue to build on the Thatcherite tradition. There is a remarkable political congruence that Britain's rather mediocre international performance can only be resolved by focused and prescriptive low trust policies that require systematic accountably measures and quality control, rather than the mobilizing, supporting and freeing its professionals to improve British schools and international standing. To ensure compliance with top down policies all parties seem to agree that teachers, school heads and schools in general must be subjected to constant monitoring through accountability checks on school and personnel by the much disliked, indeed feared, OFSTED quango. Chief Inspectors have changed over time, and inspection requirements have shifted, often without too much warning to schools, but the message from policy makers to the people they count on to implement policies remains constant - we don't trust you.

In turn, the profession, through its big unions, has taken a confrontational, high distrust and on occasion obstructionist approach to government over time. Successive governments have seldom engaged unions and other teacher and heads' organizations in meaningful ways in the policy process. In fact changes in educational policy tend to take the form of top down regulations and circulars rather than the result of robust parlamentary debate. All parties have developed policy through 'kitchen cabinets' of unelected policy advisers from private think tanks and consulting firms'. This centralization of policy in Whitehall has resulted from the gradual but relentless erosion of the roles of local authorities in education policy development and practice. While some authorities were weak and ineffective, many authorities and their advisory staffs were powerful agents of positive change for British students. Perhaps more importantly from the trust perspective of heads and teachers, the people who influenced, and for the most part supported their professional lives on a daily basis were no longer a phone call away. There is little evidence that contemporary government policies that focus on free schools and academies, or the addition of regional Tsars to compensate for the loss of the 'middle level' Local Authorities can resolve these issues because they do not deal with the fundamental problem - a prevailing lack of trust among those that count in education.

### **PAPER 6 ABSTRACT**

The United States 'And the pendulum swings', Craig Hammonds

Mark Twain's famous aphorism, "All generalizations are false including this one" could have applied to the American educational system because there is not one American system but in fact fifty. One for each State in the union, and each a product of its own unique history, culture, and politics. Within each state are a wide variety of school districts, each with its own school board, some States include huge school jurisdictions as well as many small towns and rural districts that might operate only three or four schools. Historically, responsibility to educate American children belonged to these local school districts and their principals and teachers. Since the American constitution leaves education almost by default to the States, and the Federal government up until the mid 1950s had little involvement in kindergarten to grade 12. Similarly most States left education to the locally elected school boards and their professional staffs.

The Supreme Court, through its ruling in the Brown versus the Board of Education case in 1954 to declare 'separate but equal' unconstitutional that opened the door for Federal involvement in education because responsibility for the enforcement of the court's order and subsequent orders for schools to provide opportunities for students with special needs fell to the Federal government. In 1965, as part of Lyndon Johnson's Great Society, Congress approved the allocation of substantial amounts of money to the States to upgrade the quality of education for low income and minority students. This act established the precedent for the federal government to use its considerable economic power to influence often cash strapped states to buy into federal programs such as No Child Left Behind in the 1990s and Race for the Top. The federal government provides only about 9% of the nation's educational funding but exerts inordinate influence on state supported education. The pendulum has indeed swung from a very decentralized, high trust, some may well argue chaotic professional based education model to a low trust system with all the trappings of New Public Management.

There are some signs that a system that has swung so far in a neo-liberal direction may righting itself to create a better balance between trust and verification. There are powerful well financed forces bent on maintaining the status quo or pushing what exists even further. Right leaning foundations with billions of discretionary funds, powerful private corporations that stand to benefit from greater privitization of education push the production agenda. All these forces have found political voices in both political parties and contribute generously to supportive politicians political campaigns. As our data shows and this paper explains, principals and teachers are either lukewarm or opposed to many of the production type directions and without the active engagement and trust of the policy implementers it is hard to see how improvement in America's international standing will occur.

# LDP Paper session (A)

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.00-12.30

Location: Castle Suite 2A

Chair: John Settleage

## **PAPER 1 ABSTRACT**

Establishing and implementing an effective school leadership program in the International Education Agency of Papua New Guinea: the challenges and the opportunities, Paul Richardson

The International Education Agency (IEA) of Papua New Guinea is an independent educational organisation comprising of a network of nineteen locations across Papua New Guinea. In recent decades this schooling system has transformed from a network of predominantly expatriate led international schools to a system increasingly reliant on Papua New Guinean school leaders and educators to provide services in its schools and colleges. The IEA supports a diverse range of sites operating in urban, rural, and remote locations. The leadership capacities and experiences of the principals in these schools are also diverse. In general, larger urban schools and colleges are led by expatriate principals whereas regional and remote schools are led by Papua New Guinean principals. This paper will describe the context in which IEA schools operate. It will outline the complexities of operating independently in a developing country such as Papua New Guinea alongside a struggling national education system. Within this context the framework for school leadership will be discussed. The research background to the development of the framework and the sub sequential programs that are derived from it will be shared. Considerations for the adoption and application of effective practices that support leadership development in other countries and in other jurisdictions will be discussed as responses to the limited human resource and fiscal frameworks in which the IEA operates. The paper will then detail the IEA School Leaders' Program (SLP) and its development. The SLP's components and its delivery methodology will be discussed through stories of the cultural, physical, and technological challenges for educational leaders faced in Papua New Guinea that are not commonly encountered by those working in

mainstream western education systems. Narrative will be provided about the implementation work undertaken to date, the barriers to effective leadership support, the challenges of the present and the future and, importantly, the potential for this program to provide effective leadership to IEA schools in Papua New Guinea. The paper will conclude with a discussion about the proposed outcomes of the IEA SLP and the anticipated benefits such a program is offering an organisation such as the IEA in Papua New Guinea. As well, the potential for such a model to be adapted in other developing countries will be raised.

### PAPER 2 ABSTRACT

Leadership Development Ecological Framework, Karen Sanzo and Jay Scribner

Leadership preparation and development research and literature has been primarily bifurcated. On one side is research on and practical application of leadership preparation for aspiring leaders who are seeking credentialing (traditionally universitybased leadership preparation programs). On the other is research and practical application of post-credential development programs that are traditionally district based and focused on supporting current school leaders. This paper presents a conceptual framework around an ecological approach to leadership development. The Leadership Development Ecological Framework presents a different approach then in the past to crafting and implementing a leadership support system for school districts. This paper argues for a more cohesive approach to understanding and implementation support and development for aspiring and current school leaders through a new conceptual framework. The framework adopts a districtoriented perspective and explores how school districts can use an ecological framework to create a high-quality leadership development system that includes partners such as universities and other development organizations.

Today schools and systems are complex. There is a great deal of interaction between and across teachers and leaders. Students are being charged as active agents of their own learning through formative assessment practices, goal setting, and communication with teachers in a way that was unheard of years ago (Sanzo, Myran, & Caggiano, 2015). There is a fluidity to the school, an organic feel, and palatable change to the way that schools operate. Today, educators are connected with one another and organizations are connected to varying degrees. It is this connectivity that promotes (and requires) an ecological approach to the way educational organizations function, including the leadership development system. "The ecological approach inherently recognizes the complexity of our world, while simultaneously helping us understand it" (Allen, Stelzner, & Wielkiewicz, 1998, p. 68).

Ecology is the study and analysis of living things and how those living things interact with one another and with their environments. Schools and districts are living systems and educational institutions are created and sustained for and by people. Just like ecosystems studied in science class, educational organizations are their own ecosystems. Separate ecosystems can be impacted by internal and external change. Sometimes these changes are slow, but "other times, change is abrupt, disorganizaing, or turbulent" (Folke, Hahn, Olsson, & Norberg, 2005, p. 442). Because of ongoing changes in education, educators (and leadership development systems) need to be adaptable as the "capacity of ecosystems to remain within desired states in the face of abrupt change seems to have been reduced as a consequence of human actions" (p. 442). Adaptable ecosystems are resilient and resilient educational systems will be robust enough adapt to changes and be sustainable. Otherwise, poorly adapted systems falter (consider schools that cannot keep up with changing standards and are failing and potentially subject to state takeover or closure).

The framework that will be fully detailed in the paper and applied with illustrative examples include the following: Interconnected Initiatives, Open Systems, Cycling of Resources, Adaptive Approaches, Learning Orientation, and Feedback Loops.

## PAPER 3 ABSTRACT

Teachers' perceptions, leaders' perspectives, and advice seeking networks: Equity and excellence within elementary school science programs, John Settleage

Over the past four years, we have been investigating school infrastructures in an effort to explain the considerable variability in performance annual science exams -- essentially using empirical evidence to consider the ways school ecology impinges upon children's science learning (Spillane & Seashore Louis, 2002). We found multiple factors significantly correlated to demographically adjusted science outcomes, not surprising given similar research on reading and math outcomes (e.g., Hallinger & Heck, 2010) -- and yet unique as one of the few such studies focusing on science. In addition to a science-specific teacher survey (Settlage, et al. 2015), we have also conducted social network analyses of STEM-themed schools (Burt, Kilduff & Tassellil, 2013) along with individual interviews of building-level leaders. As this wealth of data is being synthesized, we grapple with the issues of educational equity while simultaneously longing for a robust theory

of organizational learning and leadership (Scheerens, 2015). In particular, while distributed leadership (see Harris, 2008) has considerable egalitarian appeal, the social networks (about science instruction) and science achievement profiles (recalculated to account for student demographics) disrupt the tendency to endorse non-hierarchical leadership structures. In brief, there is no direct correspondence between network centralization and the realization of equity and excellence. Social network data about science instruction advice-seeking within elementary schools juxtaposed against test results reveals tantalizing inconsistencies. Clarity about organizational goals and enhanced cohesion among faculty, together creating social capital within a school building, create conditions throughout schools that help explain why certain buildings are successful with realizing equity goals whereas other schools, with ostensibly similar student populations and equivalent challenges are unable to produce adequate academic results (Holme & Rangel, 2012). Such results contradict the superhero narratives so prevalent in the popular press. Rather than urban schools succeeding because of the tireless devotion of inspiring individuals, the keys to equity are instead consequences of coordinated activity (Ishimaru, 2013). Thus, leadership transcends individual leaders as the area of interest and influence.

At this moment, we have in hand measures of school science infrastructures across seventy schools and we will be examining the relationships between the nine factors measured by that instrument in relation to the pending release of fifth graders' science test results in those schools. These data are supplied by the state and the release of information is scheduled for next month. Previously, with a sample of just thirty urban schools, we uncovered six schoolwide factors significantly associated with student achievement. We anticipate with an ever larger and more diverse sampling (i.e., a better mix of urban and suburban schools) that many of the school-level factors will again reveal themselves to be significantly related to science outcomes. In combination with social network analyses and qualitative data, at the conference we can share more complete reports about the characteristics of schools outperforming statistical projections than if we simply relied on student demographics.

# TE Paper session (B)

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.00-12.30

Location: Castle Suite 2B

Chair: Celia McArthur

### PAPER 1 ABSTRACT

The Teaching Profession in Kazakhstan: Motivational Factors and Traditional Preparation, Natallia Yakavets

There is no argument that everyone, from parents to policy-makers, is interested in highly qualified, skilled, capable and quality teachers in every classroom in every school in every nation. The key issues here are: who should teach? And how are they prepared? The career choice motivation of student-teachers is considered as a significant factor. In recent years, teacher shortages worldwide have given rise to studies on motivation on choosing teaching as a career, which is particularly important when explaining why teacher education graduates do not enter the profession or drop out after a short period of time (König & Rothland 2012; Rots et al., 2010; Thomson et al. 2012). Our account of research in Kazakhstan over the last four years suggests that teaching has become least prestigious profession with students who scored lowest points choosing teaching as a career. Despite years of educational reforms, developing teacher education and altering teacher education programs have been slow and difficult processes in the post-soviet context of Kazakhstan. The evidence shows that preservice teacher preparation has its distinctive pedagogical thoughts and practice deeply rooted in the Kazakh and Soviet pedagogical traditions (see Bridges et al. 2015). This paper aims to explore student-teachers motivation for choosing teaching profession and perceptions about their preparation for teaching. Two research questions are guided our inquiry: (i)What are motivations of choosing teaching as a career? (ii)What do students think about their overall preparation for teaching?

The results to be discussed in this paper are based on a mixed methods research design, including semi-structured interviews and focus groups carried out with those responsible for courses/programmes and with final year studentteachers in three pedagogic universities and two pedagogical colleges in different geographic locations in Kazakhstan. In addition, the paper draws on a modest amount of data from a survey completed by student-teachers administrated online through Qualtrics software. The survey consisted of 25 questions in various formats: Likert scale; multiple choice, and short open-ended responses. The data includes also analysis of documentary evidence of different kinds: course manuals; programme descriptions; textbooks used in teacher education, etc.

The theoretical starting point of the paper is Bandura's self-efficacy theory (1977). According to Bandura (1993), self-efficacy beliefs are peoples' judgements of their capabilities which provide the basis for motivation in all aspects of life, specifically with regards to one's goals and ambitions.

From the data gathered from seven focus groups with final year student-teachers, three main themes emerged, relating to motivation: the desire to 'work with children', 'to make a social contribution', and 'intrinsic value'. The aspects of low teachers' status and small salary were described as a 'temporary' factor. Descriptive statistics show that almost the majority of students responded to survey rated the quality of their preparation as good/excellent. The paper provide explanations of teacher-students' perceptions and offers some implications for policy and practice.

### PAPER 2 ABSTRACT

Deep Professionalisation in Charter School Teachers: the case of outstanding teachers in California, USA, Cristobal Madero, Rick Mintrop, and Miguel Ordenes

Current definitions of professional work applied to teachers relay on theories from the 1980s and 1990s (Hargreaves 1996; Day 1998). Charter schools emerged in the landscape of the USA Educational System after the creation of this theories. Teachers working in this new kind of decentralized schools, do not match their teaching practice with the existing definitions of professionalism. In this paper we ask for what are the personal, motivational, and technical characteristics that make a teacher a deep professional? We conducted five rounds of interviews to six teachers teaching in three different charter schools in a large city in the state of California, USA, between 2011 and 2015. We selected this sample of teachers from a poll of 50 teachers who participated in another study on charter schools. They were selected based on their commitment and skills to teach in urban settings.

We analyse Deep Professionalization, from three dimensions: 1. Intrinsic/extrinsic motivations (deservingness, common good); 2. Technical expertise: goals, clinical precision, feedback, learning around instruction; and 3.Individual level: biography, personal factors, origins of the call to teach. This professional teachers are professionals in a new way that embodies a new kind of professional commitment (a. I am willing to put in a great deal of effort beyond that usually expected of teachers. I feel that I am improving each year as a teacher; b. I really love the subject I teach most frequently; c. I am always eager to hear about ways to improve my teaching; d. I feel little loyalty to the teaching profession; e. Relationship with the administration is very important to me)\*, a new kind of service ethic (a. I try very hard to show my students that I care about them; b. I feel that I should be accessible to students even if it means meeting with them before or after school, during my prep or free period, etc.; c. It is important for me that my students enjoy learning and become independent learners; d. If I try really hard, I can get through to even the most difficult or unmotivated students; e. I feel that it's part of my responsibility to keep students from dropping out of school; f. I am certain I am making a difference in the lives of my students; g. I work for them because their deserve it.)\*\*, a sense of ownership of the work (a. Reference to level of internalization of the teacher role; b. Reference to their mission as teachers; c. Conception/opinion about teacher professionalism d. Any critics to the teacher profession (general); e. Ideas/comments about how do they want to see teachers)\*\*\*, they embodied a technical core, and have a biography that shows an special path to the teaching profession.

(\*), (\*\*), (\*\*\*) main codes that emerged from the data analysis

#### PAPER 3 ABSTRACT

Inspiring Teaching: What we can learn from exemplary practitioners, Pamela Sammons, Ariel Lindorff and Lorena Ortega

This paper discusses findings from a small-scale, mixed methods study of 'inspiring' teaching. The study, commissioned and funded by CfBT, included case studies of a purposive sample of 17 primary and secondary teachers in England who were nominated by their head teachers as exemplary practitioners whose practice could be viewed as inspirational for their colleagues and pupils. This paper discusses findings from a small-scale, mixed methods study of 'inspiring' teaching. The study, commissioned and funded by CfBT, included case studies of a purposive sample of 17 primary and secondary teachers in England who were nominated by their head teachers as exemplary practitioners whose practice was viewed as inspirational for their colleagues and pupils. Three main research questions underpinned the study: 1) What do inspiring teachers say about their practice? 2) What do inspiring teachers do in their classrooms? 3) What are their pupils' views and experiences? The mixed methods design included integration of qualitative and quantitative approaches across the data collection, analysis, and interpretation stages.

- Teachers' voices: Teachers were interviewed individually, covering topics including views on inspiring teaching, teachers' own practice, teacher identity and support, and future career plans. Teachers and head teachers were also given a ranking sheet consisting of a list of 17 constructs related to effective teaching practice, and asked to rank these in terms of personal priority. The content of the semi-structured interview schedule and ranking sheets was adapted from the Effective Classroom Practice project (Kington et al, 2008; Kington, Reed & Sammons, 2013).
- Observations of classroom practice: Two systematic observation protocols were used for each lesson, namely the International System of Teacher Observation and Feedback (ISTOF) and the Lesson Observation Form for Evaluating the Quality of Teaching (QoT). Both instruments were designed to measure characteristics or behaviours of effective teaching, and both have been internationally tested. In addition, during each lesson, participating members of the research team took detailed qualitative notes.
- Pupils' perspectives: Questionnaires were administered to class groups for 10 of the participating teachers (in some instances this was not possible due to practical constraints).

A review of existing literature reveals that the terms inspiring teaching and inspiring teachers are ill defined. The integration and synthesis of evidence from multiple perspectives increases understanding of the concept and examines overlap with research evidence on effective teaching.

Several common themes emerged across the teacher perspectives, pupil responses, and lesson observations, indicating that inspiring practice relates to the following core features: positive relationships, good classroom management, positive and supportive classroom climate, formative feedback, enjoyment, and a high quality learning experience overall. Additionally, evidence from this study suggests that inspiring and effective practice are complementary; effective practices may facilitate inspiring teaching, though inspiring practice is linked to additional features beyond those associated with effective teaching. These findings have both theoretical and practical significance. In addition to increasing understanding of the concept of 'inspiring' teaching, the results have implications for professional practice and developing professional learning communities.

## RCEL Symposium

Title: Promoting childhood mental wellbeing in primary schools

Topic: Researching the conditions for effective learning

Abstract ID: 3368

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Castle Suite 3

Authors/Speakers: Louise Marryat and Marion Henderson

Company/Organisation: University of Glasgow

Co-Authors: Lucy Thompson

> Michele McClung Phil Wilson Sarah Tweedie, Susie Smillie **Daniel Wight**

Presenting Authors: Louise Marryat and Marion Henderson

### PAPER 1 ABSTRACT

What impact do schools have on childhood social, emotional and behavioural development? Results from routine data collection in Glasgow City, Louise Marryat

Childhood mental health problems are an increasing burden in our society and have been found to have a dramatic impact both on individual attainment and on teachers and schools. This symposium proposes to explore two exciting and unique projects operating in Scotland to investigate the impact of schools on childhood mental health in primary school, and the use of school-based mental health data to work with schools to design interventions to improve child wellbeing within the school context. Both of these projects involve researching the conditions for effective learning with regards to optimising children's mental wellbeing and thus raising attainment.

The first paper will detail the Child Mental wellbeing in Education project (ChiME) being run by the University of Glasgow and Glasgow City Council Education Services for the past six years in Glasgow City. ChiME involves linking data on children's social, emotional and behavioural development, completed at preschool (age 4-5), P3 (age 7-8) and P6 (age 10-11) as part of Education Services routine data collection, with other administrative data from education, social work, and the police, among others. Levels of difficulties in Glasgow City and the potential of a "Glasgow Effect" on child mental health in schools will be examined. Exciting new analyses will be presented of multi-level models exploring the impact of school and individual level factors on child mental health during the first three years of school.

Glasgow City appears to have a higher prevalence of hyperactivity and inattention difficulties in primary school children, compared with children in the rest of the UK. However, analysis suggests that, once demographic differences such as deprivation are controlled for, children in Glaswegian schools are no more likely to have mental health difficulties than children in the rest of Scotland. However, the effect of deprivation should not be underestimated: children from the most deprived areas of Glasgow are more likely to start school with poorer mental health and to get worse over the first few years of school. Although most of the variation in the development of mental health problems over the first few years of school were due to the demographics of the intake of children into schools, schools themselves did make a difference to mental health development, even once intake characteristics were controlled for.

Schools do appear to have a role to play in promoting the development of positive and negative mental health over the first few years of school. Mental health problems in childhood can have a large impact on a child's ability to learn and perform in educational assessments. Increasing our understanding of the development of childhood mental health in primary schools is the first step in helping schools and children to promote mental wellbeing. The next paper will detail the randomised controlled trial of a school-based intervention to promote emotional and social wellbeing in primary schools.

### PAPER 2 ABSTRACT

Implementing school-based interventions to promote social and emotional wellbeing: a randomised control trial in Scotland, Marion Henderson, Sarah Tweedie, Susan Smillie and Daniel Wight

The second presentation is about the Social and Emotional Education and Development (SEED) trial. SEED is an iterative process designed to promote emotional and social wellbeing among Scottish primary school children through schools, using data collected from teachers, parents and older cohort pupils on pupil social, emotional and behavioural development. The process take place when the young cohort is in P1 (age 4-5), P3 (age 6-7), P4 (age 7-8) and P5 (age 8-9) and P5. The older cohort start at P5 and repeated when they are in P7 (10-11). It draws on other school interventions and initiatives, in particular the Gatehouse Project in Australia and CASEL in the USA. The MRC/CSO Social and Public Health Sciences Unit, University of Glasgow received funding from the National Institute for Health Research Public Health Research (NIHR) to conduct a large scale, five year evaluation of this programme through a randomised controlled trial. This is one of the first rigorous evaluations of primary school interventions to promote social and emotional wellbeing in the UK. SEED has three components:

- Repeated needs assessments: Younger pupil cohort, teacher completed, Strengths and Difficulties Questionnaire (SDQ); older cohort, teacher competed, SDQ plus a range of other, pupil completed, core SEW competencies; school staff complete a survey about their SEW, experience of teaching SEW and experiences working at their school.
- Educational psychologists feedback assessment results (aggregated by younger and older pupil cohorts)to staff and used appreciative enquiry to: promote reflection on school policy, practice and culture; help teachers to select initiatives/approaches to address pupil and school needs; and develop commitment to positive change. This process is supported by a resource guide of evidence-based interventions. After co-production of a school action plan of initiatives/approaches as been agreed, the action plan becomes part of the school's improvement plan, which is then monitored by the local authority Quality Improvement Officers. The initiatives are generally of three kinds.
- a) classroom packages for delivery to pupils, e.g. Creating Confident Kids; Being Cool in School; b) training for teachers and/or parents, e.g. to promote proactive classroom management and interactional instruction, or to understand the importance of social and emotional wellbeing of children and being positive role-models; and/or c) whole school initiatives, e.g. the implementation of restorative practice approaches.

This paper will reflect on the implementation of SEED, present some exemplar action plans and discuss the theory of change.

## **PC Symposium**

Title: Emerging models of school inspections; shifting roles and responsibilities of

Inspectorates of Education in a polycentric system

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 2918

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Staffa

Author/Speaker: Melanie Ehren

Company/Organisation: UCL Institute of Education

Co-Authors: Janssens Frans

Martin Brown Gerry McNamara Joe O'Hara Rossi Simeonova Jane Perryman

Presenting Author: Melanie Ehren

## Overview of symposium

Across Europe, Inspectorates of Education are developing new inspection methods and modalities that fit a more decentralized education system where schools and other service providers operate in networks to provide inclusive education or develop and implement more localized school-to-school improvement models. As education systems move towards more decentralized decision-making where multiple actors have an active role in steering and governing schools, the tasks and responsibilities of Inspectorates of Education also change. This symposium reflects on these changes and suggests inspection models that fit such a decentralized polycentric context. Examples of inspection frameworks and methods from Northern Ireland, England and the Netherlands are provided, as well as a brief discussion of the potential impact of such 'polycentric' models.

## PAPER 1

Changing roles and methods of inspections; theoretical framework, Melanie Ehren, Frans Janssens, Martin Brown, Gerry McNamara, Joe O'Hara, Rossi Simeonova

## PAPER 2

School inspections in a polycentric context; Ofsted and a self-improving school system, Melanie Ehren, Jane Perryman

## PAPER 3

A mixed methods analysis of a mixed methods system. School inspections in a polycentric context. The case of Northern Ireland, Martin Brown, Gerry. McNamara, Joe O'Hara

## PAPER 4

Abstract School inspections in a polycentric context: The Dutch Inspectorate of Education, Frans Janssens, N. Maassen

## **PTM Symposium**

Title: The intersection of international achievement testing and education policy:

Global perspectives on large-scale reform

Topic: Policy translations and mistranslations

Abstract ID: 2874

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Shuna

Author/Speaker: Louis Valente

Company/Organisation: Brock University

Presenting Author: Louis Valente

## Overview of symposium

Spurred by rankings on international achievement testing programs such as the Program for International Student Assessment (PISA), Trends in International Mathematics and Science Study (TIMSS), and the Progress in International Reading Literacy Study (PIRLS), many countries have initiated reforms and revised education policies with the aim of enhancing their intellectual capital – the collective achievement of their elementary and secondary students. Yet cautions and concerns are increasing about the influence of international achievement testing on education policy formation and national education systems. Within this global culture of student performance, this symposium examines the intersection of international achievement testing and education policy development across a range of western nations: Germany (Dennis Niemann), England (Sally Thomas), Scotland (Louise Hayward), Republic of Ireland (Anne Looney), Sweden (Christina Wikström), the Netherlands (Jaap Scheerens), United States (Eva Baker), Canada (Don Klinger), and Australia (Patrick Griffin).

The lead author, Professor Louis Volante, will provide an introduction to the symposium that introduces the various members of the panel and situates the topic within the broader global context. He will also explain some of the history behind the coupling of international achievement testing with education policy development. Each of the panelist, who represent various international jurisdictions, will very briefly: (a) provide an overview of the structure of public schooling and the administrative processes used to determine curriculum, pedagogy, and assessment at the national and/or regional level; (b) explain the genesis and evolution of international testing (i.e., PISA, TIMSS, PIRLS) within their respective context; and (c) discuss the "actions and reactions" that have stemmed from the relative performance of students on international achievement tests, particularly PISA which garners the most attention in education policy spheres. The majority of the session will be devoted to discussing prominent policy translations and mistranslations that have directly impacted the work of teachers and school leaders within various national contexts. The lead author will conclude the session with final thoughts, including further areas of research that have emerged from the comparative analysis.

### PAPER 1

Scotland, Louise Hayward

## PAPER 2

England, Sally Thomas

### PAPER 3

Republic of Ireland, Anne Looney

### PAPER 4

Netherlands, Jaap Scheerens

## PAPER 5

Canada. Louis Valente

## **RCEL Symposium**

Title: Explaining achievement gains in the high poverty primary schools of Trinidad and Tobago,

2005 to 2013

Topic: Researching the conditions for effective learning

Abstract ID: 3361

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Jura

Author/Speaker: Jerome de Lisle

Company/Organisation: The University of the West Indies

Co-Authors: Linda Mohammed

Cheryl Bowrin-Williams

Sean Annisette Joann Neaves Rinnelle Lee-Piggott **Dwight Merrick** Rhoda Mohammed

Presenting Author: Jerome de Lisle

## Overview of symposium

This symposium focuses upon contextualized school improvement theory explaining the achievement gains in high poverty primary schools in the republic of Trinidad and Tobago (Harber & Muthukrishna, 2010). The research questions guiding the overall session are:

- What leadership frameworks explain school improvement at high poverty sites in the primary schools of Trinidad and Tobago?
- What are the perceptions and roles of key stakeholders (teachers, parents, and students) in the school improvement process at high poverty primary schools in Trinidad and Tobago?

These two questions relate to the symposium theme, "researching the conditions for effective learning". The three sessions in the symposium are: (1) Leadership frameworks and processes in high poverty schools with improving scores; (2) Collaborative interfacing between parents and teachers in high poverty schools which show consistent annual achievement gain in Trinidad and Tobago; and (3) In the words of the child-Children's experiences in improving high poverty schools.

For Trinidad and Tobago, data from both national large scale assessments (NLSAs) from 2005 to 2013 and international large scale assessments (ILSAs), such as PIRLS 2006 and 2011, suggest that there has been significant improvement in the performance of primary schools (students age 5 to 11). We hypothesized that this improvement might be due to specific actions of stakeholders at different school sites as they respond to the School Performance Feedback System (SPFS) installed in 2005. Multilevel modelling of the PIRLS 2006 and 2011 data also provides evidence that the relative reduction in school variance for the period was 33.3% as compared with 18.4% for students. The greater improvement across schools than for individual test takers suggests that school sites may be responding to the feedback data provided. Nevertheless, both data sets also point to continued heterogeneity across geographic space, with both lower individual and site performances in poor rural areas.

Using NLSA data, we identified 15 high poverty primary schools that have made significant attainment gains on the NLSA from 2003. The status of high poverty was determined by both numbers eligible for free school lunches from the National Dietary Services Limited (NDSL) and from the Basic Needs Index (BNI) which defines poverty from the standpoint of geographic location and the community. Using the logic of comparative multi-site case studies, we extend theory on the actions and processes of school personnel contributing to achievement gains in high poverty contexts in the small island state of Trinidad and Tobago (Eisenhardt, 1989; Shah & Corley, 2006). The within- and cross-case analyses point to integrating elements, interventions, and processes in the teaching-learning core. This study is significant considering the growing concern for school improvement practice in high poverty schools (OECD, 2012). However, since most of the guidance comes from Western or OECD countries (McGee, 2004; Parrett & Budge, 2012), there is also a need for credible evidence and contextualized theory within non-OECD contexts, such as Trinidad and Tobago.

#### PAPER 1 ABSTRACT

Successful leadership practices in improving high poverty primary schools in Trinidad and Tobago, Sean Annisette, Rinnelle Lee-Piggott and Dwight Merrick

The purpose of this study was to identify dimensions of leadership practice in improving high poverty schools. Weick's (1976) theory of loosely coupled systems suggests that the core difficulty faced by high poverty schools is unresponsive, weak and disconnected subsystems. Arguably, low performing, high poverty schools have very loosely coupled subsystems. From this perspective, we hypothesize that leadership for school improvement in this context is likely to be: (1) integrative, (integrating sub-systems and processes); (2) transformational or enabling, (transforming the institutions by installing structures and reculturing to ensure sustainable change); and (3) academic focused, (centering effort upon the teaching-learning core).

Integrative leadership may be important for managing the turbulent external environment of high poverty schools, including demands from the Ministry of Education and the likely deficits of families and communities. Common strategies in this dimension might include bridging and buffering, fostering community engagement, and crafting inside-out coherence (DiPaola & Tschannen-Moran, 2005; Honig & Hatch, 2004; Kirby & DiPaola, 2011). Transformational leadership is needed to build enabling and mindful school structures and collaborative cultures to facilitate productive relationships across the school (Day et al., 2011; Hoy & Sweetland, 2001; Jacobson, Johnson, Ylimaki, & Giles, 2005). The principal must focus explicitly on the core sub-system of teaching and learning if school academic performance is to improve. This requires translating high expectations into practical activities (Leithwood, Patten, & Jantzi, 2010; Murphy, Weil, Hallinger, & Mitman, 1982).

Leadership practice was explored in 7 of 15 schools using extended interviews and shadowing of the principal. Text data from field notes and interview transcripts were reduced using hybrid coding. The coding scheme focused on the three categories identified in the leadership framework but themes were inductively generated (Fereday & Muir-Cochrane, 2006). Support for all three aspects of leadership was found in the interview text and are summarized in Table 1 (299).

## PAPER 2 ABSTRACT

Collaborative interfacing between parents and teachers in high poverty schools showing consistent annual achievement gains in Trinidad and Tobago, Cheryl Bowrin-Williams and Joann Neaves

The purpose of this paper was to describe the relationship between and among parents and teachers in improving high poverty schools. The study was guided by the following research questions:

- 1. How do parents and teachers conceive of their roles?
- 2. What actions and behaviours facilitate the change process?

High poverty schools face several economic and social constraints in the external environment. These schools must successfully confront these environmental constraints in order to improve (Emery & Trist, 1965). Pfeffer and Salancik's (1978) resource dependence perspective envisioned organizations as highly dependent upon the external environment, requiring active engagement to be successful (Scheerens & Creemers, 1989). Brofenbrenner's ecological systems theory also provides a useful framework for analysing the context of high poverty schools (Hampden-Thompson, Guzman, & Lippman, 2013). From this perspective, Wilcox (2013) positioned parents, teachers and administrators in the exosystem of the classroom's microsystem.

In terms of the capacity for educational improvement, then, an important resource is parental involvement (Hoover-Dempsey, Bassler, & Brisse, 1987; Giles, 2006). A second resource is the teacher, with high poverty schools often constrained by low teacher quality arising because of high turnover, selection difficulties or lack of professional training (Peske & Haycock, 2006; Sass et al., 2012). Unique constraints in the Anglophone Caribbean include restrictions on the role and authority of the principal and lack of specific preparation in the system for teaching high poverty contexts (Baker & Cooper, 2005; McKinney, Haberman, Stafford-Johnson, & Robinson, 2008). This multi-site case study used both quantitative and qualitative methods (Yin, 2013). The main source of data was the transcribed interviews from the focus groups. The text data was analysed using thematic analysis (Braun & Clarke, 2006; Guest, MacQueen, & Namey, 2012). The themes constitute the primary evidence for developing theory.

Interviews with both parents and teachers at some sites suggest a surprising synergy between these teachers and parents with teachers being supportive and understanding of the circumstances faced by parents and parents actively involved in all aspects of schooling including the classroom. We labelled such synergy as collaborative interfacing (the point where parents and teachers meet). As illustrated in Table 2, thematic analysis suggests that collaborative interfacing involved three dimensions: (1) a sympathetic attitude on the part of staff, (2) a high level of communication between teachers and parents, and (3) shared activity between parents and the school (386).

## PAPER 3 ABSTRACT

In the words of the child: Students' experiences in improving high poverty schools, Linda Mohammed, Rhoda Mohammed and Jerome De Lisle

This study explored children's insights into their school's improved performance and sought to investigate two research questions:

- · How do children in high-poverty low performing schools describe their schooling experiences?
- What factors do students perceive as being responsible for their school's improved academic performance?

In recent years an emergent body of research has documented the importance of students' voice in their own schooling. An important aspect of this work is students' voices within the context of school improvement in high poverty, low performing schools. Rudduck's (2002) argument for the transformative significance of students' right to be heard in school improvement is the overarching theoretical frame guiding this research.

Students must not be viewed as passive recipients in the education process but as active contributors not only to their own actual classroom learning. This implies that students are important participants in school reform initiatives that would ultimately impact their learning. Therefore, exploring students' voices will assist in defining a realistic agenda for school improvement. In this study, both verbal and visual data sources were used to explore students' perceptions and experiences in four (4) primary schools across Trinidad and Tobago that were considered high poverty, yet showing significant academic improvement. Nine (9) focus group interviews were conducted among 49 students ranging in ages from 9-12 years old across the four schools. All focus group interviews in each school were conducted in either the school's library or computer room. Given some of the inherent shortcomings with focus group interviews conducted with children, all participants also produced free-hand spontaneous drawings upon completion of the focus group interviews, in which they depicted what school represents to them.

A qualitative content analysis was undertaken by coding the interview data. Each drawing was coded by content to identify common features in the submissions (Bland, 2012). The three most visually prominent characteristics of each drawing were identified and were compared against the verbal accounts in order to corroborate the interpretation. As is common to such studies, students viewed school as fun; but, in Trinidad and Tobago, they often highlighted the instrumental value of learning as reflected in Daniel's picture presented in Figure 1. As shown, the focus is on using education for social mobility. We argue that the inclusion of students' voices in school improvement research is important as it situates students in a position that benefits the students, teachers and the school itself.

## **SE Paper session**

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.00-12.30

Location: Barra

Chair: Moyra Boland

## **PAPER 1 ABSTRACT**

How can peer review contribute to a self-improving school system? Peter Matthews and Marcia Headon\

New research looks at the authenticity of school peer reviews and their contribution to a self-improving school system. Since 2011, a large cooperative partnership of schools in England, Challenge Partners, has undertaken over 500 peer reviews, known as Quality Assurance (QA) reviews. Our study of the QA review approach takes account of surveys of the lead reviewers, reviewers and partner schools that have participated in reviews, interviews with stakeholders, and observation of reviews in action and the training of reviewers. We have found reviews to be robust and highly valued by partner schools, complementing both their self-evaluation and external inspection. There are equal benefits in the professional development of reviewers and transfer of knowledge to their home schools. The reviews are supported by increasingly focused followup arrangements. We argue that this particular review model avoids the potential weaknesses of peer review approaches, such as cosiness or lack of challenge. The validity of QA reviews is assured by independent lead reviewers who have experience as inspectors. Peer reviewers come from distant schools. They gather evidence and compare findings in partnership with senior leaders in the school being reviewed. This dual observer approach contributes to reliability and gives the school greater ownership of the findings. The reviews do not replicate inspections but focus on issues most closely related to school improvement. We contend that QA reviews extend the inspection versus self-evaluation duality to a trio of approaches. Authentic peer review arguably is indispensible to a self-improving school system because it shifts the locus of accountability away from external agencies and towards schools themselves, working in partnership. The outcomes of the Challenge Partners approach not only support and challenge schools; they build leadership capacity and mobilise knowledge of good practice, distributing it across the system. We conclude by defining the conditions needed for authentic peer review, foremost of which is social capital, i.e. trust in the process and in the people.

## **PAPER 2 ABSTRACT**

School Self-Evaluation Outcomes: Integrating School Change with Sustaining School Strengths, Tali Aderet-German and Miriam Ben-Peretz

School self-evaluation (SSE) is regarded as an educational evaluation in which the school is the object of evaluation. SSE is an important tool, with which schools can examine themselves, identify areas in need of change, and decide upon a course of action for improvement (Scheerens, 2002). This paper aims to examine the possible outcomes of this process, by presenting a case-study of an Israeli school which has been engaged in independent internal SSE for the past decade.

One of the questions the schools' leadership need to address at the end of such a process is 'How do we use the data?'. This question is widely dealt with in the literature, referring mainly to the changes evaluation utilization leads in schools (Cousins & Leithwood, 1986; Alkin & Taut, 2002; Contandriopoulos & Brousselle, 2012). This paper highlights the implications of using SSE data to confirming school strengths.

Scholars view SSE as a strategy for school improvement (Hopkins & West, 2002; Kyriakides & Campbell, 2004), inherently linking school improvement with educational change (Hopkins, Stringfield, Harris, Stoll & Mackay, 2014). Does SSE and school improvement implicitly entail change? In a project involving 101 schools from eighteen European countries, one of the SSE benefits MacBeath and colleagues (2000) identified was the affirmation of "the good thing the schools were doing, recognizing and celebrating aspects of school life which had previously gone unnoticed" (p. 184). Schools can benefit from SSE findings, in ways other than changing current practices. This paper presents a case-study of a school which has been engaged in independent SSE for the past decade, employing a full-time skilled administrator who leads and coordinates

the evaluation processes the school leadership decides to undertake. The school employs approximately 340 teachers, who teach 4000 students aged between five and eighteen in six different branches, located in four campuses in a large city. Multiple interviews were conducted with 24 participants who were teachers, principals and key figures in the SSE. The researcher engaged in participatory observation of a SSE process, from its initiation to the process's conclusion. Using thematic analysis (Ryan & Bernard, 2003) recurrent themes were identified in the texts transcribed from the interviews with the participants, and from the researcher's field notes.

The findings of this study suggest that identifying school strengths as one of the valid outcomes of SSE enhances school ethos. Recognizing successful elements of school life may reduce the threatening aspect of evaluation, promote the cooperation of teachers in SSE and enable the continuity of the process. Teachers, management and other key figures in the school's systematic evaluation process emphasized the importance of acknowledging and sustaining school strengths, alongside looking for areas in need of change. Teachers found this dual approach constructive, striving for school improvement without the fear for individual repercussions on one hand, and, on the other hand, allowing for accountability and growth. School management found that this integrated approach encouraged teachers' acceptance of the evaluation process and enabled educational innovations building on the strong aspects of school life.

#### PAPER 3 ABSTRACT

The effects of low-stakes inspection on the self-understanding, policies and practices of teachers and schools, Maarten Penninckx and Jan Vanhoof

Studies have shown that inspection leads to increased reflection and discussion among staff members in inspected schools, but not to new insights for schools into their own strengths and weaknesses (e.g. Chapman, 2002; Ouston, Fidler, & Earley, 1997). The evidence with regard to the impact on actions for school improvement is more inconclusive (Chapman & Earley, 2010; Dedering & Müller, 2011; Ehren & Visscher, 2006). The current evidence base with regard to the effects of school inspections on school's self-understanding and on schools' policies and practices is largely dominated by research in the English educational context, which is known as a high-stakes inspection context (Allen & Burgess, 2012). By contrast, the Flemish inspection system can be regarded as low-stakes, because it is highly unlikely that a school will be closed down as a result of an inspection (Van Bruggen, 2010). Flemish inspections intend to influence schools' self-understanding by adding a professional outsider's view on the quality of the school. The Inspectorate's operating assumption is that new insights (uncovering the blind spots that schools are unable to detect through self-evaluation) will serve as an impetus for processes of school improvement (Vanotterdijk, 2008).

This study investigates the 'conceptual effects' (impact on schools' and teachers' self-understanding and on professional discussion between colleagues), as well as the 'instrumental effects' (the impact on policies and practices) of inspection in Flemish schools. Additionally, it explores features of inspections and features of inspected schools that contribute to the occurrence of these effects. A qualitative approach with case studies ensures a profound understanding is built of the processes that occur in schools. The study draws on data from forty-five in-depth interviews with fifteen staff members (principals, members of the management team, and teachers) in five primary schools. Interviews were administered at several stages, from two weeks prior to, until four months after the inspection.

The results indicate that Flemish inspection incites reflection amongst teachers on the quality of their education. The inspection itself does not provide considerable new insights in the schools' strengths or weaknesses, nor in teachers' ideas about their professional role. Conceptual effects originate from the preparation for the inspection, rather than from the inspection feedback. Instrumental effects are mainly observed in schools with an unfavourable inspection judgement. The absence of external pressure was amongst the main reasons for the rather passive reaction. School features (e.g. the professional autonomy and the reflective attitude of school staff) and several inspection features account for differences in the impact of inspection on schools' and teachers' self-understanding, policies and practices.

The case studies illustrate that inspection may lead to conceptual and instrumental effects given that a number of prerequisites and conditions apply. Overall, the conceptual effects are similar to those observed in the English context, which suggests that the stakes of inspection do not have a great impact on the inspections' effect on teachers' reflection and self-understanding. The findings are of importance for academic scholars, as well as for policy-makers in order to shape inspection systems with maximal impact.

## **PAPER 4 ABSTRACT**

School self-evaluation capacity building - should we model it? Mateja Brejc

Self-evaluation is no longer a matter of question - it is a fact! And by recognizing the value of self-evaluation in schools the question of capacity building becomes an issue. Capacity building is necessary for quality and sustainable use of self-evaluation in schools with regards to teachers and school leaders not being professional evaluators, meaning that knowledge, skills and attitudes are not self-evident.

Literature and research review refering to a wider concept of evaluation capacity building (ECB) defines it's general aim as sustainable practice of quality evaluation. The concept and practice of ECB are still in the ,phase' of inquiry, there is basicly no literature or research on school self-evaluation capacity building.

Based on wide literature review of ECB and research on school self-evaluation training as one of ECB strategies school self-evaluation capacity building (sECB) model (Brejc 2014) will be presented and discussed. sECB is defined as a) the process of gaining and/or improving knowledge, skills and attitudes of teachers and leaders for self-evaluation, b) establishment of institutional frameworks and structures for conducting effective and sustainable self-evaluation aiming at improving the quality of school performance, and c) framing of the system demand, guildeliness and support for school selfevaluation efforts. As such it adresses individual (eg. teacher, school leader), organizational (eg. school) as well as system level emphasising the need to for linking them. Model will be presented in the framework of evaluation culture, school improvement and (professional) accountability. Strengths, weaknesses, challenges and dilemmas will be discussed from a point of view of specific national school system.

## **RCEL Roundtable**

Title: Extending the learning landscape: Investigating a systematic approach to school effectiveness

in Oman

Researching the conditions for effective learning Topic:

Abstract ID: 3360

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 11.00-12.30

Location: Rockall

Mohamed Osman Author/Speaker:

Company/Organisation: Sultan Qaboos University

Co-Authors: Thuwayaba Al Barwani

> Khalid AL Saadi Zuhoor Al Lawati

Presenting Author: Mohamed Osman

Presentation Format: **Round Table Discussion** 

## **Abstract**

In response to the "Vision for Oman's Economy-Oman: 2020" which stressed the importance of achieving well-developed human resources by the year 2020, the Ministry of Education took serious steps to ensure that students will be adequately prepared for the requirements of higher and further education, the labor market, and modern life in general. However, the reform efforts and investment in a longer school day and longer school year, better curricula with more focus on Science and Math, more English, more technology and life skills, a more qualified teacher core, and a modern school infrastructure, did not produce an academically better student. This became evident in the underperformance of Omani students in the international assessment measures (e.g., MLA, TIMMS, and PIRL). In light of the need for systemic educational reform to push the boundaries of students' learning potentials, this project aims to systemically activate and analyse the impact of all interrelated elements in the school system that promote the empowerment of student learning in the Sultanate of Oman. More specifically, it aims at furnishing the school system with a practical model for sustained improvement of students' performance in higher order thinking skills as measured through their performance in science, math, language literacy, and information technology. It is hypothesized that any sustained improvement in the school system is a function of a set of interrelated driving forces or subsystems that collectively drive the overall performance of the school system, and impact students' learning potentials.

## Short term goals of the project:

- · Providing empirical evidence for theoretically-sound interventions that can maximize students' learning potential.
- · Examining school leadership practices in improving the overall school efficiency.
- · Identifying the strengths and weaknesses of the interrelated elements of the school system.
- Establishing a continuous evaluation and cyclical feedback system that is directly linked to measurable learning outcomes.
- · Improving students' attainment in content areas studied (Math, Science, English and Arabic Language, and IT).
- Improving students' attainment in critical thinking skills.

A descriptive analytic methodology which draws upon mixed methods of quantitative and qualitative data will be used. The project has three phases each of which will require different types of design (e.g., descriptive analytic, experimental, and ethnography). The sample includes eight schools (four male and four female) from Muscat area. About 3600 students from grades 5 -10 will be tested and followed up at three stages: grades 5-6, 7-8, and 9-10. The sample also includes all teachers, administrators and parents of children in these schools.

## **Research Questions**

- To what extent does the proposed model collectively impact the overall school effectiveness?
- 2. What is the predictive power of each driving force in the model in contributing to the school effectiveness?
- 3. To what extent does the proposed model impact students' learning in science, mathematics, language literacy, IT, and critical thinking skills?
- 4. Does the impact of the proposed model on students' learning vary according to: subject content areas, gender, and grade level?
- 5. What is the impact of a systemic approach to school effectiveness on all stakeholders' attitudes towards schooling?

## **RCEL Paper session**

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.30-12.30

Location: Malin

Chair: Jule Hildmann

#### PAPER 1 ABSTRACT

Seeking Roads That Faster Lead to Rome: A Study On English Learning Strategies Employed During the "Affirmative" Pre-Departure Trainings, Lusi Nurhayati

Indonesia government, via Indonesia Endowment Fund for Education (LPDP) has offered overseas study scholarship (beasiswa afirmasi) for the disadvantage citizens and those who live in lagging areas. Yogyakarta State University (YSU) in partnership with LPDP runs the special intensive pre- departure English training for the awardees to improve their English skills. Pragmatically, they must get at least 6.5 (overall) on the IELTS (International English Language Testing System) with no less than 6 on writing skill. Grammar is one important aspect of language that they find it hard to deal with. Their poor grammar influenced negatively to their English performance. Learning strategies contribute to the effectiveness of language learning. Since not all of class activities may meet their learning needs, they must find their own strategies to study effectively.

The aim of the study is to identify learning strategies employed by the awardees of Affirmative LPDP scholarship joining the pre-departure training in YSU and to find out whether the chosen strategies contribute to the learning effectiveness. The result of this study is useful for teachers and stakeholders to design a better program that really facilitates learning.

This study was conducted in the Language Development Centre of Yogyakarta State University during 2014-2015 involving 15 among 30 participants whose English level was beginner up to intermediate. They came from varied cultures, age and educational background. Majority of the participants came from Eastern Part of Indonesia. The data were collected through questionnaire and interview. The questionnaire was adapted from Oxford and Lee's inventory. The data will be analysed quantitatively using descriptive statistics. IELTS test was used as an indicator of learning success. The data analysis comprised description about learning strategy classified based on level of English ability, educational background, and gender. Data from interview were analysed using Miles and Huberman's model.

The result shows that all participants used 3 types of grammar learning strategies: meaning oriented (mean = 3.37), explicit-inductive learning (mean = 3.4) and explicit-deductive learning (mean = 3.3). Majority of participants stated that they always learn from their mistakes and use computers (73%); listen to the song (60%) and learn from the teacher (53%). The effectiveness of the learning was also seen from the IELTS score gained. The result showed that nearly a half of participants were able to reach 6.5 of overall score and therefore achieve the aim of the training. Writing, a skill that requires a good grammar skill, becomes one among 4 skills tested that was perceived difficult by most participants. This study revealed that less-skilled participants highly depend on the teachers and wished to have direct feedbacks. Technology also takes an important role as it helps them to progress. During the training, they have better access to computer and internet, two things that cannot be got easily in their hometowns. There are various learning strategy that can make one be successful and efficient in learning English. Therefore, ones could choose different, as there are many, ways to Rome.

## PAPER 2 ABSTRACT

Dynamics of collaborativeness in successful professional learning communities, Aini-Kristiina Jäppinen and Dorit Tubin

Professional learning communities (PLC) have been widely accepted as effective with respect to good atmosphere, adequate leadership practices, and functional working practices (Bar-Yaakov & Tubin, 2014; DuFour, 2004; DuFour & Eaker, 1998; Hord, 1997, 2009; Leclerc, 2012; Lomos, Hofman & Bosker, 2011; Stoll & Louis, 2007; Toole & Louis, 2002; Thoonen, Sleegers, Oort & Peetsma, 2012; Tubin, 2011). However, the outcomes for school improvement on these areas normally depend on case-specific issues. To be able to identify less culturally and contextually bound issues, three PLC settings of excellence were examined in Canada, Finland, and Israel (Jäppinen, Leclerc & Tubin, 2105 online).

The Finnish case concerned a one-year study about development of collaborative understanding and functional pedagogical practices in a vocational education organization after a big merger. The Israeli case was a one-year study about how to enhance and develop mathematic curriculum and strengthen mastery of certain grades in a public high school. The Canadian study was executed during three years as to how to implement new teaching practices in an elementary Frenchlanguage school. Each case was followed up by an individual researcher in guaranteeing, in this way, their excellence as an exemplary PLC setting. The basic supposition was that these three PLCs would provide a source for finding common ingredients for school improvement and effectiveness beyond culture and context. For this, the single cases were combined to a common database. Several common Skype discussions were then conducted during a couple of years when the joint data base was carefully scrutinized and analysed. To find such ingredients that would go beyond culture and context the notion of 'collaborativeness' was exploited. Collaborativeness is a systematic and shared development process consisting of efforts, ideas, and activities that aim at achieving synergy (Hallinger & Heck, 2011; Jäppinen, 2014; Olivier & Hipp, 2006; Surowiecki, 2004; Vescio, Ross & Adams, 2008). By combining the three cases' data sets and applying a special TenKeys® model of collaborativeness (Jäppinen, 2012, 2014; Jäppinen & Ciussi, 2015; Jäppinen & Maunonen-Eskelinen, 2012), through a qualitative content analysis (Denzin & Lincoln, 2008) ingredients of collaborativeness beyond culture and context were distinguished that were considered particularly essential.

The crucial factor proved to be a dynamic relationship between mutual and deep learning that led to an organization-wide, continuous change and learning process engendering new modes of thinking. This dynamic relationship between mutual and deep learning beyond culture and context was found to possess a real power to change the school culture from within. The relationship was realized through five different ways: authority, hierarchy, and control which promote self-reflection and encourage trial and error; capacity building in terms of collective intelligence and synergy creation; quality and quantity time for processing information and interpretation and integration of former and new knowledge; nurture by training, surprising, stirring, and inspiring; and respect, equality, and trust as collegial support and positive attitudes.

## **PAPER 3 ABSTRACT**

Examining the causal relationship between attitude towards mathematics and mathematics achievement, Henri Kiwanuka

### Theoretical framework

Though a positive relationship between attitude toward mathematics (ATM) and mathematics achievement (MA) has been assumed to exist, there is no clear evidence if ATM causes MA, or MA causes ATM (Enermark & Wise, 1981), or both are the effects of a third cause (Ma & Kishor, 1997). Some studies have proposed at least four models to describe the ATM-MA relationships.

- 1. No cross-effects model: no direct effects of prior attitudes on later achievement, or prior achievement on later attitudes,
- 2. Achievement-predominant model: previous achievement has direct effects on later achievement and attitudes,
- 3. Attitude-predominant model: previous attitudes have direct effects on later attitudes and achievement,
- Reciprocal effects model (REM): prior attitude and achievement have direct effects on later achievement and attitudes.

## Research questions

- 1. What is the magnitude of ATM-MA relationship across gender?
- 2. Do changes in ATM lead to changes in subsequent MA across gender?
- Do changes in MA lead to changes in subsequent ATM across gender?
- 4. What is the best-fitting model of the ATM-MA relationship?
- 5. Is there a gender difference in these relationships?

## Methodology

The sample consisted of 4819 grade 7 students (age 14-15; 2170 boys and 2649 girls) grouped in 78 classes in 49 schools from four districts in Central Uganda: Kampala, Wakiso, Mpigi and Mukono. Data were collected through three different mathematics tests and a student questionnaire administered at the beginning, middle and end of school-year 2012. The questionnaire was designed to collect attitudinal indicators: mathematics self-confidence, usefulness and enjoyment of mathematics. We used multi-group analysis to test five nested measurement invariance models in order to measure invariance across gender (Milfont & Fisher, 2010). We tested competing structural models to determine the best-fitting model for the causal ATM-MA relationship, using cross-lagged structural equation modeling (de Jorge, Dorman, Janssen, Dollard et al., 2000).

#### Results

The fit statistics and the tests of chi-square differences between the consecutive models support the measurement invariance across gender. By the single-group analysis, REMs exhibited the best fit to the data for boys and girls. By the two-group analysis, REM showed the best fit of the four proposed models for both genders and there were no major gender differences.

#### **Disussion / conclusion**

The findings indicate that prior attitude and prior achievement are both strong predictors of later attitudes and achievement. Boys and girls who initially perform well in mathematics continue to do well in mathematics and report positive ATM. Similarly, those who initially exhibit positive ATM subsequently achieve higher MA.

## Theoretical implications

Due to their reciprocal relationship, attitude and achievement both play a role in mathematics learning. Students who express self-confidence in their ability to learn mathematics also enjoy/like mathematics better. Students who enjoy mathematics more, value it more highly and achieve more.

### **Educational implications**

All stakeholders should engage in programs designed to improve both attitude and achievement. Improvement in attitude and achievement in first-year of secondary education can lay a good foundation for the attitudinal and academic well-being of students in their schooling (Ma & Xu, 2004).

## **LDP Paper session**

Parallel Session 2 Session:

Session Date and Time: Thursday 7 January 2016 11.30-12.30

Location: Hebrides

Chair: Alan Armstrong

#### PAPER 1 ABSTRACT

Raising the performance of disadvantaged pupils in England: implications for school leadership, Caroline Sharp and Shona MacLeod

This research focused on the role of school characteristics; school strategies; and approaches to implementation in raising the attainment of disadvantaged pupils. It drew on previous research into school improvement and leadership, especially work by Fullan (2014), Robinson et al. (2009) and Seashore Louis et al. (2010). The performance gap between pupils from more and less advantaged backgrounds in England is one of the largest among OECD countries (OECD, 2014). The Pupil Premium was introduced by the Government in 2011. Schools receive funding for each disadvantaged pupil and can use the funding flexibly, in the best interests of eligible pupils (primarily those from poor backgrounds and pupils in social care). This study, commissioned by the Department for Education, aimed to investigate the contributions of different factors and influences on disadvantaged pupils' attainment at the school level. The study used school-level performance data to construct statistical models. A survey was conducted of 759 primary and 570 secondary schools in England. The sample comprised schools where disadvantaged pupils had attained higher or lower results than expected, given the characteristics of the school. Telephone interviews were conducted with senior leaders in 49 schools (primary, secondary and special). The statistical models accounted for between 30.5 and 62.3 per cent of the variance between schools in disadvantaged pupils' performance. Some of the strongest relationships were with geographical area, rurality, prior attainment, pupil absence, proportion of disadvantaged pupils, and size of the year group. There were few statistically significant results in relation to differences in the strategies adopted by more and less successful schools, although there was a positive correlation with outcomes for schools using metacognitive and peer learning strategies.

The interviews found that leaders in more successful schools saw raising the attainment of disadvantaged pupils as part of their commitment to help all pupils achieve their full potential. They prioritised quality teaching for all, seeing attendance, behaviour and emotional support as important but not sufficient for academic success. They identified each pupil's learning needs, tailored their programmes and used data effectively. There was evidence of an 'improvement journey' with more successful schools having implemented their strategies earlier, whereas less successful schools were at an earlier stage of development.

Conclusion: School characteristics have a clear relationship with success for disadvantaged pupils in England, but schools have a meaningful scope to make a difference. Overall, this research suggests that there is no 'one size fits all' solution to improving disadvantaged pupils' attainment. Instead, a number of measures are required, tailored to each school's circumstances and stage on the improvement journey. These measures include: setting a culture of high expectations for all pupils, selecting a range of evidence-based strategies tailored to meet the needs of individual schools and pupils, and implementing them well.

## **PAPER 2 ABSTRACT**

The Principal's Role in Building Capacity to Localize Social Justice Policy in a U.S. Urban High School, Peter Demerat, Douglas Revsbeck and Karen Seashore Louis

This paper examines school leaders' key role of building capacity within their school in order to implement external social justice-related policy directives in ways that are consistent with school mission, vision, and culture. The paper locates U.S. principals at the nexus of numerous tensions between national, state, and district policy pressures - especially those related to addressing predictable achievement gaps based on race). Hence, as in our 2015 ICSEI presentation, much of our framing relates to how principals function very much as street corner bureaucrats, who interpret policy on the ground, through their everyday practices, in order to meet the needs of various stakeholders. The view is appropriate given recent research on the realities of policy implementation, adaptation and localization.

Our arguments here are supported by ethnographic case study data collected from 2011-2015 in Jefferson High School (JHS), an urban public school (where the second author serves as the sitting principal) in River City, a large metropolitan area in the Midwestern U.S. As in many U.S. cities, nearly a quarter of the children in River City live in poverty. JHS itself has an enrollment of approximately 2,000 with 85% of students on free and reduced lunch. Because of its history of success in instructional improvement, getting students on college-going pathways, and securing scholarship money for them, in 2015 JHS was identified as a "Beating the odds" school by the River City Superintendent of Schools. In the fall of 2013, two months after the school year had started, the district mounted a new initiative to close achievement gaps which called for the immediate full inclusion (integration into regular classrooms) of certain categories of special education and English Language Learner students who had previously resided in self-contained classrooms.

Our data suggest that the principal's success in mediating this policy hinged on the capacity he had built within the school over the previous several years to align other external directives and programs with existing priorities. This capacity building involved: 1) developing and sustaining instructionally focused networks among teachers that made instruction a collective rather than a private responsibility; 2) developing and sustaining engaged leadership capacities beyond the cadre of formally appointed leaders; and 3) articulating and preserving core school cultural values which guided all of this work (e.g. shared beliefs in student capabilities). This capacity, then, ultimately affected the ways in which external policy affected classroom practices and student learning. We note that nearly all of this work involved mediating between district directives and what the principal referred to as the "relationship world" of the school. In this way, the capacity-building efforts we examine illustrate the connections among teachers, schools and systems that is the focus of the ICSEI 2016 theme. Overall, the paper sheds light on in-school dynamics and leadership competencies required to develop and sustain improvementoriented school culture.

## **PAPER 3 ABSTRACT**

Making sense of school leadership in intercultural schools, Christina Hajisoteriou and Panayiotis Angelides

School leaders should optimize the uses of school units to meet the challenge of intercultural education. School transformation should respond to the creation of inclusive school cultures. Thus school leaders should create a secure, collaborating, stimulating community, in which everyone is valued as the foundation for the highest achievements of all students. The creation of inclusive school cultures implies the development of inclusive values shared by teaching staff, students and parents. Research on school leadership for intercultural education in Cyprus has been scarce. What little research has been done has revealed the barriers to the development of school leadership for intercultural education that mainly derive from the content and structure of the Greek-Cypriot educational system. Because of the centralization of Greek-Cypriot education, the absence of a coherent intercultural policy developed by the Ministry of Education and Culture has undermined the development of coherent school policies by school leaders and their implementation by teachers.

In this context, this study aims to investigate the organisational principles that guide the development of intercultural policies at the level of primary schools. It explores the values, goals and operational strategies that guided the development of intercultural school policies in 20 primary schools in Cyprus, which presented high enrolment rates of immigrant students. Our research focus raises a number of related questions, such as: (a) How do school leaders define the values and goals underlying their intercultural school policies?, and (b) What operational strategies do school leaders develop in their schools with regards to intercultural education?

## **PAPER 4 ABSTRACT**

Respect, Trust, Caring and Organizational Learning in Schools: The Principal's Role, Karen Seashore Louis, Joseph Murphy, Mark Smylie

This paper investigates the relationship between principals' trust in the professional competence of teachers, teachers perceptions of principal caring for their professional situation and work, and organizational learning, which we define as searching for, assessing, and using new information. The paper is based on teacher and principal surveys in the U.S. and investigates four questions: 1) Is principal's trust in teachers' professional capacities related to knowledge sharing/ organizational learning among teachers? 2) Is principal's trust in teachers' professional capacities related to teachers' reports of being in a caring relationship with their principal?; (3) is principal caring related to knowledge sharing/ organizational learning among teachers?; and (4) Is principal caring particularly important in school contexts with minority or low income students?

The analysis is grounded on three integrated and overlapping bodies of theoretical and empirical scholarship. First, we rely on the work of scholars who explore caring as a general ethic of individuals and communities (e.g., Noddings, 1992). From these scholars, we learn that caring is about the "twin concerns of empowerment and transformation" (Foster, 1986, p. 188; Author, in press). Second, respect for the professionalism of others and caring for others' needs are related features of a school's culture that determine the way in which teachers work with their school leaders and with each other (Bryk & Schneider, 2004; Goddard, Tschannen-Moran, & Hoy, 2001). Our approach assumes that principal trust in teachers' professional competence is a precondition for promoting an 'ethic of care' that may be critical to creating a school

environment that is safe for risk-taking and experimentation, which is, in turn, assumed to undergird successful efforts to change practices (McLain & Hackman, 1999). Third, we focus on organizational learning because respectful, trusting and caring schools are likely to be more committed to continuous improvement (Brown, 2004). We define organizational learning as the presence of organizational *processes* that include the presence of habituated *searching* for new information, *processing* and *evaluating* information with others, *incorporating* and *using* new ideas, and of *generating ideas* within the organization as well as importing them from outside (Brown and Duquid, 1991; Schechter, 2008).

Findings, which are based on regressions and path models using optimized scales, indicate that principal respect for teachers and teachers perceptions of principal caring are associated with organizational learning, which is a condition for sustained improvement. Having a school population that includes a larger number of disadvantaged students does not change this relationship, but larger schools appear to be slightly advantaged. The findings reaffirm the importance of understanding the emotional and interpersonal dynamics of leadership in creating more authentically improving school settings. In an era of increasing characterized as an "audit society," principal's willingness to actively counteract the dominant narrative through caring may be particularly important (Groundwater-Smith & Sachs, 2002). In particular, it draws attention to the role of the principal caring in creating a strong ethical climate that promotes learning and innovation (Dempster, Freakley & Parry, 2001). Implications for leadership development are discussed.

# **PC Symposium**

Title: Achieving excellence in Ontario: Cultivating engagement, equity

and well-being through district collaboration

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3316

Session: Parallel Session 2

Session Date and Time: 7 January 2016 11.00-12.30

Location: Orkney

Author/Speaker: Shanee Wangia

Company/Organisation: Boston College

Presenting Author: Shanee Wangia

## PAPER 1 ABSTRACT

Achieving Excellence in Ontario: Cultivating engagement, equity and well-being through district collaboration, Shanee Wangia

Ontario is a province that has attained worldwide notoriety for its high levels of student achievement and narrowing performance gap between various student subgroups (Ontario Ministry of Education, 2014). Seeking to enhance and sustain its success, the Ontario Ministry of Education (2014) conceived and shared *Achieving Excellence* with the goals of achieving excellence by improving student engagement, ensuring equity, promoting well-being, and enhancing public confidence. Cultivating engagement, equity and well-being in educational systems has been correlated with greater motivation and learning across all stakeholders—including school systems themselves (Furrer & Skinner 2003; Klem & Connell 2004; Ontario Ministry of Education, 2008). This symposium will highlight Ontario's *Achieving Excellence* initiative as operationalized by a collaborative network in Ontario composed of the council of Ontario Directors of Education (CODE),

10 member districts of the CODE Consortium, and the Ontario Ministry of Education. It will offer a ministerial overview of Achieving Excellence as well as an analysis of the abovementioned collaborative network's effort to achieve and sustain excellence through engagement, equity, and well-being. This partnership among key stakeholders across districts to achieve provincial objectives presents an alternative innovative approach to system-wide improvement with the potential of strengthening or reforming traditional governance structures and serving as a model for other educational systems. It thus fits within the Partnership and Collaboration: Schools, Agencies, Government, and Research strand. Amid the worldwide press for test-based achievement, Ontario's educational systems has attained international recognition for its holistic assessments of students, recognizing that the sustainability of its schools necessitates such a focus. The research presented in this symposium contributes to this alternative perspective of educational change through a focus on broader educational themes: engagement, equity, and well-being. The goal of the symposium is to acquire greater insight into the potential of collaborative networks to achieve provincial goals and to better equip educators to meet the needs of every student.

## **PAPER 2 ABSTRACT**

Achieving Excellence - A Renewed Vision for Education in Ontario: Transforming culture to support student achievement and well-being, John Malloy

Dr. John Malloy will set the context for Ontario's renewed vision for education- Achieving Excellence. He will address the highlights of Ontario's journey from 2003-2015 and outline the role of strong leadership at all levels of the system as a vehicle to broaden and deepen the expectations both for the system and for the potential of our students and children going forward. His presentation will draw on a significant body of research in the field that has driven the transformation of education in Ontario from a culture of external accountability to a self-sustaining system driven by a growing culture of collaboration, participation and shared responsibility in learning, teaching, and leading in pursuit of excellence in public education. In this context the renewed vision for leadership - Leadership for Learning is positioned as a key lever to mobilize this change. Ontario's current context of public education has been a twelve year journey marked by various shifts including: shift to improve literacy; shift from professional development to professional learning; shift from external to internal ownership of learning; shift to school districts' innovating and adapting models of professional learning to respond to local contexts; and a shift to Achieving Excellence through Leadership for Learning. The key messages of a renewed vision for leadership through Leadership for Learning are:

- Shared leadership
- Prioritizes the importance of reflection individually/collectively
- Leverages the expertise of experiences of all
- Invites contribution from all voices
- Focuses professional learning through the integration of human, social and decisional capital
- Enhances collective growth mindsets
- Influences, motivates and inspires
- Recognizes and utilizes promising, evidence-based practices that foster effective leadership
- Shifts leadership practices and relationships reciprocal, agile, adaptive leadership; Provincial, Board, School, Classroom relationships
- Builds renewed coherence around the four drivers focusing direction, cultivating collaborative cultures, deepening learning, and securing accountability

Dr. Malloy will speak about the Leadership for Learning journey that is currently underway in Ontario. He will provide early findings as to how Leadership for Learning is building on the achievements of the past decade and signaling the shift in broadening and deepening the role of leaders in the following ways:

- Addressing the collective work in two broad areas: Creating a Culture of Professionalism; and Building Professional Capital
- 2. Signaling a shift in the practice of leadership in support of mobilizing the goals of Achieving Excellence
- 3. Calling upon leaders at all levels of the public education system to reflect on their leadership journey as they make contextually relevant and cohesive decision based on research and evidence of impact.

As the culture for all in the public education system shifts to a culture of Leadership for Learning, this in turn will foster innovation in providing Ontario's students with a great public education system for which they so much deserve.

### PAPER 3 ABSTRACT

Achieving Excellence through Collaborative Inquiry, Michael O'Keefe

Michael O'Keefe and school district representatives from the Council of Directors of Education (CODE) Consortium for System Leadership and Innovation will present findings on a new school improvement project in Ontario, Canada titled, "Leading from the Middle" (LfM). The presenters will describe how the project participants use a process called collaborative inquiry to further the plans of action outlined in Achieving Excellence: A Renewed Vision for Education in Ontario (2014). Current research being conducted by Hargreaves and Shirley in collaboration with member districts of the CODE Consortium and the Ontario Ministry of Education combine two research approaches, appreciative inquiry and critical friends, to achieve the goals of the project. LfM, a theory of action that Hargreaves & Shirley (2012) derived from their analysis of Ontario's previously successful "Essential for Some, Good for All" system-wide change initiative, will serve as the theoretical frame for this presentation. LfM is about driving change and developing coherence and cohesion through middle-tier leadership both within and across districts.

This new theory of educational change builds upon recent theorizing about networks and cross-district collaboration (Ainscow, 2015; Fullan & Boyle, 2014; Hargreaves & Fullan, 2013; Hargreaves & Shirley, 2012; Johnson et al., 2015). Investigative protocols will be used to elicit relevant information on the design architecture of the improvement initiative, as well as obtaining evidence and perceptions regarding both implementation and impact of LfM. A self-review instrument will also be used with a sample of teachers and administrators in order to gather a broader data base on the project, encompassing its perceived impact and the corresponding causal mechanisms, as well as its strengths and limitations. Finally, it is anticipated that the CODE Consortium LfM Research Project will provide ongoing opportunities for member boards to investigate, align and use critical collaborative inquiry to further the plans of action outlined in Achieving Excellence: A Renewed Vision for Education in Ontario (2014). This will be particularly valuable in the advancement of both pedagogy and assessment in areas beyond traditional academic achievement such as student and teacher engagement, innovation, creativity, health and wellbeing.

## **PAPER 4 ABSTRACT**

Achieving Excellence: The intersection of identity development, engagement, and well-being among self-identifying LGBTQ, aboriginal, and students of color in Ontario, Canada, Mark D'Angelo and Shanee Wangia

Mark D'Angelo and Shaneé Wangia will focus on the intersection of identity development, engagement, and well-being in students with specific marginalized identity vectors (LGBTQ, aboriginal, and students of color) in Ontario school districts that are participants in a collaborative network and school improvement project. This presentation will highlight the project's holistic focus on well-being and identity development and will investigate the outcomes and experience of students marginalized due to race, sexual or gender identity, and indigeneity. This presentation will utilize the theory of action, "Leading from the middle" (Hargreaves & Shirley, 2012), as described in abstract 3, as a theoretical frame. Furthermore, it will draw on the work of Kevin Kumashiro (2000) which examines four distinct pedagogical approaches to better serve marginalized ("othered") students: "Education for the other," "Education about the other," "Education that is critical of privileging and othering," and "Education that changes students and society."

Positive identity development and promoting engagement, even in a successful province like Ontario, is a challenge given the range of diversity within and across districts. Diversity is considered one of the province's greatest assets and while the Ontario Ministry of Education has successfully narrowed the achievement gap among some groups, these aforementioned target populations remain critical foci for the ministry (Ontario Ministry of Education, 2014). Though the use of collaborative networks across school districts to achieve excellence in all localities has gained momentum in recent years, research and literature on this new phenomenon is scarce (Ainscow, 2015; Fullan & Boyle, 2014; Hargreaves & Shirley, 2012). In a global society in which schools and school districts have traditionally operated as silos, districts working together could potentially achieve the very goals that have been elusive, particularly ones that extend beyond learning and achievement for students marginalized along vectors of race, indigeneity, and sexual and gender identity. This study will add to existing literature by presenting new findings on cross-district collaboration related to broad educational goals that include issues of equity, engagement and wellbeing. The findings will point to practices and supports that enhance or encumber districts' collective capacity to secure these goals.

## **PC Symposium**

Title: Empirical insights and critical reflections on local

education governance - an international perspective

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3349

Session: Parallel Session 2

7 January 2016 11.00-12.30 Session Date and Time:

Location: Science Centre Tower Base North 1

Author/Speaker: Stefanie Schmachtel

Company/Organisation: Friedrich-Schiller-University Jena

Presenting Author: Stefanie Schmachtel

## Overview of symposium

This symposium aims to take stock on recent developments in local educational governance with an international perspective. Over more than a decade, local-level governance measures have increasingly shaped the educational governance in many European and Western countries, be it through the introduction of local partnership working or an increased autonomy of single schools. Their growing political importance is informed by a governmental shift of devolving administrative responsibilities from the national onto the local level in the context of New Public Management (NPM) and the increasing acknowledgement of the 'local' as a key level for co-produced policy-making and implementation. This has led to new administrative tasks, responsibilities and challenges for local leaders both in administration and in organisations. Yet, existing research has predominantly examined the local practices (much in line with the NPM paradigm) in the light of their effectiveness and efficiency, e.g. through examining how local partnerships could be improved and what issues need to be addressed to make it work. Studies that break with this managerial perspective and shed light on the darker side of local governance practices to address underlying questions of power, discourse and micro-politics in a wider socio-political context have been rare. However, much speaks for a socio-critical, transdisciplinary perspective. Why, for example, is the use of local partnerships still very popular amongst politicians and practitioners although we by now have broad evidence that its efficiency and effectiveness is rather limited (e.g. Sinclair, 2008, Power et al. 2004)? What governmentalities inform these local-governance measures? What contradictions do they pose on the involved actors and how do the actors individually and collectively deal with them? What outcomes are thereby (re)produced in the light of broader societal aims such as addressing social inequality? And last, how can we turn such critical insights into constructive impulses for policy and practice? Contributing to the third conference strand, the symposium discusses these questions by means of four cases from the UK and Germany that examine locally situated practices of enacting local education governance measures in a wider multi-level and socio-political context. In doing so, the symposium aims to generate a broader and more critical understanding of where we currently stand regarding past and current developments in local educational governance to ask what implications can be drawn from it. The international perspective of the symposium might thereby be helpful in revealing the wider governmentalities through making the national educational governance contexts and commonalities and differences between them more visible. Drawing on the analyses, the symposium also asks about the implications of such a socio-critical perspective on the choice of theory and methodology when examining local education governance.

### PAPER 1 ABSTRACT

What works Scotland: Early reflections on public service reform in Scotland, Hayley Benet, Mark Hadfield and Christopher Chapman

What Works Scotland is a three-year ESRC/Scottish Government funded study investigating public service reform in Scotland. The Universities of Glasgow and Edinburgh are leading a programme of research to explore how local areas in Scotland use evidence to make decisions about public service development and reform. The research focuses on Community Planning Partnerships involved in the design and delivery of public services to:

- learn what is and what isn't working in their local area
- encourage collaborative learning with a range of local authority, business, public sector and community partners
- better understand what effective policy interventions and effective services look like
- promote the use of evidence in planning and service delivery
- help organisations get the skills and knowledge they need to use and interpret evidence
- create case studies for wider sharing and sustainability

This paper focuses on one of the four Community Planning Partnership areas within the study to reflect on some of the early lessons from initiating a collaborative action research process across two multi-agency projects. The first project, the 'Family hub', aims promote joint-working and bringing together early years workers. This project is closely aligned to Fife Council's recent investment in a transformational change programme focusing on early intervention and prevention, described as the Family Nurture approach. This programme focuses on improvement in how services are planned, developed and delivered applying an asset-based and multi-agency approach, its core being community engagement and empowerment. The second project adopts an early intervention approach to address issues of low educational attainment, poverty, and deprivation. The aim of this project is to intervene and support young people who are in danger of disengaging with education. In 2014 the CPP partners collectively agreed to support 5 intervention programmes targeting different age ranges:

- P6/7 Transition in five primary schools
- S1/S2 Support in three secondary schools
- S3 Support to increase young people's skills, confidence and abilities, using a range of interventions from one to one, groupwork, work experience, flexible schooling opportunities. This to be offered 2 fixed days per week in a community setting (Kirkaldy YMCA)
- S4 Support for young people to maintain their education when they are dealing with issues such as homelessness, lack of family support, confidence etc.

The YMCA manage this project in collaboration with education workers and Fife council community development employees. Key questions for the two projects include:

- How are individuals across different professional, organisational and service user groups brought together?
- How is engagement with parents and communities in the development of 'hubs' and joint-working initiatives initiated and sustained?
- How do current governance arrangements facilitate and/or inhibit effective collaboration and partnership working within these settings?

This paper will offer early insights into the three questions and explore the issues, tensions and dilemmas associeted with initiating a participatory research approach across professional and organisational boundaries, setting out a number of further questions for advance research in these settings.

#### PAPER 2 ABSTRACT

School Business Managers in the English school context: Professional identity and territory negotiation, Paul Armstrong

In England, schools are large and complex organisations with sizable budgets often operating in collaboration with other schools and agencies. Furthermore, recent structural reforms and the decline of the Local Authority, often referred to as the 'middle tier of government', are symptomatic of a shift towards what has been termed a 'school-led system' (Hargreaves, 2010). Consequently, business acumen is now an essential component the school principal's armory. Against this backdrop, the role of the School Business Manager (SBM) has evolved as a key position in schools as they adapt to a fast moving landscape necessitating business and organizational management capacity at leadership level (Woods, 2014). The individuals occupying these roles are situated in a unique position: though generally classed as support staff, SBMs are often members of the leadership team with considerable influence and decision-making responsibility over financial and organizational matters, occupying multiple group memberships (Armstrong, 2014).

This paper reports on early findings from a study that employed a multiple case study-design to explore the experiences of SBMs as a group of 'outsiders', negotiating their own professional territory within a landscape traditionally led and managed by trained educationalists. Adopting a social identity-perspective (Hogg and Abrahams, 1988) with a specific focus on in-group/out-group identities, key areas of interest are notions of self-perception (how the SBMs see themselves as professionals), inter-group relations (how the SBMs see themselves in relation to the other groups alongside which they work) and the implications of these concepts within the wider contexts of both the burgeoning profession of school business management and a turbulent educational policy landscape. This is important because of the exponential growth of the SBM role and its potency as a symbol and symptom of the increasing influence of business practices within education. Also, the relatively recent introduction of this new 'professional manager' role into schools affords the opportunity to explore the experience and influence of these individuals who are positioned at the forefront of the New Public Management in education in which effectiveness and efficiency are prioritized (Hood, 1998). Comprising 10 case studies, the research was undertaken from an interpretivist perspective (Husserl, 1965) to facilitate a meaningful understanding of the ways in which the SBMs view themselves and are viewed by their colleagues. SBMs and schools were selected across a range of socio-economic, geographical and structural contexts and also across different phases of education to capture the wide variations in the SBM role. School business management remains an under-researched area of the field with SBMs, in comparison to educational leaders, having received very little scholarly attention to date. This paper will provide a new empirical and conceptual contribution by addressing this gap in the literature. In particular it will support the generation of knowledge relating to the social identity formation of SBMs and the influence of this emerging profession on the broader field of educational management and governance.

## **PAPER 3 ABSTRACT**

Implementing the German 'educational landscapes' concept under conditions of interurban competition, Anika Duveneck

The paper discusses empirical findings from a case study that examined the local partnership process in an "educational landscapes" project. 'Educational landscapes' is an influential concept in current German educational politics that aims at improving educational provision through developing integrated services between schools and non-school organizations in the community. Its organizational form – a participatory way of governing education through local partnership working - is based on an extended notion of education which aims to interlink formal, informal and non-formal ways of learning, and thereby connecting in Germany still loosely coupled policy fields: education policy (up to now restricted to formal education), non-formal education in childcare and youth work (social policy) as well as cultural education, sports etc (other public policy).

This case study investigated the role of this wide notion of education in the practical implementation process of 'educational landscapes' and explained its findings against the background of the "competition state" (Hirsch 1996; Jessop 1999), a concept from regulation theory stating that in recent western societies, all fields and levels of politics are oriented towards competiveness. Following a materialist approach, the study focused on the project "Campus Rütli", an 'educational landscape' project in a deprived neighbourhood in Berlin. Based on 15 semi-structured interviews with key project actors on both the administrative and practitioner level, the analysis identified how the wide notion of education is being put into practice in this project. On this basis, it theoretically reconstructed how the observed gap between policy concept and practice could be traced back to a politics under conditions of interurban competition on a local level (Harvey 1989; Peck 2014).

The study shows that, despite being constitutive for the implementation of this educational partnership, the concept's promises were not realized in practice: the potentials of non-formal education, resulting from its former independence from formal educational politics, caused high expectations towards creating a less selective and more needs-oriented education beyond school and therefore activate the practitioners to realize the project. However, in practice, their resources become one-sidedly used for a cost-neutral "bottom-up" modernization of the school. From the perspective of regulation theory, this contradictory relation between policy concept and practice could be traced back to conditions of the competition state. The competition-generating conditions guided the involved public administrators despite their intention in improving the local educational provision in the young peoples' interest to take an instrumental interest in education, adhering to the necessity of being competitive in the context of a knowledge-based society. This implied the subordination of the potential of nonformal education to the production of human capital and employability (Duveneck 2014; Duveneck forthcoming). Drawing on these findings, the paper sketches out issues, strategies and instruments for local actors involved in 'educational landscapes' projects to enable them to unfold the non-formal education's potential for a less selective and more needoriented implementation of 'educational landscapes' under the current conditions of competition.

### **PAPER 4 ABSTRACT**

Local partnerships as 'rationalized myths': findings from an ethnographic study of a German education partnership, Stefanie Schmachtel

This paper presents findings from a longitudinal ethnographic study that examined an education partnership process on the neighbourhood level in a deprived German urban area (Schmachtel 2015, Schmachtel-Maxfield 2013). Using a micro-discursive systemic lens, it investigated how and with what outcome the local organisational leaders built a strategy to improve the educational situation in their neighbourhood. It asked what challenges the actors faced, how they dealt with them and how the situated decision-making process was shaped by the local partnership discourse. Against this background, the paper would like to pose the provoking question of whether local education partnerships help reproduce social inequality rather than addressing it. The examined planning partnership on the neighbourhood level (PPN) was part of an educational partnership in the context of a wider urban renewal programme. The analysis drew on audio-recordings and participant observation of the PPN meetings over a period of almost three years, linking it with document analyses and longitudinal interview data. The analytical framework combined the concept of 'rationalized myths' (Meyer & Rowan 1977) with a critical cultural-historical lens (Nissen 2012) that focused on the situated micro-political processes of negotiating a common sense to achieve decision-making.

The findings showed that the accomplished strategy failed in its ambition to create integrated services in the community: additive community projects were established that left the core businesses of the involved organisations untouched while predominantly favouring the stakes of the schools and marginalising the topics, interests and problem-knowledge of smaller youth welfare organisations. Simultaneously, important and contentious issues that initially evoked big conflicts among the organisations were hierarchically dealt with outside of the partnership's realm. Consequently, the existing structures, power relations and conflict lines got reproduced and structural innovation to address social inequalities in the community was not achieved. The local partnership discourse played a key role in shaping the micro-political dynamic and decisionmaking in the PPN. On the one hand, it constituted and legitimised the partnership's set-up - yet, under conditions that were contradictory and complex through a counter-productive structural reality in the 'shadow' of the project. On the other hand, it offered the PPN members the discursive resources for dealing with this reality: its managerial rationality helped veiling the systemic contradictions through individualising the community conflicts, whilst the discourse was used to exert moral pressure to comply dissidents into 'consensus'. The findings suggest that the 'local partnership myth' is prone to conceal a hegemonically achieved hierarchical policy-making while co-opting local actors into prefigured strategies. Local partnerships mark new governance arenas that evoke a specific 'strategic selectivity and capacity' (Jessop 2004) which consolidates existing power relations in the context of a neoliberal metagovernance. They draw attention away from the root causes of social inequalities and place partnership managers and other involved actors in a 'hamster in a wheel'-position without the means to address the issues that needed to be addressed.

## PC Roundtable

Title: Closing the gap and reducing overlap in child and youth mental health services:

A collaboration between school boards and community agencies

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3084

Parallel Session 2 Session:

Session Date and Time: Thursday 7 January 11.00-12.30

Location: Science Centre Tower Base North 2

Author/Speaker: Arveh Gitterman

Company/Organisation: Ryerson University/Ontario Ministry of Children and Youth Services

Co-Authors: Kathryn Short

Presenting Author: Aryeh Gitterman

Presentation Format: Round Table Discussion

## Abstract

Approximately 1 in 5 children experience a mental health issue. In Ontario, a province with two million students, 72 school boards and over 400 community-based mental health agencies spread across 415,600 square miles, it can be difficult to facilitate consistent, high quality educational programming and responsive mental health services. Child and youth mental health service delivery is complex and cuts across a number of different service sectors and professionals, including teachers. As a result, collaborations must be forged between various groups in order to provide a clear and focused vision for mental health services. In 2011, the Government of Ontario launched Open Minds, Healthy Minds a comprehensive, cross-governmental mental health and addictions strategy aimed at removing existing barriers and improving access to services. The first three years of the strategy focused on ways to coordinate services between providers, students/clients and communities in order to reduce overlap and gaps in service, to ease client confusion and frustration, and to maximize resources. Building on the over \$90M(CDN) investment in front-line services between 2011 and 2014, the Ministry of Children and Youth Services (MCYS) created the Moving on Mental Health (MOMH) plan to transform the communitybased child and youth mental health system. The plan defined seven core services to provide all children and youth in Ontario, regardless of where they live, with mental health services in their community. This has been done through the establishment of thirty-three lead agencies that are responsible for planning and delivery, in cooperation with schools, primary care, hospitals. While MOMH was created at MCYS, a complimentary program, School Mental Health ASSIST (Awareness, Strategy Selection, and Implementation Support Team) was created at the Ministry of Education that focused on addressing gaps in programming, as well as implementing mental health promotion and prevention within all 72 school boards across the province. Through ASSIST, school boards are provided with resources and with implementation support through provincial and regional meetings, as well as individual school board coaching. As a result, students learn in an environment that underscores the importance of mental health, and are able to access services as needed. While this initiative was designed by two ministries, each will succeed because of the other. Within a continuum of services, school boards contribute to enhanced promotion and prevention, while lead agencies focus on providing core intervention services. Together they create a comprehensive program that provides all children and youth with access to the mental health services they need. In addition, the creation of a baseline Scorecard has permitted all groups involved in the project the opportunity to understand the service and data gaps that persist as programing is rolled-out across the province. This round table will explore the successes and challenges of multi-level and multi-stakeholder project development and implementation with a particular emphasis on future considerations to ensure the project's continued development and success.

## PC Paper session

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.30-12.30

Location: Science Centre Clyde 1

Chair: Beth Dickson

#### PAPER 1 ABSTRACT

Local Authorities as agents of collaborative change and transition within a national school improvement programme, Kevin Lowden

This paper considers findings emerging from research on a national education change programme, the School Improvement Partnerships Programme (SIPP). This was implemented in 2013 by Education Scotland, working with local authorities and university researchers, to broker and facilitate collaborative partnerships within and across schools and local authorities to address Scotland's attainment issues and tackle educational inequality. The SIPP emphasises collaboration, underpinned by systematic practitioner enquiry and the use of evidence to drive innovation. The collaborative improvement strategies that underpin the SIPP build on a body of international research that confirms the value of school-to-school networking and cross-authority partnership work as key levers of innovation and system improvement (e.g.: Ainscow et al 2012, Chapman 20008, Hadfield and Chapman, 2009; Fullan 2013).

The paper explores issues for conceptualising the role of local authorities/ school districts as corporate actors driving educational improvement and transition regarding new practices, structures and culture to tackle educational inequality. The paper draws on theory and concepts of infrastructure (Spillane, J. P., Hopkins, M., & Sweet, T. 2015), distributed leadership, social interaction and knowledge transfer as drivers of change (e.g. Blau, 1957; Bryk & Schneider, 2002; Choo, 1998; Coburn, 2001; Daly & Finnigan, 2010; Elmore, 1996; Eraut & Hirsh, 2007; Frank, Zhao, & Borman, 2004; Hill, 2004; Little, 2002; Smylie, 1995; Spillane, 2004, Spillane et al 2011). The research adopted a number of interlinked quantitative and qualitative methods including: longitudinal surveys; interviews, focus groups, researcher observation; national and local workshops/events and secondary analysis of partnerships' own data and research on progress and impact. The research has found that progress has been most apparent in those partnerships that established truly collaborative networks. These have supported professional dialogue and informed teachers' learning and teaching approaches to address inequality, as well as facilitating their ability to apply research to assess their progress and inform further developments. The findings indicate that the SIPP has most traction where the partnerships' local authorities have:

- Provided early identification and mobilisation of individuals at different levels who are well placed to lead and manage educational change and improvement through partnerships/ collaboration in schools and local authorities
- Facilitated practitioners and managers to transform and extend their professional roles and identities in ways that promote collaborative enquiry to drive innovation and sustained improvement
- Facilitated and sanctioned practitioners' time and resources for use in collaborative enquiry
- Supported communication and brokering of knowledge exchange across partners and within, between and beyond institutions.
- Encouraged school managers to embed in longer-term planning those lessons learned regarding what works to promote effective change.

#### PAPER 2 ABSTRACT

Partnership Development for Effective Teacher Programs: Emergent Lessons Learned from the Application of Design Theory, Jacob Easley

The purpose of this paper is to explore the processes and features of one P-16 partnership developed to improve the clinical experience of teacher preparation. The development of partnerships reflects a commitment among institutions to collaborate in a purposeful manner with a keen awareness that each partner must seek to better understand and respect the culture of the other's institution, maintain a level of flexibility, and establish common goals for outcomes. Using the outlined purpose above, the development of this partnership observed a particular design theory. Partnership members within this study provided their assessment of the benefit(s) of the partnership program on their professional development. With these ideals in mind, this study was designed to investigate the critical conditions of a newly developed schooluniversity partnership that fosters professional development among its members. In turn, the relationships between member development and program quality are explored. Findings regarding the effectiveness of design theory and implementation are presented. Implications for partnership sustainability are offered as a result. The critique of teacher preparation programs is not a new phenomenon; yet, the intensity has increased in recent years (Zeichner, 2010). Within the profession of teacher education it is widely agreed that student teaching (i.e., the clinical experience) is a critical, if not the most important, aspect of pre-service teacher preparation (Purpel, 1967; Cochran-Smith, 1991; Musset, 2010).

A scan of student teaching coursework across the nation reveals several commonalities with regard to design, duration, and practice: (1) Student teaching typically occurs as a culminating experience at the end of a program, during the last 12-15 week semester (Ronfeldt & Reininger, 2012); (2) Most states within the U.S. (i.e., 39) have set, by regulation, a minimum length of 10 weeks for student teaching, a length largely recognized as the standard bearer within the field (Greenberg, Pomerance, & Walsh, 2011); and, (3) Despite the agreed upon importance of the role of cooperating teachers (mentors), they typically do not receive training to serve in said capacity (Gareis & Grant, 2014). This omission is not limited to the United States, but is found to be the norm in other countries as well (Clarke, Triggs, & Nelson, 2012; Mitchell, Clarke, & Nuttall, 2007). We refer to programs sharing several, if not all, of these traits as traditional clinical experiences within the U.S. context. Western University (pseudonym) sought to align its program with nationally recognized principles for effective clinical experiences. This prompted the formation of a formal partnership with a local school district to both create a professional learning community among university and P-12 faculty and to pilot a new student teaching clinical experience. As is demonstrated by the findings of this study, purposefully designed collaboration fosters the potential for professional learning among partnership members. Nevertheless, the work of partnership development within the "third space" is not without its challenges. For one, relationship development requires time. Respect among members and a meaningful design that is mutual constructed reflect other needed ingredients and challenges. All-in-all, partnership development is an iterative process.

## PAPER 3 ABSTRACT

Exploring significant change - the impact of clinical programs on teacher professional learning, Beth Dickson and Larissa McLean Davies

Clinical approaches to the preparation of pre-service teachers have gained international prominence since the turn of the 21st century. Responding to evidence that teacher quality has the greatest in-school impact on student learning, and the consequent need for reform in the preparation of pre-service teachers, The Teachers for a New Era report from the Carnegie Corporation of New York (2001) proposed that optimum initial teacher preparation should be regarded as grounded in terms of clinical practice. This adaptation of medical discourse for the preparation of teachers has presented a new paradigm for teacher preparation and professional learning – a key tenet of this approach is the 'translation' and application of theory and research in the sites of practice (Burn and Mutton, 2013). While there is increasing research on the impact of these programs on pre-service teachers' development (eg Conroy et al 2013; Menter et al 2012; McLean Davies et al 2013; McLean Davies et al 2015), there has been far less work done on the impact of these programs on the school partners, and in particular on the professional learning of teachers located at these clinical sites. In light of this gap in the research, this paper will explore the impact/s of two clinical pre-service teacher preparation programs—The Master of Teaching at the University of Melbourne and the Partnership Model at the University of Glasgow-on Principals and teachers located in the programs' partnerhship schools. Drawing on individual and focus group interview data, and utilising the 'most significant change' technique, (Davies and Dart 2005) this paper will offer initial insights into the affordances of pre-service clinical programs for in-service teachers' professional learning and school cultural change.

### **PAPER 4 ABSTRACT**

Examining tensions and ambiguities in a policy desire for enquiring professionals and partnership working, Valerie Drew

The current policy desire for enquiring professionals and partnership working in education is part of a drive to improve teacher quality through career-long professional learning in Scotland and elsewhere. This paper considers the nature of this policy desire for enquiring professionals and partnership working through some of the ambiguities and tensions between what may be considered 'symbolic' desire indicated through insufficient attention to the contextual conditions required for successful processes of implementation, or a 'material' desire as demonstrated through allocation of funding (Rizvi and Lingard 2009). This paper reports on a reciprocal partnership project between a university and a local authority, situated in a space betwixt university and schools, which took place over a three year period from 2012-2015. The project involved the development of a Masters level professional learning programme to facilitate school-based curriculum development through critical collaborative professional enquiry (CCPE). This paper draws on complexity thinking, to explore how this emergent methodology for enquiry, CCPE, is being adapted to challenge and address some of the issues identified in previous studies which trouble the implementation of professional enquiry and partnership working in practice. For example: insufficient space and time for meaningful activity, the temporal nature of the enquiry process, lack of critical engagement or external critique in the enquiry process, problems re ownership of enquiry, the reciprocity of partnership and the rationale for partnership working. The conceptual framework is drawn from theories of professional enquiry, professional learning and curriculum. Findings indicate that attending to these problematics through devising programme pedagogies to disrupt existing practices and hierarchies minimises and/or removes some of the barriers encountered by educators engaged in implementing these policy imaginings.

# **RCEL Paper session**

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 2016 11.30-12.30

Location: Science Centre Clyde 2

Chair: Jenny Reeves

## PAPER 1 ABSTRACT

School belonging, engagement and academic achievement: Validating the Anderman-Freeman Model, Jerome St-Amand, Francois Bowen, Michel Janosz

In recent years, a number of theorists have examined students' sense of belonging in school contexts, in order to better understand the ways they can be connected to academic achievement (Anderman & Freeman, 2004; Connell & et al., 1994; Roeser, Midgley, & Urdan, 1996). Anderman and Freeman (2004) have developed a theoretical model to explain these psychological processes. These researchers explain that school belonging can directly influence academic engagement. In turn academic engagement has an impact on academic achievement. In these psychological processes, positive emotions positively and partially mediate the relationship between school belonging and academic engagement. To more thoroughly investigate these psychological processes, we applied the Anderman-Freeman model to validate the following hypotheses:

- Hypothesis 1: Positive emotions positively and partially mediate the relationship between school belonging and behavioral engagement.
- Hypothesis 2: Positive emotions positively and partially mediate the relationship between school belonging and emotional engagement.
- Hypothesis 3: Positive emotions positively and partially mediate the positive relationship between school belonging and cognitive engagement.

Hypothesis 4: Emotional, cognitive and behavioral engagement positively and partially mediate the positive relationship between school belonging and academic achievement.

The sample consists of 5,000 high school students living in Québec (average age = 14.4 years, SD = 1.6 years). The data used for this study were collected as part of a research project called Stratégie d'Intervention Agir Autrement (SIAA), aiming to evaluate the impact of a Strategy on high school students' retention rates. Different scales were used to collect the data on school belonging, academic engagement (emotional, cognitive, emotional), positive emotions and school achievement. Path analysis was conducted to test the model that supports our hypotheses.

Our results support partially the first hypothesis i.e., positive emotions fully mediate the positive relationship between school belonging and behavioral engagement. Our findings do support hypotheses two, three and four. Specifically, the relationship between school belonging and emotional engagement shows a more direct than an indirect effect (hypothesis two). The study produced similar results for cognitive engagement, i.e: a direct effect (hypothesis three). Finally, the relationship between school belonging and academic achievement indicates a more indirect than direct effect (hypothesis four). Despite the fact that we cannot fully support Anderman-Freeman model, our results corroborate several elements of this model: first our results support the idea that school belonging is the basis for academic engagement and achievement; second our findings reinforce the important role of positive emotions for student engagement. Longitudinal studies are needed in order to more fully understand this complex psychological phenomena.

### **PAPER 2 ABSTRACT**

Straddling the gender-identity fence: A search for strategies to support nonconforming pre-schoolers in the classroom, Mona Jenkins

The purpose of this project is to explore the early childhood education experiences of gender nonconforming preschoolers to see how teaching and classroom management strategies support their cognitive, social, and emotional development. The role of educators is to provide a safe, healthy, and supportive environment for all children to learn, thrive, and succeed yet the needs of gender nonconforming children are often overlooked. Educators are prepared and understand the burdens that children in poverty and children with physical or learning disabilities endure while trying to learn and interact with their peers in school. However, little is known about the hardships encountered by gender nonconforming preschoolers as related to gender identity. Previous research has suggested children between the ages of 2 and 3 years old are able to identify their biological sex (Dragowski, 2011; Zucker, 1992; Kohlberg, 1966) and begin to demonstrate their gender identity through preferences and behaviors during preschool and early school years (Zucker, 1992; Bussey, 2011; Kohlberg, 1966). When these preferences and behaviors deviate from the socially accepted norms, additional strategies, services, and support may be required from the educators, school administrators, and families to assist gender nonconforming children in the classroom. Exploring these experiences can be valuable to the field of early childhood education since many traditional preschool classrooms provide a learning environment that can be stressful for gender nonconforming children. Often, they are vulnerable to isolation and can respond to unsupportive environments with symptoms of depression, fear, anxiety, anger, and low self-esteem (Mallon, 2006). A significant amount of research has been conducted to measure the cognitive, social, and emotional development of girls and boys including comparisons to evaluate any differences. However, little is known about how gender nonconforming children respond to learning and what is needed from their care providers to support their development. This is a participatory case study to explore and identify the preschool education experiences of gender nonconforming children to determine what teaching and classroom management strategies are in place to support their cognitive, social, and emotional development. Grounded theory methodologies guided the continual process of data collection and analyses. Direct observations and interviews were conducted with educators, school administrators, parents, and gender nonconforming children and employed to develop an emergent framework. Patterns of responses were coded and utilized to identify recurrent themes and key events in an effort to gain a more comprehensive understanding of the nature of the experiences of the gender nonconforming preschoolers with their care providers. Contradictory data to these patterns, feminist theory, and constructivist and pedagogical theories on teaching and learning were also considered when interpreting which processes and practices supported development and learning. The results reported in this study are based on constructive lessons and failed situations and outcomes and propose new policies and practices which can contribute to the overall development and effectiveness of learning of gender nonconforming preschoolers.

### PAPER 3 ABSTRACT

Balancing students' psychological characteristics and e-learning: a case study in a higher education institution, Eugenia Shishova and Marina Solobutina

With the shift of education to technology, academic research has revised the concepts of the development of cognitive processes, mental states and especially the development of students' personality in the course of university learning. The psychologists and teachers of Kazan Federal University had the task of giving a conceptual description of the development of human activity and mental functions under technologization in education. An empirical study of individual psychological characteristics of students using electronic educational resources EERs was conducted. The research shows that the use of multi-level EERs increases the success of students' learning activities by taking into account their individual psychological characteristics. A mandatory component within the structure EERs are complexes of auxiliary procedures based on psychological analysis and used to optimize students' learning. Multilevel EERs are constructed in such a way that students are provided with the types of educational material presentation, practical tasks and methods of control allowing them to make their own choice. The quality of cognitive sphere and self-regulation activities alter in the course of work with multilevel EERs. Implications for practice: e-learning resources should be modular, made up of individual blocks; each method of study for each particular person should be individualized, and should take into account individual predispositions to certain types of learning activity; before the start of classes, typological features of students and their psychological personality characteristics should be identified and considered in the course of learning.

#### PAPER 4 ABSTRACT

Renovating the instructional core in an information age, Tyler S. Thigpen

Whether we call it "21st-century learning," "deeper learning," "21st-century skills," "post-Gutenberg learning," or something else, the emerging trend to move beyond teaching facts and more fully integrate complex thinking and contemporary marketplace skills into classrooms is not a silver bullet to fix schools but a sea change in how and for what reasons we educate in an information age. Definitions and reasons have been at the heart of current rhetoric, research, and debate around renovating the instructional core. But how we achieve this integration at scale is less obvious. With a bias towards action and an eye on practicality, this Paper will explore how teachers and leaders can get this integrative work done now and in spite of many challenges. Based on case studies of schools with proven implementation models, this session offers suggestions at the classroom, school, district, and state/national levels so we can move from one world to another. For the purposes of the Paper, I call this work "21st-century learning" and imagine it as renovating the instructional core to include the following emphases for students:

- A continued mastery of some (but not all of the traditional) core academic content;
- Learning how to learn;
- Teamwork;
- Appreciating and navigating complexity;
- Creativity, or the construction of new knowledge;
- Deep critical thinking;
- Written and spoken communication; and
- Transfer, as the ability to translate knowledge and skills to new situations.

While different groups and individuals use nuanced definitions to approach this suite of expectations, they all seem to include the above components. The paper will highlight bright spots of implementation in the United States. Many schools are presently overcoming, and in some cases ignoring, common challenges. Some have extra help in terms of funding, political support, legal opportunities, or additional autonomy. Schools of 21st-century learning are found in all sectors (public, private, and charter), in all regions (urban, suburban, and rural), and serve a full range of students, including those who have been historically underserved such as English-language learners, special education, and low-income minority students. These schools organize themselves around one or more of the following five orientations:

- 1. A pedagogical orientation
- 2. A capstone orientation
- 3. A personalization orientation

- 4. A career-based orientation
- 5. A curricular orientation

Finally, I will offer four things school leaders and teachers can do now to create the conditions for a much fuller integration of 21st-century learning. Key takeaways, common threads, and sage advice from pioneers in this movement, coupled with promising research trends and some of my own synthesis, combine to form the basis of these recommendations. Each recommendation is feasible now and, when implemented together, has the potential to produce results that move a generation of students, parents, and teachers to transform the sector from within. In particular, I will explore how leaders and teachers might:

- 1. subtract non-essential content from teachers' teaching loads;
- 2. gradually add more nuanced, 21st century skill-based standards;
- 3. mix standards and teachers across disciplines;
- 4. modify students' and teachers' use of time; and
- 5. let student interest and mastery of standards be the drivers.

## **LDP Roundtable**

Title: Expanding the knowledge base on school and system improvement: Listening to all voices

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3137

Session: Parallel Session 2

Session Date and Time: Thursday 7 January 11.00-12.30

Location: Science Centre Auditorium

Author/Speaker: Michele Jones

Company/Organisation: Institute of Educational Leadership University of Malaya

Co-Authors: Gillian Hamilton

> Carol Campbell Lyn Sharratt Louisa Rennie Linda Kaser Irina Grunicheva Judy Halbert Karen Edge Paige Fisher Tracey Allen Alma Harris

Presenting Author: Michele Jones

Presentation Format: **Round Table Discussion** 

## **Abstract**

Around the world, women play a pivotal and powerful role as educational leaders at the school and system level. There are many female activists, theorists, policy makers, researchers and practitioners who continue to make a significant contribution to the field of educational effectiveness and improvement. But how far is this expertise, experience and evidence being effectively communicated to the international community and how far is it directly contributing to the improvement of the knowledge base? This roundtable is not about gender but rather it is an opportunity for focused debate and intellectual reflection on the contemporary lived experiences of women leaders, as policy makers, practitioners and researchers, in schools and systems around the globe. The aim is to consider how such experiences and expertise can be best harnessed, shared and systemised as part of the knowledge base on educational effectiveness and improvement. The roundtable will bring together a range of female leaders from a variety of contexts, backgrounds and countries to share their knowledge and experience. The intention is not to be exclusive but rather to invite others to share, to interrogate and to investigate points of connection and confirmation about what is actually working in very different schools and systems. The contemporary discourse on school and system reform still tends to be dominated by commercial organizations that give little room for alternative perspectives and provide limited acknowledgement of important cultural and contextual factors. This roundtable will look at the experiences of women educators and women leaders in very different contexts and will test how far the popular notions of school and system improvement really stand up to localised scrutiny and cultural examination. The roundtable will be interactive and each named contributor will briefly introduce their leadership role and highlight one reflection for consideration. Participants will be encouraged to bring their own questions and issues for discussion and debate. The main purpose of the roundtable is to start a dialogue among those who are firstly, interested in this theme and secondly, who are willing contribute to the knowledge base about educational effectiveness and improvement from their particular leadership position or cultural vantage point. Listening to all voices is part of building the educational effectiveness and improvement knowledge base and ensuring that issues of diversity and equity, that ICSEI endorses, are actively and purposefully addressed. The aim of the roundtable is to be inclusive and to actively invite different voices to be heard not only those leading the discussion. There are possibilities for following up this roundtable with an ICSEI monograph that reflects the discussion and also scopes issues for further investigation.

# **Parallel Session 3**

Thursday 7 January 2016

14.00 - 15.30

## PC Innovate!

Title: 6 Golden Nuggets for Successful Online Community Management

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 2931

Session Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.30-15.00

Location: Argyll Suite 2

Author/Speaker: Lisa Riegel

Company/Organisation: Educational Partnerships Institute, LLC

Co-Authors: Belinda Gimbert, Craig Hammonds

Presenting Author: Lisa Riegel

## Summary of session

As educators continue to realize the importance of collaborating, many online communities are emerging to serve as a platform for sharing and discussion. This presentation outlines six golden nuggets to consider when designing and managing an online community. mNET, Mobilizing Novice Educator Talent, funded through a \$10.8 million national teacher quality grant, has leveraged these six nuggets to build a successful online community for novice teachers and school leaders from across 12 states (Kansas, Nevada, Ohio, Texas, Colorado, Louisiana, Mississippi, New York, North Carolina, Oklahoma, South Carolina, Virginia), Puerto Rico, and the District of Columbia. This innovative, nontraditional national teacher preparation system was designed to help individuals attain full state certifications in high-need, hard-to-staff school districts. Many of them are midcareer professionals, recent college graduates, and paraprofessionals who are pursuing certification as a classroom teacher. We have served teachers from 84 different school districts and will have impacted over twelve hundred teachers by the end of 2016.

The six nuggets are based on research on trust, online community management, and case studies from a number of fields, including health care, national emergency management, business, and education. For each nugget, presenters will discuss the research, show an example of how they have put this research into practice for the mNET online community, and will discuss challenges and ideas the audience can use in building their own online networks.

Participants will have an opportunity to learn how mNET has used its online community to prepare alternatively licensed teachers for licensing exams and to provide ongoing ecoaching and support for teachers in their first three years. Drs. Lisa Riegel, Belinda Gimbert, and Craig Hammonds will discuss the evolution of the online community, its successes and challenges and its plans for sustainability. Audience will have the opportunity to hear perspectives from both the program designers and the users of the system.

This presentation aligns with the "Partnerships and collaborations: schools, agencies, government, research" strand. mNET has successfully collaborated with a variety of partners, including universities, P-12 local education agencies, educational non-profits, and state departments of education. It has leveraged the expertise of each partner to create an extensive online and mobile-friendly support system that addresses all areas of novice teacher induction. This partnership has generated policy changes around alternative licensure in various states and has positively impacted recruitment, support and retention of novice teachers in high need hard to staff school districts. Several studies are being conducted on the program to explore its impact on professional growth and development of beginning teachers and the role of principals in supporting novice teachers.

## **TE Innovate!**

Title: Recording Songs: An Approach to Interdisciplinary Learning in Schools

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3459

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 15.00-15.30

Location: Argyll Suite 2

Author/Speaker: Frank O'Hagan

Company/Organisation: University of Glasgow School of Education

Presenting Author: Frank O'Hagan

## Summary of session

The purpose of this research is to describe, analyse and assess the effectiveness of the use of recording songs with pupils as an approach to interdisciplinary learning. The principal results of the research are that evidence has been found to support the thesis that recording and using songs as an integral part of a teacher's pedagogy is able to enrich learning by allowing and encouraging pupils to form meaningful connections across curricular areas and thus to combine several disciplines thereby promoting critical thinking skills and involving learning experiences which resonate with learners.

This paper will describe, explain and analyse several instances in a number of schools on the Southside of Glasgow in the West of Scotland, UK where systems and structures have combined with the enthusiasm of staff and pupils to facilitate successful interdisciplinary work and the recording and production of enhanced audio CDs which feature footage of pupil work in virtually all curricular areas.

The interdisciplinary approach is endorsed by the principles of constructivist theory which promotes the idea that learning is a complex process which should focus on developing deep knowledge of an idea rather than creating boundaries and strict benchmarks and it is associated with Piaget's idea of learning through discovery where learning is achieved and constructed by the pupils themselves and is therefore deeper, more intrinsically motivating and memorable than knowledge which is delivered to a passive class in a didactic way.

The main conclusions of the research are that teachers will have to challenge the subject-based curriculum much more fundamentally than has been happening with Curriculum for Excellence and that the interdisciplinary approach as described and illustrated in the research must now be taken seriously as an effective method of motivating pupils and encouraging creativity in learners in a move away from a didactic style of teaching towards more of a partnership model between learners and teachers.

Another significant conclusion of the research is that when a teacher has the confidence to share the products of their own creativity, that, in itself, can motivate pupils to be more confident in their own creativity and, as a consequence, the pupils are willing and confident to share their poetry, lyrics, art work and other examples of creativity with their peers and the teacher.

It is important that pupils receive more connected meaningful learning experiences and this has implications for the role of the teacher which would include providing experiences for the pupils to reflect upon. Arguably less emphasis should be placed on subjects in isolation (discrete subjects) and more emphasis ought to be placed on a more integrated approach to teaching.

If, as Albert Einstein proposed that "...It is the supreme art of the teacher to awaken joy and creative expression and knowledge", the interdisciplinary approach as described, illustrated and analysed above must now be taken more seriously not only by teachers and teacher educators but also by policy-makers so that systems and structures can be put in place to facilitate its implementation.

## LDP Innovate!

Title: Inquiring Districts: Activating Learning and Changing Lives

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 2944

Parallel 3 Session:

Session Date and Time: 14.30-15.00

Location: Argyll Suite 3A

Author/Speaker: Catherine McGregor

Company/Organisation: University of Victoria

Co-Authors: Scott Benwell, Linda KaserJudy Halbert

Presenting Author: Linda Kaser

## **Summary of session**

Located within Conference Strand 2: Leadership development and practice to build sustained improvement, this Innovate Session will be presented by a consortium of inquiry and innovation minded public school district leaders, university faculty and thinkers from British Columbia, Canada. The session will engage participants in an exploration of how disciplined professional inquiry at the school district (meso) level impacts student, teacher and leader engagement and learning. The session will begin with a presentation about how the consortium has been formed, its conceptual and theoretical foundations, methods of data collection, and multi-year design, so as to trace the effects and impacts of disciplined professional inquiry in multiple contexts. David Istance (to be confirmed) of the OECD will offer a response to the presentation and then participants will have the opportunity to provide additional perspectives about how the study could be enhanced to ensure it will make an important contribution to our knowledge of how innovation grows in response to meso-level inquiry-based initiatives.

## Context

British Columbia consistently ranks highly on international measures of student achievement (OECD's Programme for International Student Assessment (PISA)). In its recent study Innovative Learning Environments (OECD, 2015) the meso level was identified as "critical for growing, diffusing and sustaining innovative learning" (p. 7). While we know BC districts are making considerable investments in inquiry, limited study has gone into looking at how these approaches sustain impact and ensure that the learning organizations are adapting, improving, and consistently benefiting learners. A group of 12 British Columbian public school districts ranging in size from large (70 000 students) to small (1 500 students), are intent on accelerating learning and identifying the component parts that make this jurisdiction so successful. Our goal is to carefully assess what works and why so that we might share this learning with other educational jurisdictions in Canada and around the globe.

The consortium of 12 districts is linked by a common interest in organizing professional growth and school improvement around disciplined inquiry and networks of learning environments. The research has the potential to have implications for policy levers aimed at school improvement and evaluation. Elements of the design will consider high quality learning environments, district leadership, and systemic growth and improvement as areas of influence and impact.

## **Research Design**

The multi-year study being undertaken in British Columbia will look at the drivers of success and how middle-level managers (Superintendents, Assistant Superintendents, and Directors of Instruction) create key changes, innovations and systemic interventions that result in improved student learning outcomes. Based on the model used by the OECD to collect data from innovative sites across the globe, this consortium of leaders has developed a template that will give districts a common framework for documenting their approaches to inquiry, while leaving space to map how iterative and emergent strategies have developed in response to ongoing reviews of the districts' strategies for action.

## **RCEL Innovate!**

Title: Using experiential and outdoor learning to promote key competencies in school

Topic: Researching the conditions for effective learning

Abstract ID: 3466

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 15.00-15.30

Location: Argyll Suite 3B

Author/Speaker: Jule Hildmann

Company/Organisation: The University of Edinburgh

Presenting Author: Jule Hildmann

## **Summary of session**

This paper argues how insights from research in outdoor learning can be employed to promote the acquisition of transferrable 'key competencies' in school settings. Problem-solving, perseverance, informed decision making, self-management, co-operation, and taking on responsibility are part of the 'key competencies' internationally called for by the OECD to achieve personal and professional success in the life of individuals, as well as a prosperous and peaceful society. These largely mirror the main objectives (i.e. 'four capacities') of the Scottish Curriculum for Excellence.

Research from formal and informal areas of education provides evidence that teaching and learning strategies that nurture such social and personal (key) competencies indirectly also lead to higher attainment, while the opposite is not necessarily the case. Strategies that seem to support both academic and transferable skills are:

- · emotional learning
- · social, interactive learning
- multi-sensory and active learning
- self-directed learning
- · and others

Incidentally, the combination of these strategies describes the educational approach of experiential education, which is used in outdoor learning. The large body of literature investigating the learning outcomes of outdoor learning and outdoor education programmes reveals that these are very similar to the key competencies listed above. This leads to the claim that outdoor learning is a suitable approach to promote academic and transferrable skills.

Next, it is investigated through a literature review which distinct factors account for the positive effects of outdoor learning. The most prominent of these are:

- the use of principles and strategies of experiential education (as named above)
- exposure to nature or even just urban green spaces
- physical activity and exercise.

A summary of evidence for the positive impact on attainment, health and wellbeing is presented for each of these factors individually and their combination in outdoor learning. As a conclusion, the systematic implementation (or increase) of these three factors into school contexts is recommended. This leads to the practical question of how this can be achieved in a tangible and everyday manner. Academic literature on successful outdoor learning activities in school contexts are presented as examples of good practice. To break new ground, further recommendations are offered on how these insights can be employed more deeply and broadly in everyday school life.

This research project is funded by the European Commission under the Marie-Skłodowska-Curie Action.

## **PC Paper Session**

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Castle Suite 1A

Chair: Christine Forde

## PAPER 1 ABSTRACT:

Connecting Research and Practice Through a Collaborative Policy Implementation Network: An Example from Ontario, Joelle Rodway, OISE/University of Toronto.

Networks have been deemed an important strategy in connecting research and practice (Cooper & Levin, 2010), a field otherwise known as knowledge mobilization (KMb). However, much network research fails to acknowledge the ways that relational linkages among members mediate its work, particularly in the case of KMb. The purpose of this study was to investigate the ways in which patterns of interaction among members of an innovative policy implementation support network in Ontario, Canada mediated KMb activities in support of evidence-informed school mental health policy and practice in publicly-funded school districts. The conceptual underpinnings of this study are rooted in social network theory and the premise that the exchange of social resources (e.g., information, advice) affects the success of actions (Lin, 2001). It uses the network theoretical concepts of cohesion — the degree of connectedness in a network (Scott, 2000; Wasserman & Faust, 1994) — and prominence — central and prestigious network actors (Knoke & Burt, 1983), and their related social network measures (e.g., density and degree centrality) to explore the ways in which these network patterns facilitate and/ or constrain the ways in which participants find, understand, share, and use 'research-based knowledge' (Davies & Nutley, 2008) in their school mental health work at the district level.

This exploratory case study (Yin, 2014) used a sequential, explanatory mixed methods design (Cresswell & Plano Clark, 2011). The network was a bounded sample where program coaches (N=6) and school district Mental Health Leaders (MHLs; N=31) from the first two cohorts of the program were invited to participate. Phase one of the study included a survey, administered online (response rate = 97%), that included social network and attribute-based guestions. Network data were analysed at multiple levels using UCINet, and SPSS was used to conduct appropriate descriptive and inferential analyses. Phase two consisted of interviews with all five coaches, and six MHLs selected based on phase one degree centrality findings. The constant comparative method (see Boeije, 2002) was used in the interview analysis.

Each relational dimension of the network (research, advice, influence, and social support) lacked cohesion (i.e., were weakly connected networks), and the patterns of interaction in each focused on a specific subset of people. Certain individuals stood out as dominant sources of research, advice, and influence. Overall, coaches received significantly more incoming ties than MHLs; however, there were two MHLs who were often sought out more than other coaches. An online forum, program coaches and resources, capacity-building activities, research literacy and community were considered facilitators of KMb, whereas organizational structure, tension among system priorities, and external groups were perceived as constraints. This study describes an innovative KMb model where formal events mattered most and the key players were not always coaches. The broader context of the program mediated KMb activities, where it was not only the people within the network, but also the resources and opportunities available within it that connected research and practice.

#### PAPER 2 ABSTRACT

Lifting the Bar: Lessons for enhancing instructional leadership through large scale reform, Tim Wyatt and Robert Carbines, **Erebus International** 

This paper describes an approach to large-scale, sustained school improvement being implemented in New South Wales (NSW), Australia. The initiative, known as the NSW Literacy and Numeracy Action Plan has now passed the midway point of its planned four-year timeframe, and is showing early signs of success. The initiative has thus far engaged more than 600 schools from across the government, Catholic and Independent school sectors, at a cost of around A\$261 million. Schools targeted for participation in the initiative included those that consistently perform in the lowest quartile on the National Assessment program, and include those schools which serves communities with the lowest socio-economic status. The schools typically enrol high number of Indigenous students, and many of the schools are located in rural and remote areas and have a frequent turnover of leaders and teachers.

The initiative focusses on improving educational leadership and teacher capacity in the early years of schooling (Kindergarten to Year 2), to ensure all students successfully acquire the foundation skills in literacy and numeracy. High priority has been given to enhancing teacher competence and confidence in exercising evidence based practice, differentiated teaching and personalised learning, enhanced accountability for learning. The centrepiece of the initiative has been the appointment of an additional position in the schools to provide instructional leadership.

The results thus far have been impressive in terms of the impact on teacher and school leader behaviour and on school culture and organisation. There has been a significant increase in teacher collaboration and professional dialogue and significantly enhanced teacher understanding and application of explicit teaching and response to interventions. For the first time in NSW, teachers in these schools are using a systematic approach to monitoring and assessing student learning in the early years, and routinely using this information to for planning on a school wide, classroom and individual student level.

The initiative is different from previous attempts to improve literacy and numeracy in that it is not a defined program or a dedicated funding stream; indeed the implementation of the initiative has differed both between and among schools in the various education sectors. It has continued to evolve on the basis of experience. While the implementation models vary, the research described in this paper has identified some common success factors. The lessons from this experience have strong relevance both for future school improvement efforts in NSW, and for other school systems seeking to undertake large scale reform. These include the importance of balancing support with accountability. Maintaining a clear and explicit focus on improvement, promoting the belief that all students can learn, holding high expectations for achievement and acceptance of collective responsibility for each student, providing in-class point of need teacher professional learning and intervention, and empowering student ownership of learning are all essential for acheiving the cultural change that is needed to improve learning in the most disadvantaged schools. The study finds that regardless of the governance arrangements for the individual schools, strong systemic/sectoral involvement is a prerequisite for sustained improvement to occur.

#### PAPER 3 ABSTRACT

Implementation of the Common Core Curriculum in New York State: Using Experiential Education to Meet Standardized Educational Benchmarks, Jill Perttula, University at Buffalo, Curriculum, Instruction and the Science of Learning, English education.

This paper seeks to examine the ways in which experiential learning can adhere is state standards while expanding critical thinking skills and improving writing skills of middle and high school students. This examination is pertinent to the Partnerships and collaborations: schools, agencies, government, research ICSEI 2016 conference strand.

In the United States, many states (including New York State) have adopted the Common Core curriculum. This has led to prescriptive module programs that undermine the autonomy of the teacher. Although these module programs address common core curricula, it has been noted by educators that the engagement levels of students can be lowered. Although educational researchers since the seventies have known through their research that the experiential model is the best way to learn, U.S. public schools have not been persuaded to adopt this system. While researchers in the 1990s were supporting and demonstrating that experiential education should be implemented in schools, the tradition of instructionalism has been maintained. After U.S. school children performed poorly on worldwide assessments ranking nations all over the world (not necessarily a new development) at the turn of the millennia, George W. Bush used his position to reinvent education (and solidify didactic pedagogy). When Bush introduced No Child Left Behind (NCLB) in 2001, the advent of extensive standardized testing and increased reliance on teacher-led, skill and drill instructional strategies was set. Apple (2006) argues that with this standardized testing, public shaming of public schools (the report card process that calls attention to caliber of teaching practices and student results) has occurred. Further, Apple (2006) argues that "NCLB [had] the paradoxical effect of actually creating a situation in which ever more children are educated in institutions that have minimal if any forms if public oversight" (Apple, 2006, p. 90). NCLB has left many children in a far worse educational environment than they had occupied previously. In other words, intervention through testing actually began to create a climate where students focused on "skill and drill" instead of a relevant experiential educational experience. The Common Core Curriculum (an adaptation of E.D. Hirsch's cultural literacy ideology of the 1980s) has been implemented and added to the tradition of NCLB pedagogy and traditional instructionalism has been cemented in the process.

Interestingly, the Common Core Standards for the English Language Arts (ELA) are positive benchmarks for students to reach despite the unfavorable ways that the curriculum has been implemented. The accountability era (as seen in NCLB) has impacted the ELA classroom but that does not mean that experiential learning cannot take place. Common Core State Standards can be supported through project-based learning. This demonstrates that imagination and creativity does not have to be sacrificed in order to create curriculum that fosters collaboration, critical thinking and writing for a purpose.

In addition to curriculum strand demands, countless schools are under financial constraints. Many educators feel that experiential learning is not possible without extra resources. However, experiential activities in ELA are not only cost effective but also easily implemented and supported by Common Core standards.

# **PC Paper Session**

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Castle Suite 1B Location:

Chair: John Daffurn

## PAPER 1: ABSTRACT

Partnerships with universities and school - An Australian Story, Annette Cairnduff, University of Sydney

Since the 2008 major review of higher education in Australia, universities around the country have significantly and rapidly increased their engagement with complex school communities. Benefits for pre-tertiary students in programs to support academic preparation, motivation and confidence, information for parents and professional development for teachers have been widely acknowledged.

This paper will look at the conditions and mechanisms required to develop and maintain strong, enduring partnerships with mutually beneficial outcomes with universities and complex school communities.

It will case study one of the innovative programs developed by the University of Sydney and partner school communities, the conditions which provided for effective partnerships, the co-design and developmental evaluation process that have shaped the ongoing engagement and connection.

When the program, Compass, was established a key challenge was to develop a widening participation program that could cross from primary schools - high school in disadvantaged communities. Compass was designed to be engage with the school from the earliest years of schooling. Understandably, the primary school communities in particular, many of which we had previously had no or little formal relationship, met the University with scepticism and wariness. Many were concerned that about the purpose and focus of the partnership and doubtful about the benefit for their school community. In the last seven years we have together built resilient and strong partnerships that support mutual goals and outcomes. Compass is in high demand in primary and schools around Sydney and regional NSW provides fantastic learning opportunities for school and the University's students and staff.

## This paper will outline

- the ways in which this partnership was built and continues to be supported ultising a Collective Impact Framework and Community Development Approach and how these methodologies provide effective mechanisms in which to govern, measure and progress interventions and partnership.
- showcase some of the individual projects that have been developed and implemented within the K-5 year range and articulate how these were developed in collaboration with school (teachers and principals) and University (staff and students) to build programs of mutual benefit.
- detail how we have assessed and supported the collaboration itself to build a more powerful model of engagement than would be possible independently
- summarise the findings of two external evaluation studies on how these partnerships are impacting on culture and academic outcomes within the school and University communities.
- the ways in which the design of Compass and it's partnership approach led to the establishment of the Bridges to Higher Education Initiative which received \$21m in 2011 from the federal government and summarise findings from that broader initiative

#### PAPER 2 ABSTRACT

School accountability pressures, school improvement and teachers practices in the Brazilian context, Mariane Koslinski, Eduardo Ribeiro, Luisa Xavier de Oliveira, Julia Carvalho, Federal University of Rio de Janeiro

There is a large body of research reporting the impact of standard-based or school accountability pressures either on school performance and/or on principals and teachers 'gaming' the system. Less evidence is found on how different accountability incentives and pressures influence school practices and how those are incorporated in different school contexts. Until very recently, there was no national guidelines towards accountability policy and, in the Brazilian federal system, each municipality and state was autonomous to develop its own educational assessment system and school accountability policies with different designs. In general terms, States have adopted designs that "include" targets based on rates of improvement (none of them use value-added measures), some use indicators that incorporate pass rates and few states use other controls such as students' attendance to the tests and family background.

This paper analyses the impact of a recent school-based accountability program implemented in the State of Ceará and provides evidence on the effects of the incentives on school results and teacher practices. The State of Ceará, has adopted, since 2009, school-based accountability and school improvement programs focusing schools that offer the first grades of elementary education. On one hand, the program intends to bring a results-based incentive by rewarding, every year, the 150 highest performing schools. According to the program design, school higher in the ranking are deemed effective and the targets may be seen as unfeasible for most schools. On the other hand, the State Government also provides a positive intervention by means of a financial assistance to the 150 lowest performing schools. Those schools also receive technical support from high performing schools. Nonetheless, supported schools are only entitled to receive the second part of financial aid if they increase their performance in standardized tests in the following year.

The research estimates the impact of the program on school results and teachers practices. For that purpose some specific features of the policy were explored. Firstly, we considered the effect of achieving the programs' goals and, thus, receiving the prize. The same impact was observed for the low performing schools - that have also received financial support. We consider that, as important as observing the later schools is to examine what has happened with the "borders schools", those which have not achieved the goal and were not among the low performing schools. Thus, the study makes use of the position in the ranking to evaluate outcomes at different school contexts. Finally, the accountability program is a state policy, which directly influences how the municipalities implement their own policies and educational practices. In this sense, the paper looks at the variation of outcomes in this scale of analyse. It makes use of the State of Ceará assessment data (school panel data from 2008-2013) and national assessment system data (school panel data from 2007 to 2013). The results have shown that schools' position in the ranking plays a key role in how school actors react to the government incentives, and have pointed to a strong variability among local contexts at municipal level.

## PAPER 3 ABSTRACT

The challenges of implementing change and sustainability from the bottom up, Joan Mowat, University of Strathclyde

## **Focus and Theoretical Underpinnings**

This paper explores issues around change management (James, 2009, Fullan, 2003, Fullan, 2008), sustainability (Hargreaves and Fink, 2006) and the role of leadership in 'growing' an intervention beyond its initial setting. It focuses upon an intervention which was initially developed by the author to support children with Social Emotional and Behavioural Needs in a Secondary school in the West of Scotland and the further development of this intervention in two local authorities in Scotland, extending into upper primary. The paper explores the variables that impacted upon the implementation of the intervention, with a particular focus upon leadership and sustainability. The paper will examine the above through the lens of Fullan's 'The Six Secrets of Change.' (Fullan, 2008)

The study – an evaluative case study, sponsored by the Esmée Fairbairn Foundation, constituted three projects – a Primary 6 project; a Transition Project (spanning Primary 7 and Secondary 1) and a Secondary 2 project – and was conducted with six clusters of Primary/Secondary schools (led by an appointed Cluster Leader), constituting 63 pupils who participated in support groups and their related stakeholders - parents/guardians; Support Group (SG) Leaders; Pastoral Care Teachers and a sample of class teachers (selected via a purposive sample). The project was managed via. a Steering Group which had representation from the two local authorities, the six Cluster Leaders and the research team.

The study was principally qualitative and a wide range of data were gathered – statistics relating to attendance, behaviour and attainment; semantic differential and open-questionnaires, interviews and focus group discussions. Six in-depth case studies (one from each cluster), selected via. a multi-phase stratified sample, were conducted and six focus group discussions were held with SG Leaders who also completed semantic differential questionnaires. Statistical data were analysed principally via. chi-squared tests and qualitative data via. thematic analysis.

For the purposes of this paper, the data is drawn from the focus group discussions and the semantic differential scales completed by SG leaders and reflections upon the SWOT analysis.

## **Findings**

The most important variables (not in any specific order) to emerge related to:

- High quality distributed leadership, supported by structures that facilitate the development of communities of practice (Wenger et al., 2002)
- A clear vision, commitment and support and training provided by the research team
- Adopting a whole-school approach, the intervention being seen as integral to the school and not a 'bolt-on'
- Involving the whole school community and in-house training for all staff
- Effective communication and partnerships with parents
- Putting effective structures in place to support implementation
- Articulation with national policy and imperatives
- Taking cognisance of school culture and context
- Managing competing imperatives and resource constraints.

## Conclusion

'Growing' an intervention, extending it beyond its initial context and ensuring sustainability is highly complex, requires a high degree of intentionality and needs to take account of the environment. A wide range of variables comes into play, some of which cannot be readily anticipated indicating that a highly flexible and responsive response is required.

## **TE Symposium**

Title: How Can Pre- and In-Service Education Enhance the Quality of Teacher Professionality

with a view to school improvement?

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3185

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Castle Suite 2

Chair Michael Schratz, University of Innsbruck

Discussant Karen Seashore Louis

## Overview of Symposium

## Themes, issues and questions of the symposium

This symposium contributes to the ICSEI 2016 Strand 1 "Teacher effectiveness, teacher quality and professional learning" by presenting insights into how German speaking countries are currently emphasising professional learning as a major strategy in realising change and improvement at both the level of school improvement and at a wider systems level.

In the past few years the institutional professionalisation of future and practising teachers has been dominated by modularisation and standardisation under the overall paradigm of competence orientation. In many instances, this has led to an isolation of knowledge, skills and attitudes in training programmes which neglected the fact that in the context of schooling teaching and learning are total human activities which are irrevocably intertwined and codetermining in their corresponding settings (Schratz, Westfall-Greiter, & Schwarz, 2012). Since the contextual nature of improvement in education is usually small-scale and messy, teacher education has to find ways of how personal mastery (Senge, 2006) can be developed as the ability to cope with uncertain situations in a professional manner and allow professionals in education to lead themselves and others from the future as it emerges (Scharmer, 2007).

Paper 1 (Austria, Germany) introduces a heuristic model of teacher professionalism which takes the dialectic between both subject-perspectives and structural perspectives the professionalization as a starting point for the presentation of five domains which have been developed into a national framework for teacher education. The first findings from research into this model will be presented.

Paper 2 (Switzerland, Germany) introduces a web-based learning platform with video scenes which can be used as a learning tool to implement the domains presented in paper #1. An empirical study of its application both in pre- and inservice settings offers insights into the effectiveness of change processes in the professionalization of future and practicing teachers.

Paper 3 (Austria, South Tyrol/Italy) deals with theoretical concepts of change in the professionalization of teachers by analyzing the tension between structure bound reproduction/tradition and innovation/invention. Its authors elaborate on the frames and configurations which seem to impede or even hinder or might support their individual development and argue that learners themselves seem to intuitively know which step of professional development to take next.

Paper 4 (Germany, Switzerland) introduces a quality manual for professional development of teachers which has been developed by the German Association for the Advancement of Further Education of Teachers. The purpose of the sample manual is to initiate discussions to ensure highest quality of professional development across all German Länder (States).

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## PAPER 1 ABSTRACT

Domains of professionalism: teacher competences revisited Angelika Paseka and Michael Schratz, University of Hamburg

The main debate about the conceptualization of teacher professionalism has globally been driven by two theoretical and methodological approaches: On the one hand, we find concepts which put their focus on teachers or teacher students as subjects, trying to measure their competences with a bias on subject matter content knowledge, pedagogical content knowledge and general pedagogical knowledge (Shulman 1986), which have been elaborated in large-scale studies like TEDS-M or COACTIV (Zlatkin-Troitschanskaia, Shavelson, & Kuhn, 2015). On the other hand, there are theoretical concepts which focus on the structure of the teaching profession, trying to grasp the logic of professionalism and school as organizational context for the teaching profession by using qualitative methods.

With the ambition to dovetail the two approaches, an interdisciplinary expert group of researchers and administrators by the Austrian Ministry of Education was initiated, representing teacher education, school improvement and educational administration, with a view to substantial reform of teacher education. The expert group developed a heuristic model of teacher professionalism which considers the dialectic between both subject-perspectives and structural perspectives based on Giddens' theory of structuration (Paseka, Schratz, & Schrittesser, 2011). Five domains (reflection and discourse, professional awareness, personal mastery, cooperation and collegiality, the ability to differentiate) were identified and elaborated, connected by a sixth dimension which renders the domains a thematic bias. The professional framework (EPIK) contains case-vignettes for each domain, which present them in a situational context, as well as a descriptive elaboration. The EPIK Framework has already been implemented in teacher education of a great number of Austrian higher education institutions.

To bridge the gap between quantitative and qualitative empirical research both approaches were used to look for empirical evidence of this model at the University of Hamburg (Germany). In a first step several items were created for each domain. With these items the self-perception of the students was tested in two cohorts before, in-between and after the students' internship in schools. After two test-phases 15 items remained which reproduce the model in its whole spectrum. With help of these items it was possible to capture the changes in the students' self-perception correlating the items with organizational aspects of the internship.

In a second step further case-vignettes for each domain were created to get a holistic impression of the understanding of teacher professionalism. The case-vignettes describe a scene and have an open end producing a dilemma. On the basis of such case-vignettes dilemma interviews were carried out with teachers and teacher students. The interviews were analysed with the documentary method looking not only what the interviewees had said but also behind their stories. In contrast to the results of previous expert-novice-research (Berliner, 1992) the interview analyses do not show a clear differentiation between the two groups (Paseka, & Hinzke, 2014).

## PAPER 2 ABSTRACT

Development of teacher professionalism by using a web-based learning platform, Angelika Paseka and Wilfried Schley, Leadership Foundation, Switzerland.

In a first part the results on three years development on building a web-based learning platform (INTUS 3) containing 40 video scenes with different educational situations in a school context will be presented. It relates to the EPIK domains, focuses on Peter Senge's personal mastery as ability to cope with uncertain situations in a professional manner and allows to develop the main factors of John Hattie's research. The scenes give the opportunity on training self-efficacy and offer opportunities for collaborative learning. The presentation will offer an opportunity to get insights into:

- the use of INTUS 3 learning concepts on social and emotional competences,
- the balance of cognitive analytical and intuitive emotional ways of learning,
- the processes of raising awareness, presence, openness and resonance.

Successful personal mastery depends on the quality of attention and intention that a professional brings to any situation. We focus on four attitudes of attention.

- 1. "Stay self-assured, no matter what happens": Uncertainty is a constant reality of being a teacher. It is important, then, to show presence and be prepared to assume leadership.
- 2. "Turning an unproductive atmosphere into a productive one": Uncertainty alerts awareness, an intuitive sensitivity for the dynamics, and the willingness to recognize a situation for what it is and to transform unproductive atmospheres.
- 3. "Recognizing needs and using disruptions as potential": Teachers therefore must be capable of empathic contact and changing perspectives to recognize the needs of pupils and use disruptions as a potential for development.
- 4. "Recognizing and changing patterns and their effects": Patterns are usually unconscious and as individual as a fingerprint. Only in contact with others can we experience ourselves and recognize ourselves in our behavior.

The web-based learning platform INTUS 3 was used as an instrument for professional development in three German schools and in a pre-service project at the University of Hamburg. The projects were evaluated by qualitative methods (interviews, group discussions). The results give evidence that it is possible to enhance sensitivity and ability to observe uncertain situations as well as to enable teachers and teacher students to cope with such situations. In the in-service project four stages of involvement could be identified. In the preservice project with teacher students a specific course design was created to enhance such an involvement. The analysis of the students' answers at the beginning shows that they prefer options which correspond with their roles as teachers within the structural context of schooling. At the end of the course, the students started to question such answers and to develop an empathic attitude for the situation by trying to take the role of their pupils and to assess the situation from their point of view.

## PAPER 3 ABSTRACT

Frames and configurations which hinder or support professionalisation in initial teacher education, Nadja Köffler, Christian Kraler, University of Innsbruck

Our system of formal education is embedded in the tension of structure bound reproduction/tradition and innovation/ invention. For the organization of teacher education, the central question is: How much creative freedom for fruitful development and individual learning experiences in the formal course work can be given (with a view to innovation and development)? Useful structures of order exist through which the educational system as a whole recreates itself as do parts of it (hand down function), for example in the form of the repetition of a shape, form, or behavior at each level (individuals, institutions ...), generated by the phenomenon of fractal distinction and ending up in a form of self-similarity. Self-similarity helps to create shared goals and objectives (cf. Abbott, 2001) but has an economy that resists or absorbs attempts for change and development, viscidly insisting on old structures (Kraler, & Schratz, 2011). These patterns have a strong effect in teacher education.

On an individual level, teacher education students as learners in formal educational contexts are obliged to adapt to institutional frames and limitations. Then again, they need to cope with their own individual restrictions. They show bound patterns of behaviour which seem to impede or even hinder necessary changes that might support their individual development and professionalization (Gendlin, 1997).

This raises the question why certain patterns of behaviour, acting and thinking seem to be fixed while others are varied and can be changed easily (repeating patterns vs. changing patterns) and what kind of support do learners need in teacher education programs to change their bound behaviour after all.

In the first part of the presentation we discuss empirical findings of structure bound patterns in teacher education (spatial, temporal, institutional and individual configurations) derived from a research project at the University of Innsbruck ("Developmental tasks and the course of education in initial teacher education"). Based on these results we then ask for ideas that support development and a "fruitful" change of viscid patterns with respect to grown structures (because educational systems tend to be conservative by default). We introduce ideas of A.N. Whitehead (1938), who focused on dynamic becoming rather than on static being, pointing out creative spaces arising from the not yet realized possibilities. Adapted to the context of teacher education, his theoretical evocations lead to further thoughts and reflections on sustainable innovations in formal educational systems (Whitehead, 1929).

## **PAPER 4 ABSTRACT**

A quality manual for further training of teachers: development, application and perspectives: Jochen Mogler and Rolf Koerber, University of Leipzig

In Germany, the 16 federal states decide on issues of education. Therefore Germany is heterogeneous when it comes to matters of school as well as to further training of teachers. The German Association for the Advancement of Further Education of Teachers 1 supports the cooperation and professionalisation of experts in the field of teacher training and school development. The DVLfB operates as a cross-national organisation that includes teacher training in Germany and in other German-speaking countries like Austria or Switzerland.

A cross-institutional team of different states in Germany and Switzerland developed the sample quality manual during the years of 2003-2006 by order of the DVLfB. The quality manual was published as a publicly available specification (PAS) -PAS 1064 - supported by the German institute of standardisation (Deutsches Institut für Normung, DIN) in 2006 (Becker et al., 2006).

The purpose of the sample quality manual is to initiate a transregional discussion in order to ensure highest quality of further training of teachers in all sections. Not only the employers and the clients but also the schools and the students should benefit from its contents. The basis for the PAS 1064 are the quality discussions and quality demands of the teacher training institutions (pre- and in-service), of the school-authorities and the requirements of quality management systems, as described in the ISO 9001, EFQM or the Balanced Score Card (BSC). The content consists of 33 basic standards (general goals) and 119 matching criteria (operationalisable goals) in five sections (leadership, planning, organisation, implementation, evaluation), which are underlayed with 306 indicators (measurable detailed goals) and 140 documents.

The PAS 1064 provided an exhaustive quality description of teacher training, which has served as a prototype of quality descriptions in various German-speaking teacher training institutions. The DVLfB started a new project of quality development in 2014. The goal of this project is to adapt the PAS 1064 to current situations, to embed it into a more broad context of research and practice in order to develop a sample reference frame "Quality development and quality standards of teacher training".

Two authors in this section will introduce their work on the PAS 1064 and discuss perspectives on further development. They will present concrete examples of working with this quality instrument and offer a basis for discussion of meaning and use of comparable instruments. The goal of this section is to clarify how such an instrument can be used in practice and how a quality description of practitioners can relate to normative guidelines of the political control level. Is it possible to influence these guidelines by reasonable and reflected practice or are the guidelines taken and changed into feasible practice?

# TE Symposium

Title: Leading and Learning through Collaborative Networks and Communities

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3388

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Castle Suite 3

Chair: Danette Parsley, Education Northwest

## **Overview of Symposium**

Forming educator collaboratives, or networks, is increasingly used worldwide as a strategy to support school innovation and improvement (Hargreaves & Shirley, 2012). There is a growing body of literature focusing on the conditions for effective collaborations (e.g., Jones & Harris, 2014) and, to a lesser degree, examining the impact that networks can have on organizational learning and change, leadership capacity, teacher knowledge and skills, and improved student outcomes (Hadfield & Chapman, 2009; Muijs, Ainscow, Chapman, & West, 2011). Most of the research to date has been conducted in the urban context; very few studies specifically examine the experience and impact of rural collaboratives. Despite the growing enthusiasm and investment in these types of collaborative networks, we still have much to learn.

This symposium brings together researchers and practitioners from Europe, North America, and Southeast Asia to discuss experiences with collaboratives in England, Australia, and the United States. The session focuses on the relationship between teacher collaboration and professionally learning generally, then provides a window into the unique characteristics and conditions for rural school collaboratives. The session was inspired by the 2016 conference theme, "Connecting teachers, schools and systems: creating the conditions for effective learning," and addresses two overarching questions:

- 1. How does the strategy of connecting teachers across schools for purposeful collaboration impact professional practice, leadership, and student learning?
- 2. What are some unique considerations for rural educator collaboration?

<sup>&</sup>lt;sup>1</sup> Deutscher Verein zur Förderung der Lehrerinnen- und Lehrerfortbildung e.V.(DVLfB); see www.lehrerfortbildung.de

This symposium relates directly to the conference strand, "Teacher effectiveness, teacher quality and professional learning." The goal of teacher collaboration and networking is to engage in authentic professional learning that leads to productive shifts in classroom practice and, ultimately, improved outcomes for students. Teachers who participate in purposeful collaborative learning experiences have an opportunity to not only hone their professional practice, but develop as leaders (MacDonald & Shirley, 2009). Increased leadership capacity distributed throughout schools, in turn, can strengthen the overall system and fuel momentum for change.

The symposium will open with presenters Michelle Jones, Alma Harris, Jon Andrews and Helen Lee examining the relationship between quality of collaboration and level of professional learning and practice. Using evidence from two Australian schools, they argue that disciplined and systematic collaborative learning increases the odds of positive impact on teacher practice and student learning. The second presenter, Daniel Muijs, discusses research on the impact of rural school networks in England and outlines the conditions for successful rural networks. The third presenter, Nettie Legters, discusses results of a U.S. national scan of rural education collaboratives and highlights key findings about the organizational structures, practices, and lessons learned from four successful cases. For the fourth presentation, Danette Parsley, Dennis Shirley, Michael O'Connor, and Andy Hargreaves share insights from network members' personal experiences in one of the rural networks highlighted in the U.S. national scan. The Discussant, Chris Chapman, will draw from his extensive research and background in education networking, collaboration, professional learning, and improvement of school systems in disadvantaged settings to provide reflections and questions for the group of presenters and larger audience to consider.

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## PAPER 1 ABSTRACT

From Loose Co-operation to Disciplined Collaboration: Professional learning with Impact, Michelle Jones, University of Malaya

The research literature has established that there is a powerful relationship between high quality collaborative professional learning and school and system improvement (Timperley et al 2007). It reinforces that the main point of any professional collaboration is to 'connect to learn' but that often little thought is given to the establishment of those connections and scant attention is paid to the fact that to be most productive and effective, some professionals need to 'learn to connect' (Harris & Jones, 2012). So how do we get professionals to connect to learn in the most effective ways, and how do we evaluate the impact and outcomes of this professional learning more generally?

First, although it is now well established that carefully constructed and systematic professional collaboration can make a positive difference to organisational performance and outcomes, it can only do so if it is rigorous, focused and systematic (Jones & Harris, 2014). The research evidence has highlighted again and again that loose or unfocused professional groupings, partnerships or networks are unlikely to secure improvement or to have a lasting impact. An international review of school to school networks found that relatively few networks could demonstrate a positive impact upon learners. Where an impact could be substantiated, it was largely correlated with learner enjoyment and engagement (Bell et al, 2010). In their analysis of school networks, other researchers (Hadfield & Chapman, 2009) similarly noted the difficulty of establishing any causal link between networking and improved learner outcomes.

It is proposed that lack of impact can be explained in a number of ways. Firstly, many of these collaborative or networking arrangements do not have a clear model or theory of action guiding their collective work in any consistent or disciplined way (Jones & Harris, 2013a). Consequently, schools and teachers are expected to self-combust into effective collaboration using only a few characteristics or limited guidelines. Second, in too many cases the primary focus of the collaboration or networking is the teacher and not the learner (Jones & Harris, 2013b). Third, evaluation practices related to professional learning or development tend to overly rely on teachers' self-report about the outcomes and impact. There are, of course, exceptions where the evaluation of professional learning practices in schools is well developed, sophisticated and rigorous, but this is not the norm.

While it is not easy to measure in simple, causal terms gauging the impact of professional learning is not impossible (Lloyd & Mayer, 2011). This paper focuses on the evidence from two schools in Australia who have moved from loose cooperation to disciplined collaboration over the past three years. The paper will outline their journey and most importantly will demonstrate the impact of the disciplined collaboration model on professional collaboration on students learning and teachers' professional practice.

## **ABSTRACT PAPER 2**

Conditions for Successful Collaboration and Networking Among Rural Schools, Daniel Muijs, University of Southampton

School-to-school collaboration as a school improvement method has grown in importance in England in recent years, and there is growing evidence that such collaboration can have a positive impact on both capacity to change and student attainment. Recent research has shown that this is true for rural as well as urban areas (e.g. Muijs, 2015). However, global findings of positive effects may mask significant differences between schools and networks. In this paper we will explore the extent of between- and within-network variation in student outcomes, and explore the correlates associated with more and less effective rural networks.

A mixed methods research methodology was used to explore this question. In the first part of the study, we looked at within- and between-network variance in pupil outcomes using a reanalysis of a quantitative dataset collected for previous studies (see Muijs, 2015). Three-level multilevel models (network, school pupil) were used to assess relationships with pupil attainment controlling for a range of student characteristics such as social background. In a second phase we used two additional datasets, one utilizing school inspection data and one from a previous study to explore correlates associated with differential outcomes. In a third phase we used four networks as case studies, where we interviewed a cross-section of school leaders at senior and middle management levels. Findings highlight key conditions that need to be met, as well as particular difficulties of rural networks related to size and distance.

## PAPER 3 ABSTRACT

Rural Education Collaboratives in the United States: Results from a National Scan, Nettie Legters, Education Northwest

In the United States (U.S.), more than 40 percent of all schools and nearly half of all school districts are in rural areas, and close to a third of all students attend rural schools. One in four of these students live in poverty; it is not uncommon for the child poverty rate to exceed 50 percent in rural communities (Johnson, Showalter, Klein, & Lester, 2014). While circumstances in rural areas vary across the country, there is growing understanding that geographic isolation and depressed economies have kept education innovation and improvement from reaching rural school systems. The result is persistently low levels of education attainment and diminished opportunities for rural youth and their communities.

This paper will report recent research by Education Northwest and the Battelle for Kids Foundation on rural education collaboratives (RECs). To inform a pressing national conversation about viable solutions to the challenges of educating students in rural areas across the U.S., a research team investigated how rural school systems are using collaboration as a leading strategy to improve teaching and learning, achieve efficiencies, and level the playing field for rural students. The following questions guided the research:

- What is the status of RECs—who are they, where are they located, what do they do, how are they organized, and what outcomes do they report?
- How do successful collaboratives work?
- What are the reported benefits and challenges of multi-rural district collaboration?
- What is the outlook for RECs with respect to quality, growth and connectivity?

The research team addressed these questions through a national field scan and in-depth case studies. For the scan, researchers developed inclusion criteria and used comprehensive web search and document review to identify and collect basic descriptive data on RECs operating across the U.S. The team also conducted short phone and email interviews with REC contacts to verify website information and collect information that was either unavailable or insufficient through public sources. The scan produced a database with information about the number, membership, organization, and reported outcomes of RECs across the country. Researchers then developed descriptive case studies of four RECs to take a closer look at how rural collaboratives are operating in different parts of the country. The case studies are based on document review, interviews, and in some cases, direct observation of the collaboratives' activities. Interviews were conducted in-person or by phone, and followed a standard protocol of questions that inquired into the collaboratives' origins, governance, organization, goals, activities, impact, and lessons learned.

The scan identified seventeen rural collaboratives that were visible, currently active, well established and organized, and, most importantly, focused on improving practice through shared commitment to a common purpose and mutually reinforcing activities that were creating value for rural students. Case studies describe how the collaboratives started up and have sustained operation over time. They detail governance, funding, and organizational structures, as well as key strategies to improve teaching and learning (e.g. job-alike groups, virtual learning networks, collaborative projects), and achieve efficiencies (e.g. pooled purchasing, shared services, collective fundraising and advocacy).

## PAPER 4 ABSTRACT

Voices from the Field: What Rural Educators Are Gaining from School-to-School, Danette Parsley, Education Northwest, Dennis Shirley, Michael O'Connor, Andy Hargreaves

This part of the symposium brings in the voices of educators participating in the Northwest Rural Innovation and Student Engagement (NW RISE) Network, one of the U.S. rural education collaborative case examples highlighted in the previous presentation.

The purpose of NW RISE is to connect small, rural schools to provide educators with the opportunity to collaborate with colleagues from other districts in similar teaching positions (e.g., fifth grade, secondary social studies) and focus on the challenge of teaching to new college- and career-ready standards in a way that is culturally and locally relevant and engaging for students. Teachers hone their professional practice through collaboration with colleagues from other schools. Meanwhile, participating school-, district-, and state-level leaders work to create supportive conditions for teachers to effectively collaborate and take purposeful action to improve student engagement and achievement. The network goal for students is "engagement", further delineated to include three components that prove especially important for students in rural communities: academic achievement, community attachment, and empowerment.

Two years into Network activities, we gathered participant reflections on their experiences to date and insights about how their collaboration with colleagues from other rural schools has impacted various dimensions of their professional lives, such as:

- sense of self as a rural educator
- collaboration with colleagues within their schools
- areas of professional growth resulting from job-alike collaboration
- changes in classroom practice
- student engagement and learning

- leadership development
- commitment to school and community.

Network members also provided reflections and insights about the challenges of collaborating across schools spread over a large geographic area. Presenters will highlight themes from NW RISE Network members' reflections and use a series of very short video clips and storytelling to illustrate each.

# **TE Symposium**

Title: The sustainability of data-based decision making with data teams for improving teacher

effectiveness and student learning: the policy, research and practice perspective

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3090

Parallel Session 3 Session:

Session Date and Time: Thursday 7 January 2016 14.30-15.30

Location: Staffa

Chair: Kim Schildkamp, University of Twente

Discussant: Jan Vanhoof, University of Antwerp

## Overview of Symposium

The policy emphasis for data use is growing internationally (Mandinach & Gummer, 2013; Vanhoof, Vanlommel, Thijs & Vanderlocht, 2014). However, although data use can lead to school improvement (Carlson, Borman, & Robinson, 2011; McNaughton, Lai, & Hsiao, 2012), schools still struggle with the implementation. This understanding has led to an increase in teacher professional development to support data use (Marsh & Farrell, 2014). At the University of Twente we have developed the 'data team procedure' to contribute to teachers' professional development in data use (Schildkamp, Poortman & Handelzalts, accepted). Data teams of 4-6 teachers and 1-2 school leaders follow a structured eight step approach from identifying an educational problem, to taking decisions based on data for solving this problem, to evaluating the effectiveness. The procedure includes a comprehensive set of guidelines and support from an external coach from the university. The coach visits the team every 2-3 weeks to work on the steps, for a period of two years.

The implementation and evaluation of this procedure was promoted by national and local policy initiatives, through support of the Dutch Ministry of Education and a school board. Previous research showed that the data team procedure can lead to increased data literacy, data use and improved student achievement (Ebbeler, Poortman & Schildkamp, submitted; Poortman, Ebbeler, & Schildkamp, 2015). The question is, however, to what extent sustainable changes in educators' data use are achieved (Fullan, 2007). According to Spillane (2012, p.113): "Relations between data and local decision making are not elaborated or worked out in policy texts. (...) practitioners need to follow the guidance offered by data when making decisions." In this symposium, therefore, we focus on sustainability of the data team procedure from the policy but also the practice and research perspective. A representative from the Ministry, a researcher and two team leaders, will present their perspective. In conclusion, Jan Vanhoof will reflect on the findings and discuss their implications. This symposium therefore contributes to the conference theme and this strand, more specifically by discussing the role of sustainable data use for teacher professional learning and effectiveness.

Paper 1: Sustainable data use in Dutch secondary education: the national policy perspective, Etty Schippers, Dutch Ministry of Education.

Paper 2: The Quest for Sustained Data Use: Developing Organizational Routines, Mireille Hubers, University of Twente.

Paper 3: The practice of sustainable data use through data teams in our school, Anne Tappel, Carmel College Salland School.

Paper 4: Data-based decision making as a basis for sustainable educational development at our school, Christel Wolterinck Marianum School:

## PAPER 1 ABSTRACT

Sustainable data use in Dutch secondary education: the national policy perspective, Etty Schippers, Dutch Ministry of Education

## Issue and key ideas

Schools have a lot of autonomy in the Netherlands. This entails freedom in choosing the religious, ideological, and pedagogical principles on which their education is based and in organizing their teaching activities. The Inspectorate, however, holds schools accountable for their education. This means, for example, that schools need to use data to report about the quality of their education to the inspectorate.

This presentation will focus on secondary education. At the end of secondary education students take a national test. This is the only standardized assessment that is used by all Dutch secondary schools. Recently, however, the Ministry of Education has started a pilot for the development of a diagnostic assessment at the age of 14-15. The aim of this test is to give teachers and school leaders an indication of where students stand on their way to the final examination (depending on the track, 1-3 years later), regarding the core subjects of Dutch, English and mathematics. This means that schools consequently have more data available to use for school improvement, at the level of the core subjects and the classroom. Other important data sources available to Dutch schools include: school inspectorate data (e.g. lesson observations); school self-evaluation data; data on intake, transfer, and school leavers; student work; and student and parent questionnaire data. At the policy level, schools are expected to make use of all of these data to improve their education.

## Main findings and conclusion

Data use at Dutch secondary schools is going relatively well concerning the first stages of data use: 65% of the schools were measuring and analyzing student achievement in 2014 (Dutch Inspectorate, 2015), compared to only 20% in 2010 (Dutch Inspectorate, 2011). Still, there are only few schools - about 25%- that are able to translate student achievement data into action at the school and classroom level. The aim of the Ministry is that all primary and secondary education schools in the Netherlands apply the first stage of data use by 2020, and that at least 60% of the secondary schools also translate student achievement data into action. This is one of the main reasons to support the data team procedure and to also support extending research into the data team procedure in the context of the diagnostic assessment, specifically related to the core subjects in the secondary education curriculum.

During this session, a Ministry representative will further discuss their view on their policy for sustainable data use and share with you some of the latest challenges they face in this respect.

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#### **PAPER 2 ABSTRACT**

The Quest for Sustained Data Use: Developing Organizational Routines, Mireille Hubers, Kim Schildkamp and Cindy Poortman, University of Twente,

## Question and conceptual approach

Data use has become increasingly important in education, as it may improve student achievement (Datnow, Park, & Kennedy-Lewis, 2013). However, teachers often do not use data effectively (Ingram, Louis & Schroeder, 2004). Therefore, several professional development programs have been developed to support schools in effective data use (e.g. Wayman, Midgley, & Stringfield, 2006). An example of such a program is the data team procedure. An important guestion is whether this approach leads to sustainable changes in educators' data use (Fullan, 2007). Data use will only become and remain sustainable if it is implemented permanently (Desimone, 2009), for example by establishing organizational routines (Sherer & Spillane, 2011). Organizational routines are re-occurring action patterns, involving multiple actors (Feldman & Pentland, 2003). These routines consist of an ostensive aspect, which includes formal regulations and norms (e.g. scheduled data use meetings), and a performative aspect, which includes everyday practice (e.g. actual data use during these meetings). This results in the following research question:

How did schools using the data team procedure sustain their data use in terms of the ostensive and performative aspect of their organizational routines on data use?

Ten Dutch secondary schools with a data team participated in this mixed-methods study. A data team consists of 4-6 teachers and 1-2 school leaders, who meet with a coach from the university twice a month for two years (Schildkamp & Poortman, 2015). During these meetings, they work with an eight-step cyclic procedure (see Figure 1, Symposium introduction) on an educational problem prevalent at their own school, such as high grade retention rates.

The ostensive and performative aspects of their organizational routines were studied over a period of three years: two years in which the coach provided support, and the year after which support was withdrawn. Each year, a questionnaire with scales on the ostensive and performative aspect of data use (Schildkamp et al., submitted) was disseminated among teachers in the participating schools, and their policy documents were collected. Furthermore, interviews were conducted with teachers, data team members and the principal at two case study schools.

## Main findings and conclusion

Findings suggest that multiple types of development could be distinguished, reflected in both the questionnaire data and policy documents. For example, some schools built on their vision on data use each year, whereas this vision demised after the second year in others. Furthermore, the ostensive aspect influenced the performative aspect: when a principal did not develop a clear policy on data use, teachers were less inclined to use data in their everyday practice.

These results help us understand why data use was (not) sustained in schools. Furthermore, the results can be used to improve data use programs, and to support schools in facilitating data use.

## PAPER 3 ABSTRACT

The practice of sustainable data use through data teams in our school, Anne Tappel Carmel College Salland School.

## Issue and key ideas

At our school we experienced the problem that too many students transferred to a lower level of senior general education compared to the level they were assessed at finishing primary education. We approached this problem using the data team procedure (Schildkamp & Poortman, 2015), with a data team of 4 teachers, a team leader and a quality care manager. This school already had experience with a data team before, that focused on improving feedback of teachers to students.

The data team that worked on the transfer problem found that at least 70% of the students that ultimately transferred to the lower level could already be identified after the first semester. Subsequent qualitative research led to the conclusion that not only students' own attitude, but also guidance, assessment, and the organization of lessons needed to be adjusted. One of the measures recently implemented, therefore, is training teachers in helping students to direct their learning process; and to guide students in this respect. In addition, advanced organizers with explicit learning goals are now being used in the lessons

## Main findings and conclusion

Colleagues of data team members were involved throughout the process; but the data team's results were also presented to the entire school management team at the end of the two-year training period. Consequently, sustainability of the data team procedure was discussed. The school management team concluded that this method is valuable for the school and suggested that 'spin-off teams' would be implemented. The first is focused on the core subject English in the lower-track department. The chair of the 'transfer problem' data team became chair in this new spin-off team, to share her expertise with the inexperienced colleagues. The second spin-off team focuses on the subject of English in the entire school, because the results are poor in all departments. This team is also chaired by a member from the previous data team. In terms of school policy, a 'Data use project leader' was also appointed. Her role is to improve the school, making use of data, in collaboration with all departments. This is a new direction for the school, showing the importance of data-based decision making according to the school management team's vision. The project leader will have the opportunity to develop her role and make connections with other projects as developed within the larger institution of schools of the same school board.

In conclusion, this school has implemented the data team method in a way that is both connected to educational problems that teachers experience, and in a way that helps to develop their long-term vision on data-based decision making.

## **PAPER 4 ABSTRACT**

Data-based decision making as a basis for sustainable educational development at our school, Christel Wolterinck, Marianum School

## Issue and key ideas

At our school we experienced the problem of disappointing results on the compulsory arithmetic test in senior general secondary education. We approached this problem using the data team procedure (Schildkamp & Poortman, 2015), with a data team of 4 teachers and two team leaders. This data team investigated who exactly were the 'at risk' students, and took measures to support these students better. Specific measures were, for example, providing extra lessons for these students. In addition, the team focused on providing more coherence throughout the curriculum regarding this subject in general. They also focused on formative assessment to improve student learning in this subject.

## Main findings and conclusion

The data team procedure helped the school in becoming more aware of data use as a basis for educational development. More specifically, a team leader 'research and development' was appointed. This team leader is responsible for educational quality in cooperation with the department leaders, using research and data as a basis. This team leader is also part of school management, and therefore able to connect school-broad and subject-specific developments. School management aims to achieve a fundamental data use culture in the school: all kinds of decisions in the school should essentially be data-based.

In addition, two 'spin-off' teams of the first data team were established. The first team has split up to form two new teams, completed with new members. One team focuses on disappointing results for the subject English; the other is working on a school-broad problem regarding disappointing transfer rates. Teachers are enabled to participate both regarding their lesson schedule and regarding their formal responsibilities. Sharing knowledge within and outside these teams is considered crucial: presentations to school management and teachers' department and within-team meetings are part of the data teams' activities.

To further promote data-based decision making, also at the level of the classroom, this school is participating in two 'formative assessment' projects. Data-based decision making is one approach for formative assessment (Van der Kleij, Vermeulen, Schildkamp, & Eggen, 2015). Research has shown that teachers have a lack of knowledge and skills relating to formative assessment (Black & Wiliam, 1998; Jimerson & Wayman, 2015). Firstly, Marianum School and the University of Twente are working together to research how a specific form of the data team method can support teachers in professional development in formative assessment (using the diagnostic assessment as discussed by the first presenter). Secondly, the role of formative assessment in preparing for the exams and improved exam results is studied. In conclusion, this school has implemented the data team method for improvement both regarding student achievement in specific areas and the school as a whole in a sustainable way.

## PTM Roundtable

Title: Generation X School Leaders: Examining The New Generation of Leaders in Chile

Topic: Policy translations and mistranslations

Abstract ID: 3035

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 14.00-15.30

Location: Shuna

Author/Speaker: Luis Ahumada

Company/Organisation: Pontificia Universidad Católica de Valparaíso

Co-Authors: Karen Edge

> Sergio Galdames Carmen Montecinos

Presenting Author: Luis Ahumada

Presentation Format: **Round Table Discussion** 

## Abstract

There is an increasing body of literature, addressing the relevance of generation theory to understand professional motivations, performance and desired working conditions in any organization. Studies in educational settings, especially for the work of school leaders have been recently developed in England, United States and Canada (Edge, 20013; 2014), however there are not much studies addressing this issue in Latin-American or Chilean context. Focusing on Generation X (35 to 49 years old), the study explores the school leaders perceptions about their careers, educational policy and work-life balance. A document policy analysis and a multiple case study was design and implemented considering ten cases in two big cities in Chile (Santiago/Valparaiso).

## Objectives or purposes

Our study aims to create a new wider body of knowledge about the emerging generation of school leaders entering education systems around the world. This proposed research builds on existing participant rosters and, to some extent, datasets to examine the lives and work of Generation X leaders in London, New York, Toronto (ESRC No: RES-061-25-0532; Edge, 2014). In this paper we try to answer: How are young leaders experiencing their work and life balance? What do they believe they need to create sustainable leadership careers? How do Generation X leaders perceive the influence of policy on their needs, work and professional aspirations?

## Perspective(s) or theoretical framework

Research on leadership in educational contexts has been abundant in the last years (Bogotch 2011; MacBeath, 2011; Moos, 2011) and is due to the need to give answers concerning the continuous failures of many national educational policies that have not been successfully implemented locally (Dinham, Anderson, Caldwell & Weldon, 2011; Townsend, 2011).

Over the last two decades, the Chilean governments has made substantial efforts to improve the quality and equity of education offered by the public system. The role of public policy has been to support this process. In parallel, a series of mechanisms of control based on national standards aimed at assuring educational quality in all schools have been installed.

## Methods, techniques or modes of inquiry

Our study was founded on a document analysis focusing on the educational policies that directly affect the work of principals in terms of professional development, recruitment and selection, assessment, promotion and wellbeing. Also we conduced ten interviews with ten Generation X leaders in the big cities of Santiago/Valparaiso Region. Both analysis were cross in a mix method analysis.

## Results and/or conclusions/points of view

Findings are organized in four main topics that are relevant to understand the relation between the educational policy and the work of school principals. Identity, careers development, job design and work-life balance. These categories that emerge from the data are relevant to understand the policy context of Generation X school leaders in Chile.

## RCEL Symposium

Title: Researching the conditions for deep learning in teacher education programmes

Topic: Researching the conditions for effective learning

Abstract ID: 3444

Parallel Session 3 Session:

Session Date and Time: Thursday 7 January 2016 14:00-15:30

Location: Jura

Chair: Mike Jess, University of Edinburgh

## **Overview of Symposium**

Paper 1: Unifying visions of curriculum renewal and teacher education in British Columbia and Scotland: Embracing complexity, Mike Jess, Nicola Carse, Tim Hopper and Kathy Sandford

Paper 2: Complexity-Informed Courses in British Columbia, Kathy Sandford

Paper 3: Complexity-Informed Teacher Education in Scotland, Mike Jess, University of Edinburgh

## PAPER 1 ABSTRACT:

Unifying visions of curriculum renewal and teacher education in British Columbia and Scotland: Embracing complexity, Mike Jess, Nicola Carse, Tim Hopper and Kathy Sandford

In Scotland and British Columbia, recent curriculum development initiatives have been a result of the shifting demands placed on schools. In both cases, these curriculum innovations reflect a concern to make education more personalized, create diverse routes to success for all students and focus on more participatory and collaborative pedagogies. However, these innovations exist with contradicting pressures for change. Most notably, the neo-liberal critique of the education profession's claims of a specialist knowledge base for teacher education has resulted in moves towards deregulation and

market-based solutions (Conroy, Hulme, & Menter, 2013). Consequently, while reformers emphasize the practical-technical dimensions of learning to teach, the neo-liberal rhetoric threatens to undermine the efforts of university-based teacher educators who emphasize the complexity of teaching and the role of education as a public good. In this symposium, we come together to present case studies that explore how ideas from complexity thinking have helped us frame teacher education developments in four university courses in Scotland and British Columbia in our efforts to negotiate the tensions that are currently in evidence in both settings.

In this first paper, we introduce how ideas from complexity thinking have recently become more evident within the education literature (e.g. Davis, Sumara, & Luce-Kapler, 2008; Morrison, 2003) and how they resonate with contemporary ideas from social constructivism (Bruner, 1990), situated learning (Lave & Wenger, 1991) and connectionism (Cilliers, 1998). In the paper, we highlight how complex systems are not pre-programmed by an external designer, rather how all of the parts of the complex system self-organize and interact with each other within their own structure and also with the external environment in which they operate (Prigogine, 1976). Consequently, a key for the complex learning system is the idea of emergence that is a result of the interaction between components and not from characteristics inherent to the components themselves. Complexity thinking focuses on how relationships between parts give rise to the collective behaviours of a system and how the system interacts and forms relationships with its environment and other systems. Accordingly, we discuss how human interactions, at all levels of society, form complex social systems that self-organize around distributed information networks that cooperate and compete for scarce resources (Cilliers, 1998).

Subsequently, in this symposium, we discuss how complexity thinking considers learners (children, students and teachers) as active agents engaging in a learning process that is self-organising, emergent, collegiate, non-linear and uncertain. The papers that follow consider how use complexity thinking is a way to both describe how teachers' and students' practices develop over time and how curriculum emerges in context with learning as a transformative process.

## **PAPER 2: ABSTRACT**

Complexity-Informed Courses in British Columbia, Kathy Sandford

## Issue

For teacher education programs to act as scaffolds in supporting new teachers to become informed, creative and innovative members of a complex and valuable profession, we need to re-imagine how teacher education programs operate. We need to consider how courses are conceptualized and connected, how learning is shared and how knowledge, not just "professional", but embedded knowledge in authentic contexts is understood, shaped and re-applied. In this paper we reflect on a case study of instructors' lived experience of locally developed programs in secondary teacher education called Transformative University of Victoria teacher education (TRUVIC). From this reflection we offer a relational "complex" approach to knowing as an alternative to more mechanistic "complicated" explanations that limit teacher development.

## **Conceptual Approach**

The critique of Cartesian dualism with the resulting Newtonian mechanistic view of reality and the associated separation of mind from body, of knowledge from context, has led to a rethinking of how we know what we know and how we understand learning (Capra & Luigi Luisi, 2014). Agreeing with contemporary learning theorists such as Barab & Plucker (2002) we have come to the conclusion that we need to consider a relational approach to knowing that is an alternative to these more mechanistic explanations. Such a perspective frames human learning and the cognitive processes it entails as distributed in the world and our interactions in that world. From this perspective we have adopted a complexity think (CT) framework to interpret the TRUVIC approach. CT is a theory of change and emergence and the dynamics of change within a system (Ramiah, 2014).

## **Main Findings**

In the case study a form of systems thinking developed for both instructors and students as they were continually 'becoming' teachers within the dynamic context of the school. For this to happen the conditions to support the features of a complex system were identified and nurtured. As noted by Davis and Sumara (2006) complex systems demonstrate several features such as self-organized, bottom-up emergent and short-range relationships, these will be highlighted within this paper.

#### Conclusion

Learning to be a teacher by going to a school where teaching happens has long been a belief of students, teachers and teacher educators. However, how to learn to become an 'effective' teacher is not a case of simply observing and copying another person or applying theories of learning and teaching. It involves a continuous circular process where both knower and known are brought forth and co-specify each other (Proulx, 2008). At the end of the course students often admit how anxious they were to learn in a school context, about being nervous to take the opportunity to "be a teacher." At some point, with multiple opportunities and with peers sharing similar feelings through forums and personal exchanges, they began to just take the leap and take advantage of the opportunities to work with children and teachers, to integrate their assignments, to challenge themselves to "embrace the chaos".

## **PAPER 3: ABSTRACT**

Complexity-Informed Teacher Education in Scotland, Mike Jess, University of Edinburgh

#### Issue

Within complexity thinking, learning is perceived as a non-linear process where predictability and unpredictability coexist. Accordingly, within this paper we explore what this looks like in practice within the context of teacher education programmes.

## **Conceptual Approach**

We suggest that learning experiences within teacher education contexts should be designed to incorporate the:

- development of the knowledge and skills needed to support notions of order and structure;
- facilitation of diversity and unpredictability; and
- creation of connections within and beyond the curriculum.

Incorporating these principles into learning experiences resonates with the key tenets of complexity - similarity, diversity and connectivity (Morrison, 2003). By supporting the self-organising, non-linear and recursive nature of learning these principles promote deep learning that can be applied and transferred across contexts. The paper highlights the need to recognise the situated nature of these learning experiences as they are influenced by immediate and nested factors.

## **Main Findings**

This paper discusses how complexity thinking has been used to inform pre-service and in-service teacher education courses in two Scottish universities. The first part of the paper explores how complexity principles implicitly informed the development of a physical education course in a pre-service primary teacher education programme. The paper discusses how, in the first iteration of this course, little direct consideration was given to notions of complexity. However, as the delivery of the course progressed it was apparent that complexity principles had implicitly informed the design of the course and were being applied by the teacher educator to inform the approach to teaching and learning. Examples of this implicit inclusion of complexity and how it was incorporated into the course delivery will be discussed. Reflecting on the researcher's own experiences of working with complexity thinking the paper also discusses how presenting initial teacher education students explicitly with complexity language and concepts was perceived as too problematic.

The second part of the paper discusses how, over a number of years, a masters-level programme in primary physical education has explicitly employed complexity principles. As the programme developed, complexity principles were introduced and consolidated in a manner that was non-linear and messy. The paper reflects on how both the teaching team and students grappled with the incorporation of the language and concepts of complexity. Recognising the recursive evolving nature of the programme, the paper then discusses how the teaching team now scaffold complexity thinking in a more gradual and iterative manner that has proved to be more successful. This is evidenced by reflections on the final sessions of the programme when teachers discuss how the complexity principles have been both observed and applied within their own teaching context.

## Conclusion

The paper concludes by discussing what can be learned by comparing and contrasting these approaches to teacher education, within British Columbia and Scotland, which are underpinned by complexity thinking. The paper will also reflect on how these efforts within teacher education are attempting to make tangible links between theory and practice.

# **SE Paper Session**

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Barra

Chair: Professor Tony Finn

## PAPER 1 ABSTRACT

System-Level Support for School Improvement - What Makes a Difference? Hamish Valentine, Peter Hart and Clare Scollay Catholic Education Western Australia

Although school effectiveness has been gaining considerable attention among researchers and policy-makers alike, debate remains about the practices that lead to improved school effectiveness. Research suggests that the guality of system-level services can make a difference to the outcome of school improvement strategies. In this paper, we investigate whether changing the delivery of services to schools in a way that: (a) tailors them to schools' needs; and, (b) locates them close to the school community, results in increased school effectiveness. We evaluated a service delivery trial that changed the provision of system-level services from a 'one size fits all' approach to a more tailored approach that reflected the needs of individual schools and ensured that system-level service providers were located in school communities. In a system of 110 Australian schools, 20 participated in the trial and 90 served as a comparison group.

Two waves of longitudinal data were obtained from 226 leaders, 4,000 staff, and 7,476 students in the 110 schools. We found that there was a significant improvement in the quality of service delivery ratings obtained from school leaders in both cohorts. However, the improvements were four times greater in the trial schools. Notwithstanding the improvements in service delivery, we found that this did not translate to improvements in school effectiveness. For example, we did not find improvements in school climate, staff engagement and morale, the quality of teaching, or a range of student outcomes.

To investigate further, we used the data from all schools to examine the differences between schools that improved and those that did not. We found that the quality of service delivery was not a factor in differentiating these schools. Longitudinal regression analyses showed that change in a school's organisational climate contributed to change in the quality of teaching and a range of student outcomes. Analyses of variance showed that in the cohort of improving schools there was a stronger focus on learning and development, and staff had a clearer sense of purpose. The results also showed that staff felt more supported by their leaders and had a greater sense of empowerment. In the declining schools, by comparison, staff had significantly less focus on learning and development, were not on board with the school's goals, and did not work collaboratively to achieve those goals. In these schools, staff felt less supported by their leaders and less empowered.

Overall, these results demonstrate that merely improving the quality of service delivery is not sufficient to bring about sustained improvements in school effectiveness. Instead, it is necessary for systems to implement school improvement strategies that focus on building a team-based learning culture that engages staff and enables them to improve the quality of teaching and student outcomes. Accordingly, the education system has now designed and implemented an action learning school improvement strategy that aims to support school communities in building the cultural behaviour that will deliver these outcomes. Early feedback from this trial has been very positive. The implications for system-level support for school improvement will be discussed.

#### PAPER 2 ABSTRACT

Redesigning system processes for school improvement, Rosemary Vellar, Catholic Schools Office, Diocese of Broken Bay

The Catholic Schools Office (CSO) of the Diocese of Broken Bay (the 'Diocese') is located in Sydney, New South Wales (NSW), Australia. The Diocese is responsible for the education of approximately 18,000 students across forty-four systemic schools (36 primary schools; 7 secondary schools; one K-12 college).

Integral to school improvement in the CSO, is the local School Improvement Plan (SIP) and participation in school review processes. The SIP, driven by three-year strategic goals articulated in terms of student learning outcomes, is intended to focus the pedagogical leadership of each school team. The purpose of school review is to provide assurance to the CSO of a school's compliance with regulatory bodies and of the quality of a school's educational program. The approach taken by the CSO in the mid-2000s to monitor the compliance of its schools paralleled the inspectorial approach adopted by the NSW regulatory authority (BOSTES). This approach was both labour and resource intensive with the impact on school improvement being questionable.

A system level challenge existed to re-design accountability processes in a way that more explicitly served and supported each school's locally developed SIP. This was actioned through the alignment of the SIP and school review cycles culminating in a six-year cycle, with two three year phases. In 2011, the CSO began exploring a range of options in designing a more progressive model of review with both regulatory requirements and quality assurance. Data collected from focus groups, surveys and external reports over the period 2011-2013, indicated that schools were well-placed to move to a more collaborative style of review.

In 2014, a pilot program of peer and self-review with regard to regulatory requirements was conducted with ten primary schools. In 2015, the pilot program was expanded to include all schools. Evaluations from each group were favourable towards the new model with the majority of comments focussing on the benefits of sharing practice in collaborative environments whilst at the same time ensuring that regulatory requirements had been met.

Complementing this approach, the CSO also took the next step to review its processes with regard to quality assurance. In 2015, a group of eight schools took part in a pilot program to evaluate their learning journey using the Australian National School Improvement Tool (NSIT) in an area related to their SIP. The NSIT is characterised by performance levels of low, medium, high, and outstanding across nine domains which enable schools to make judgements about their learning over time. The self-review design is intended to build precision in pedagogical leadership focused on the SIP goal and allows for deeper inquiry into school-based evidence for improvement.

The three plus three system level design of review now aligns to the local SIP cycle of each school, allowing system resources to be assigned at three-year intervals to support the pedagogical leadership of school teams as well as a framework for system level monitoring and accountability.

## **PAPER 3: ABSTRACT**

A Genuine School Improvement Miracle in China: a Case Study, Hechuan Sun, Xiaodong Wang and Rui Jin, Shenyang Normal

This study is a part of the research project funded by China National Social Science Foundation (本文属于中国国家社科 基金"十二五"规划教育学国家一般课题"教育督导评估指标体系的国际比较研究"'BDA120028\_的部分研究成果). In this study Hechuan Sun, Xiaodong Wang and Rui Jin present a remarkable case study which took place in mainland China. The authors put their focus on the instructional leadership or leadership for learning perspective of Principal Qisheng Cui, the Head of Dulangkou Secondary School at Chiping County in Shangdong Province of China, particularly on the strategies that he used to turnaround a "bottom" school into a "top" effective one. The research methods used in this study are both qualitative and quantitative. In the qualitative part, the authors described the past, the present of Dulangkou Secondary School and its key improvement process. These included Principal Qisheng Cui's clear goal-setting, visionbuilding, strict accountability, his new classroom instructional model, the great enhancement of the student outcomes, the professional development of teachers and leaders, etc. In the quantitative part, the authors went one step further to invest

what other school Principals thought about "Dulangkou Miracle" and the crucial factors for its success. 34 Principals from 34 secondary schools were interviewed and filled in the questionnaires. They all had the experience of visiting Dulangkou Secondary School before. The outcomes of the interviews and questionnaires were revealed from three dimensions (see details in our full paper and our presentation). The findings of this case study strongly argue that instructional leadership or leadership for learning matters in schools in mainland China! School leadership does play the most crucial role especially in changing a failing school into a most effective one.

## **PAPER 4 ABSTRACT**

Perceptions of School Effectiveness and School Improvement in Abu Dhabi, Nafla Al Ahbabi and Tony Townsend, University of Glasgow

## Statement of the Problem

After nearly 15 years of educational reform in the United Arab Emirates (UAE) there is concern that schools are not as effective as they should be to bring the country in line with other countries when it comes to student achievement. Although schools are provided with modern human and physical resources in an effort to achieve the officially desired objectives, inspection reports highlight various dysfunctions and areas of under-performance, including weak school leadership and limited academic outcomes. These shortcomings have guided education policy of the Abu Dhabi Educational Council (ADEC) as identified in its 2020 vision that seeks to revamp current practices and choices in schools.

## **Purpose of the Study**

This study considers the perceptions of principals, teachers, students and parents about how to define an "effective school", what characteristics are associated with effective schools in Abu Dhabi, and what schools might do to improve 'school effectiveness'.

## Methodology

The study uses a sequential exploratory mixed study strategy that combines and cross-validates quantitative and qualitative data involving 46 school principals, 136 teachers, 142 students and 138 parents.

## **Research Questions**

The following research questions guide the study:

- 1. What is the perceived meaning of school effectiveness held by stakeholders in secondary schools in Abu Dhabi, UAE?
- 2. What factors are perceived by stakeholders as being important elements of school effectiveness?
- 3. What strategies might be implemented to improve school effectiveness in the UAE?

## **Summary of Findings**

A major perception of stakeholders in Abu Dhabi was that effective schools should focus on the development of Islamic culture

- There was an incomplete understanding of the meaning of 'school effectiveness'
- There was an absence of a clear vision for schools and a framework to help schools achieve effectiveness
- There was an absence of accountability systems needed to promote schooling effectiveness.
- · There was a tendency to lead schools in a managerial transactional way without the effective involvement of parents or the local community
- There was a reticence on the part of the school principals to collaborate with the teaching staff.

#### Conclusion

With the perception that a major role of an effective school in the UAE is to "support the development of an understanding of Islamic principles", there exists a clear need among public school communities in UAE to raise awareness of the other issues associated with 'school effectiveness' and the conditions necessary to implement improved teaching and learning. School principals saw themselves and were seen as managers rather than leaders, thus flagging the need for consideration of providing them with the training necessary to become proactive decision-makers as a means of improving school effectiveness. This will help push public education in UAE forward in a parallel direction to international best practices, which will ultimately promote enhanced school performance among UAE's future citizens and lead to the realization of UAE's 2020 Vision.

## **Mixed Paper Session**

Parallel Session 3 Session:

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Rockall

Chair: Celia McArthur

#### PAPER 1 ABSTRACT

Collaborative activities shaping teachers' use of learning outcomes and teacher learning, Roos Van Gasse, Kristin Vanlommel, Jan Vanhoof and Peter Van Petegem, University of Antwerp

The collaborative character of using non-cognitive and cognitive learning outcomes is generally seen as an essential feature for teachers, in order to make valuable changes in their daily practice (Hubbard, Datnow, & Pruyn, 2014; Wayman, Midgley, & Stringfield, 2006). Therefore, the assumption arises that the collaborative character of teachers' use of learning outcomes facilitates their professional learning. Despite the interest attached to the collaborative character of teachers' use of learning outcomes, in this context little in-depth research is available on teachers' collaborative learning activities and about their professional learning. Therefore, this study investigates (1) teachers collaborative learning activities on the basis of pupil learning outcomes, (2) how teachers differ in learning activities they undertake, (3) professional learning results of teachers on the basis of collaborative learning activities, and (4) how collaborative learning activities around pupil learning outcomes are related to teachers' professional learning.

Since teachers' use of learning outcomes is situated and thus culturally bound, one cannot expect that learning activities will be merely individual or interactive (Kwakman, 2003). Therefore, Little (1990) categorizes four learning activities, depending on their level of interdependence between teachers. In storytelling activities, teachers gather information through interaction and operate nearly complete independent. Helping refers to giving or asking help or advice, which incorporates a high level of independence. Sharing implies the distribution of data, materials and methods or the open exchange of ideas and opinions. A higher level of interdependence is present. Conjunction or "encounters among teachers that rest on shared responsibility for the work of teaching" incorporates the highest level of interdependence among teachers (Little, 1990).

We draw on work of Zwart, Bubbels, Bolhuis & Bergen (2008) to map teachers' professional learning to establish both changing and maintaining aspects of teaching into our conceptualisation of professional learning. According to Zwart et al. (2008), 7 types of professional learning derive from teachers' learning activities at the workplace: new ideas, conceptions or beliefs, confirmed ideas, conceptions or beliefs, increased awareness, intention to change behavioural practice, changed ideas of the self, new ideas and intentions to change behavioural practice, and confirmed ideas and intentions to change behavioural practice.

To answer the aforementioned research questions, a qualitative study with semi-structured interviews was designed. Interviews took place with 14 school teachers out of 6 secondary schools in Flanders. The interviews were transcribed ad verbatim and coded and analysed using Nvivo 10 software.

In this paper, we investigate how collaborative activities (storytelling, helping, sharing, conjunction) are involved in teachers' use of learning outcomes to improve their practice. Accordingly, we examine how these activities shape teachers' professional learning and how differences in teachers' collaborative activities can be related to differences in professional learning. This study contributes to the research field by gaining more insight into the collaborative character of teachers' use of learning outcomes and into the relation between teachers' collaborative use of learning outcomes and their professional learning.

#### **PAPER 2 ABSTRACT**

A case for a creative approach in Scotland's educational leaders?, Marie Beresford-Dey, University of Dundee

Creativity is recognised as a skill required for the multiple challenges faced in the 21st Century and is a growing concern within organisations around the globe. It is widely accepted as a key component to highly successful organisations, teams and individuals. Creative thinking is not a new concept, nor is leadership. Within both realms it has been argued that individuals are born to be creative or to lead others. However, literature informs us that both strands can be learned and developed.

Strong educational leadership is fundamental to the success of a school in improving attainment and, as a result, Scotland is currently undergoing change processes in relation to educational leadership development programmes. Whilst welcoming these changes, caution must be taken to ensure that old approaches are not simply repeated. Senge (2012) argues that education is 'more immune to innovation' than other sectors but is required for a sustainable future, particularly when thoughts turn to closing the attainment gap (pp 44-45). In the recent publication of the Draft National Improvement Framework for Scottish Education (Scottish Government, 2015) it is stated that the framework will 'give room for innovation in schools' (p.5), unfortunately it lacks any further discussion surrounding creativity and innovation in relation to school leadership. This leads one to question the true extent in which creativity and innovation are valued by those implementing national policy.

Within education the wheels of creativity are beginning to turn, we realise the need for creative thinking, particularly in our children and young people, but creative thinking should thread through the whole school system, including leadership. Perhaps the notion of creativity lends itself to a feeling of uncertainty and ambiguity which is often not tolerated in education although creativity does not always mean that we have to change thinking, practise and organisation on a grand scale (Harris, 2009). Therefore, the author seeks to address the questions:

Do Scotland's primary headteachers see creative thinking as an essential ingredient within their practice?

Are primary headteachers encouraged to be creative leaders?

What impact does creative thinking (or its absence) have on Scotland's primary headteachers?

Do the current trends of educational leadership preparation programmes promote creative thinking in leaders within primary education?

As part of the author's doctoral studies a literature review was carried out. A keyword search was utilised to locate relevant journal articles for the period of 2010-2015. Despite the importance placed on creativity and educational leadership the review found a lack of research literature in relation to combining these two themes within the field. Further empirical studies are required to establish a greater understanding of the relationship. These findings should demonstrate the need for creative thinking skills to underpin the development of Scotland's educational leaders.

It is the intention of the author to share the research to date and pose engaging questions in relation to educational leadership and creative thinking within Scotland's primary sector.

## PAPER 3 ABSTRACT

Five Myths of School Turnaround That Must be Remedied for Meaningful, Lasting Change, Coby Meyers and Mark Smylie, University of Virginia

## Framing of Problem

We have identified many school turnaround myths continuously perpetuated because too many actors in all arenas appear convinced that steadfastness in current thought, behavior, and action will eventually be rewarded. We continue to ignore organizational change literature that makes clear that any lasting traction requires scrutiny - and likely change - of norms. Many school turnaround perspectives, practices, and policies appear contrary to organizational theory and the reality on the ground.

## **School Turnaround Myths**

There is nothing to learn from failing schools. School turnaround literature focuses solely on rapid improvement of lowperforming schools (Herman et al; 2008; Author). This singular focus on future success sacrifices understanding failure - how a school arrives at the point of needing turnaround. Defining and pursuing success can only fully be understood in conjunction with and understanding of failure.

## Turnaround can be achieved through drastic disruption.

Drastic disruptions to schools have gained considerable political traction. That many of them are implemented jointly demonstrates the urgency of school turnaround. Significant funding. New teachers. New leadership. All of these are occasionally necessary. But without accounting for school context, most of these drastic disruptions have little lasting positive impact on schools.

## The turnaround trajectory is clear.

Little thought is given to where the turnaround event is supposed to lead. We often continue to rely upon the model established with effective schools research literature of the 1980s, which is replete with examples of good schools. Efforts to transport those practices into low-performing schools seldom result in successes.

## Turnaround is a problem of individual schools.

Case study research suggests that districts might be missing players while schools descend and then try to pick themselves up from the mat (Peck & Reitzug, 2014). American federal stipulations appear to advance this disconnect. Districts have been responsible for little in terms of assisting schools via planning, developing structures, providing meaningful resources, etc.

## Fundamental, revolutionary, lasting change can happen quickly.

Conventional thought on the topic has suggested three years should be sufficient time for drastic improvements to be realized (Herman, et al., 2008). Some statistical analyses to identify successful school turnaround has followed suit, expecting demonstrated student achievement growth in short windows (for example, Author). There is a difference between increasing scores quickly and building an efficacious organization for sustained success.

## Scientific Significance

Collectively, these considerations should help guide more thoughtful, systemic efforts to turn around low-performing schools.

## References

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# **TE Paper Session**

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Malin

Chair: Moyra Boland

## PAPER 1: ABSTRACT

Do beginning teachers trained in professional development schools show better teaching skills than beginning teachers trained in ordinary schools? Willem van de Grift and Michelle Helms-Lorenz, University of Groningen, Netherlands

## Conceptual approach

Since the 1980's, the education of pre-service teachers has shifted, internationally, from being mainly based at the teacher training centre of an university, to being mainly based at the future workplace of these teachers: the school (Browne, &Reid, 2012; Zeichner, 1992). The collaboration between schools and universities in improving teacher education varies greatly across institutions worldwide (Callahan, & Martin, 2007), but the general aim of these partnerships, called here professional development (PD) schools, is to develop school practice of pre-service, beginning and experienced teachers (Nath, Guadarrame, & Ramsey, 2011; Darling-Hammond, 2005).

- Research question: Do beginning teachers trained in professional development schools show better teaching skills than beginning teachers trained in ordinary schools?
- Sample: Almost 200 pre-service teachers working in 31 PD-schools and 66 ordinary schools for secondary education were observed by specially trained observers during the last year of their teacher training. One and two years later, the respectively 1st and 2nd year certified beginning teachers were observed again.
- Method: The ICALT observation scale used for observing the quality of teaching consists of 31 dichotomous items. The ICALT observation scale satisfies the assumptions of the Rasch model and has predictive value for students' academic engagement (Van de Grift, Helms-Lorenz & Maulana, 2014). The minimum score (Warm's θ) is -7 and the maximum is 5.
- All observers were trained during half a day until they reached sufficient consensus with each other and with an external criterion while observing the same video-taped lessons.

## Results

- Student teachers in PD-schools show no significant differences in teaching skill in comparison with student teachers in non-PD-schools.
- 1st year teachers in PD-schools show significant largely better teaching skills compared to1st year teachers in non-PD-schools. The last part of table 1 brings along some questions: Are PD-schools more selective for both student teachers and 1st year beginning teachers?
- 2nd year teachers in PD schools show better teaching skills than 2nd year teachers in non PD-schools, too (medium effect size). The fact that the difference is not significant might be due to a power problem in this small subsample.

## Conclusion

Beginning teachers, trained in professional development schools, show in their first year as a beginning teacher a significantly higher level of teaching skill compared to beginning teachers trained in ordinary schools. This might be partly due to a better selection of PD-schools. In the second year the same trend (although not significant) is found.

#### PAPER 2 ABSTRACT

Effects of expert feedback on student teacher's reading instruction quality, Henk van den Hurk, Thoni Houtveen, Mirjam Snel and Anja Kamphuis, Utrecht University of Applied Sciences

#### Introduction

Teaching student teachers the required knowledge base for the effective instruction of reading is one of the important tasks of a teacher training college. Student teachers however, learn how to teach in the educational practice, during 'workplace learning'. We can't take for granted, however, that these student teachers apply what was taught in theory at the teacher training college in their apprenticeship. Nor is it obvious that experiences gathered in workplace learning are always in line with the effective teaching knowledge base. Therefor it is important to seek for closer connections between 'what students learn in teacher training' and 'their instructional behaviour during workplace learning'. Different models to strengthen this connection are proposed, one of which is a model for data-use (Mandinach, Honey, Light & Bruner, 2008). In this model the connection between theory and practice plays a pivotal role. In an earlier study we implemented this model in the curriculum, thus enabling student teachers to significantly improve the quality of their reading lessons. (Van den Hurk, Houtveen, Van de Grift & Cras, 2014). The cooperation between the participants was not optimal. The participating teachers were not trained to use the observational instruments, nor were they trained in providing the essential feedback. This leads to the following question:

#### Research question

Is it possible to further improve student teachers' teaching skills by training their mentors' observation and feedback skills?

## Research method

The present study was designed as a quasi-experiment in which 10 student teachers on 6 different schools for primary education were assigned to the experimental condition. Subsequently the 10 staff members mentoring these students were involved. A control group of 10 student teachers and their mentors was matched from the total group of first year students. In both conditions the same data-use model was implemented. In the experimental condition however, the classroom observations and feedback conversations were carried out by trained mentors. The training consisted of two 120 minute

The student teachers teaching skills were observed with three event-sampling instruments: Quality of interactive book reading (16 items); Keeping pupils in the flow of the story (16 items) (Houtveen, Brokamp & Smits, 2012) and Fostering confidence in pupils (9 items) (Houtveen & Booij, 1994). The items in each scale were scored according to the extent to which the desired behaviour was observed. The quality of the mentors' feedback on the observed lessons was measured by a questionnaire (20 items, scored on a six point scale).

## Data analysis and results

The reliability of the instrument is (re)tested using the total sample of students and teachers. In order to check if the mentors in both conditions differed with respect to the quality of the provided feedback, effect sizes (Cohens' d) are calculated. Subsequently the student teachers' growth in teaching skills in the experimental and the control condition will be compared. Differences in instructional skills between experimental condition and control condition at the end of the experiment are calculated using Cohens' d. The results will be presented at ICSEI-2016 in Glasgow.

## PAPER 3 ABSTRACT:

Strengthening Teacher Candidates and School's Ability to Understand Each other: Adding Technology to the Orientation and Recruitment Process, Dale Mann, Professor Emeritus, Columbia University Interactive, Inc and Kenneth Eastwood Superintendent, Middletown Public Schools, Middletown, New York

#### Issue

New teachers are often hired after a review of paper credentials and interviews. While necessary, both are subjective processes and often require discerning prospective effectiveness among vastly different backgrounds, for example, comparing teaching records in big and little schools, in schools serving low and high-income families, in schools at different organizational levels, etc. Especially in high-demand districts like Middletown, NY, candidate teachers have little appreciation or unrealistic expectations for their prospective work environments. Neither candidates nor schools are well served by current recruitment processes.

## Conceptual underpinnings

Web-enabled computer simulations can replicate the demands of classroom teaching and give candidates and employers additional insight into how candidates will perform in the replicated world of teaching.

## **Findings**

Middletown, NY, a nationally-recognized transformed majority-minority school district is using part of a US Department of Education grant to create computer simulations to acquaint teacher candidates with the demands of teaching in the district.

The simulation presents 30 situations in full-motion video that require the candidate's action, show the results or consequences of their decisions and score the user according a profile adapted from Charlotte Danielson's framework for teaching.

## Distribution of Teacher Candidate Decision Points by Danielson Domains

Domain and activity # of decision points

Domain 1: PLANNING AND PREPARATION (7 total, 23%)

- 1a. Demonstrating knowledge of content and pedagogy √√
- 1b. Demonstrating knowledge of students √√
- 1c. Setting instructional outcomes √
- 1d. Demonstrating knowledge of resources √
- 1e. Designing coherent instruction √
- 1f. Designing student assessments

Domain 2: THE CLASSROOM ENVIRONMENT (13 total, 43%)

- 2a. Creating an environment of respect and rapport √√
- 2b. Establishing a culture for learning √√√
- 2c. Managing classroom procedures √√
- 2d. Managing student behavior  $\sqrt{3}\sqrt{3}$
- 2e. Organizing physical space √

Domain 3: INSTRUCTION (5 total, 17%)

- 3a. Communicating with students √
- 3b. Using questioning and discussion techniques √

- 3c. Engaging students in learning √
- 3d. Using assessment in instruction √
- 3e. Demonstrating flexibility and responsiveness √

Domain 4: PROFESSIONAL RESPONSIBILITIES (5 total, 16%)

- · 4a. Reflecting on teaching
- 4b. Maintaining accurate records
- 4c. Communicating with families √
- 4d. Participating in a professional community √
- 4e. Growing and developing professionally
- 4f. Showing professionalism √√√

#### Conclusion

Participants will have a web-link to the video which they can review in real-time and which will be discussed by Dr. Eastwood and Dr. Mann.

#### PAPER 4 ABSTRACT

Observing growth of teaching skill of professional practice of beginning teachers during their first two years, Willem van de Grift, Michelle Helms-Lorenz and Ridwan Maulana, University of Groningen, The Netherlands

#### Conceptual approach

We all know that beginning teachers still have to learn a lot after graduating as a certified teacher. But how much do they learn during their first years?

## Research question

How much do beginning teachers grow in teaching skill during their first two years?

### Sample

195 student teachers working in 97 schools were observed by specially trained observers during the last year of their teacher training. One and two years later, the respectively 1st and 2nd year beginning teachers were again observed.

#### Method

The ICALT observation scale was used for observing the quality of teaching. An item example is: 'The teacher adapts instruction to relevant student differences'. The ICALT observation scale satisfies the assumptions of the Rasch model and has predictive value for students' academic engagement (Van de Grift, Helms-Lorenz & Maulana, 2014). The scale has a minimum score (Warm's θ) of -7 and a maximum score of 5. All observers were trained during half a day until they reached sufficient consensus with each other and with an extern criterion while observing the same video-taped lessons.

# Main findings:

In the cross sectional analysis we found in the first year 195 student teachers, in the second year 65 1st year teachers, and in the third year 44 2nd year teachers.

The 195 student teachers reached in the last year of their teacher training on average a score (Warm's θ) of .98 on the ICALT observation scale. In the second year the average score increased with 42% of a standard deviation to 1.78 and decreased in the third year to 1.49.

The loss of teachers in the cross sectional analysis is due to not graduating, leaving the school of their internship for another school or for something else than the teaching job, or no longer willing to participate in this study. So the changes found might be due to sample changes. In the longitudinal analyses we followed the 45 (44) student teachers who remained in the sample during three years. The 45 student teachers reached in the last year of their teacher training on average a score of .83. In the second year of the average score increased with 48% of a standard deviation to 1.65 and decreased in the third year to 1.49.

#### Conclusion

During their first year as a certified teacher, beginning teachers grow almost half a standard deviation in teaching skill. This growth in teaching skill seems to stagnate in de second year.

# **TE Paper Session**

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Hebrides Location:

Oscar Odena Chair:

### PAPER 1 ABSTRACT

The Importance Of Trust To Research Informed School Improvement In England: Findings From A Social Network Analysis Of 43 English Schools, Chris Brown, Alan Daly and Yi-Hwa Liou, UCL Institute of Education, London.

This paper examines what factors support: 1) the use of research evidence in practice by schools in England; and 2) the degree to which the school improvement strategies of English schools are based on research and evidence. To do so, we address three objectives. First we examine the global drivers for schools to now use and share effective practice, including that informed by research and evidence (RE). Second, we outline the Research Learning Communities project and model data from the project to show how trust, organizational learning (OL), and the frequency and quality of teacher professional interactions facilitates research-informed improvement. Our final objective is to examine the implications of our analysis for school leaders and at the system level.

Our study was guided by the following research questions:

- RQ1: what is the relationship between a high trust environment and teachers' perceptions of the RE use climate in their school?
- RQ2: to what extent is the presence of organizational learning within schools associated with teachers' perceptions of the school's RE use climate?
- RQ3: to what extent are perceptions of the RE use climate positively related to the frequency and quality of professional interactions reported by teachers?

To answer these, a social network survey was administered to teaching staff within schools involved in the project. A total of 828 teachers from 43 schools joined the survey, resulting in a response-rate of 75%. The data include perception scales, social network relations, and demographics background.

Our analysis examines the importance of teachers' perceptions their of school's climate of RE use (School's RE Use Climate), as explained by the actual pattern of professional interactions around teaching and learning (TLE Network – frequency and quality of interaction), as well as perceived climate of trust (Climate of Trust) and organizational learning (Climate of OL). We used the UCINET social network software program to calculate degree centrality for both frequency and quality of interaction. Model specifications are provided in the full paper.

Within the paper network sociograms from sample schools will be used as illustrative examples of the study's findings. The sociograms illustrate that the schools with a higher RE Use climate tend to be relatively more dense and of greater average degree of professional connections regarding exchanging expertise in teaching and learning.

Our quantitative findings suggest several positive relationships with teachers' perceptions of RE use climate at their schools. Specifically, our models suggest that teachers who reported their school as having a positive learning climate and high trust environment also possess more frequent (weekly) and useful professional connections with colleagues around teaching and learning. These schools also tended to report higher levels of teaching-related activities that are more research-informed.

Overall our study provides vital new perspectives on the role of trust in achieving school self-improvement as grounded in the use of research. In particular, our results illustrate the importance of trust in facilitating the types of relations needed to provide teachers with access to the research-centered social capital that resides within a school.

#### **PAPER 2 ABSTRACT**

Towards as a useful paradigm for teacher-research, Oscar Odena, University of Glasgow

This paper considers some paradigms of educational research, and their relation to teachers' own research in their work settings. The characteristics of the positivist, interpretive and critical paradigms are examined, with reference to three cases of teacher-research projects. A participatory paradigm is considered with reference to the projects' participatory elements. The projects were carried out by teachers who were seconded on a part-time basis to their local authority to carry out research over the academic year 2014-2015. The secondments were funded as part of a successful partnership bid to the Scottish Government Initiative to Facilitate an Increase in Masters-Level Learning, submitted by Education Services, Dumfries and Galloway, Scotland (led by Brydson and Thin) and the School of Interdisciplinary Studies at the University of Glasgow Dumfries Campus (led by Clark and Odena). After the teacher-researchers were recruited through an open competition they organised themselves in a self-directed community of practice calling on the support of others when needed. The teacher-researchers carried out their educational research autonomously, based on their own professional interests but also local authority priorities concerning vulnerable learners and reducing barriers to learning. The outcomes of individual projects with particular reference to looked-after children, early intervention, support needs and parental involvement were discussed in a symposium at the annual conference of the Scottish Educational Research Association (Gauld, Odena, Beck, et al. 2015).

This paper discusses relevant contemporary literature on action research (Heron & Reason, 2009; Odena, 2014) and argues that for teacher-research, the participatory paradigm is more appropriate than others. Following some of the areas suggested by Cain (2011, 2012) the paper considers how teacher-research in this paradigm: (a) includes self-study, (b) involves students, (c) considers the influence of context, and (e) engages with, and contributes to, the development of theory. The paper argues that teacher-research is essentially research for action, although the characteristics of 'action research' as described in the literature are not always evident. The conclusion outlines the benefits of moving towards a participatory paradigm for teacher-research that goes beyond the positivist-interpretive dichotomy, if the aim is to include enquiry as part of teachers' professional learning.

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#### PAPER 3 ABSTRACT

Teacher Professionalisation: Contexts and Priorities - From evidence-based to research informed teacher professionalism, Chris Brown and David Godfrey, University College London Institute of Education, UK

This paper will outline the findings of two extant research projects which advocate and actively engage in approaches to shift educational discourse surrounding research use in practice from an expectation of teacher practice being evidence based, to one where teachers engage in research informed teacher professionalism.

The first half of the session will be used to argue for the need to view teacher professionalism as allowing for a high degree of autonomy and judgement. A dominant discourse exists in England around the relationship between evidence and practice that still prescribes a technical-rational view of professionalism. This sees evidence as producing truth and the professional as a technician whose job is to unquestioningly implement approaches based on 'what works'. Teacher's practice is, and should be, however, informed by different types of overlapping knowledge, professional expertise and judgement, management and pupil data and research evidence. These should all take into account classroom context and the wider needs of learners. Indeed, the term 'evidence' itself can be problematic, as evidence can be produced to support almost any proposed course of action in education. As such, evidence should 'inform' rather than dictate practice, with a better conceptual term being 'research-informed practice' as this also allows for the inclusion of theory, education as a process not simply one of outcomes and enables teachers to find a voice and base their actions on values. In support of this argument, evidence will be outlined from case studies of English secondary schools to show how the right organisational, leadership and professional environment can help promote such research informed practice within the context of a schools eco-system.

Second, to highlight effective ways to achieve research-informed practice, we will report on a two-year knowledge mobilisation project, testing an innovative approach to increasing research use amongst primary school teachers at scale. The project, involving primary schools in England, is a randomised contrail trial: of the 114 schools involved, we are working with 58, grouped into 14 Research Learning Communities (RLCs). RLCs meet four times a year for whole-day workshops, supported by research facilitators. Each school engaged in RLC activity provides both a senior leader and an informal 'opinion-leader' (with the latter identified via social network analysis). Workshops focus on specific issues and introduce research evidence that investigates 'what works' in relation to those issues. In between workshops, practitioners engage in peer-to-peer support with a much greater number of colleagues. An independent evaluation of the approach is assessing its effectiveness in terms of increasing research use amongst teachers within the schools involved. Through its use of learning activity, approaches designed to build practitioner capacity and expertise and a distributed approach to leadership (in terms of its participants), it is envisaged that the RLC project will provide an optimal template for embedding research-informed practice across the school system generally.

# TE Paper Session

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Orkney

Chair: Charlaine Simpson

#### PAPER 1: ABSTRACT

Creating an epistemological network for communal learning and pedagogical innovation: A rhizomatic approach, Peiying Chen

This study aims to explore teacher-led initiatives by forming networked learning communities between schools. The networks of teachers generated ripple effects of joint action and interconnection across schools. This expansive learning networks experimented and transferred new knowledge and skills through the rootstalk connection at the same time generated a paradigm shift in pedagogy and spread out the innovation in curriculum and teaching. In facing with challenges of knowledge-based economy in a global age, Taiwan's educational system has undergone rapid changes in order to cultivate younger generation for 21st century competences and life skills. Nevertheless, conventional teaching and test-oriented learning predominantly function in schools which frustrate the young minds from pursuing new ways of learning. Although curriculum reform and professional development of teachers have been implemented for over a decade, learner-centered paradigm advocated by the government has not been transformed and realized in schools. Systemic and comprehensive reform of 12-year basic education is currently realized in 2014. The new policy demands teachers to innovate and collaborate to meet learning needs of diverse students and achieve educational goals of 21st century. In response with these challenges, the emergence and evolvement of networked learning communities appeared two years ago and has galvanized bottom-up joint actions of educators across schools and regions. This new form of professional learning was initially aspired by lesson studies and learning community practices spread out its influences via social networks, and has reshaped into locally shared practices with support of university scholars and local education bureaus in Taiwan. The new form of teacher learning is characterized as one type of teacher-led initiatives. It has become an epistemological space where teachers can do collective inquiry and experiment a learner-centered pedagogy. The border-crossing collaboration of teachers from different schools construct networked learning communities where they can build interdependence, trust, and respect for collective inquiry of teaching. The potential contribution of this study is two-fold. First, through study of networked learning community, the process of inquiry-based professional learning is explored to capture the lateral capacity building among teachers across schools and its impacts on pedagogical innovation in classrooms. The changes in curriculum design, pedagogy, and student learning will be observed to understand the interplay between collective-inquiry of teachers and collaborative learning of students. Secondly, taking a social network perspective, this study explores and interprets the form and function of emerging professionalism and its inquiry practices in Taipei, Taiwan. Particularly, the research shows how the teacher pathfinders in Taipei continue expanding epistemological space upon which a variety of networks for communal professional learning and pedagogical transformation could be nurtured and expanded. Consequently, the interconnection of teachers by means of networked learning communities assumingly not only enhances inquiry-based teacher learning, but also nurtures a culture of professional collaboration. The connection, interdependence, and collaboration of professional learning together may accumulate social capital of teachers and empower them to become change agents for systemic capacity building and renovation in education. By this paper, the research team will present their intervention research in a case school developing an innovative pedagogical prototype geared towards school change.

#### **PAPER 2: ABSTRACT**

Linking theory to Practice: How GTCS is supporting teacher to become 'enquiry practitioners', Charlaine Simpson and Tom Hamilton, General Teaching Council for Scotland

#### Issue

How does a national system encourage teachers to see themselves as enquiry practitioners? In this presentation, we discuss briefly the 'policy migration' that has influence the concept of teachers as professionals who engage in practitioner enquiry as part of their professional learning. The current global agenda has aspirations for teacher to enhance their 'professionalism' and undertake research into their own and others practice. This is from the perspective that practitioner enquiry as part of professional learning will support teachers to become more research literate and engage in research at a local level offering local solutions to practice which is literature informed.

In discussing the Scottish context we offer a view that that GTC Scotland supports practitioner enquiry through the application of a suite of Teacher Education Standards. The Standards support teachers to benchmark their practice but also offers 'support and challenge' for a professional learning journey that helps practitioners to increase their knowledge, skills and abilities through professional learning. Through the application of the suite of Standards practitioners have the opportunity to seize the agenda and shaped the notion of what a 'good teacher' is in the Scottish context. By becoming "active agents" (Sachs 2003) of their own learning practitioners can ask very specific question and enquire into practice that will support the attainment and achievement of their students.

We go on to discuss practitioner enquiry as part of the groundwork of the reconceptualization of teaching in Scotland. This reconceptualization involves practitioners engaging in research which is linked to the view that engaging in enquiry often leads to transformative learning and is congruent with the act of 'becoming', Sachs (2003). By offering guidance on practitioner enquiry GTCS adopts the 'enquiry as stance' (Cochrane-Smith and Lytle 2009) terminology where GTCS assist practitioners to question their practice and adopt a 'critical habit of mind" (Cochrane-Smith and Lytle 2009) approach to their practice.

We discuss the 'enquiry as stance' aspiration for all practitioners and how this is influencing their practice. We then continue by examining practitioner enquiry and how this can contribute to professional learning as a means of supporting changes in practice and teachers putting themselves back in the position of a learner. Throughout this we discuss the role GTC Scotland plays in supporting the notion of practitioner enquiry for all our registrants.

### **PAPER 3 ABSTRACT**

Supporting effective science teaching: the role of a national professional development programme, Jim O'Brien, Moray House School of Education, University of Edinburgh, Kevin Lowden, Stuart Hall and Niamh Friel, University of Glasgow.

Professional learning and development including update (Cook, 2011; Humes, 2014) is a critical element in Scottish school and teacher improvement initiatives. Debate continues about the efficacy and effectiveness of various models (Kennedy, 2014) of continuing professional development (CPD) although in Scotland the term Career Long Professional Learning (CLPL) increasingly is the more common expression.

This paper reviews the outcomes of a national science CPD programme focusing on the appropriateness of the model of CPD adopted (Kennedy, 2005), contextual challenges (Cumming, 2011; Donaldson, 2014), impact of the programme (Ingvarson et al., 2005) and how the Scottish experience relates to the international literature (Garet et al., 2001; Desimone et al., 2003; Wayne et al., 2008; Desimone, 2009; Antoniou & Kyriakides , 2013;).

Key findings are discussed from a study of the impact (Lowden et al., 2011) of the Scottish Schools Education Research Centre's (SSERC), in association with other agencies, national Support for Science Education in Scotland through CPD programme for science teachers and technical support staff. The programme ran from 2008-2011 and was supported by the Scottish Government which sought to raise interest and attainment in science by enhancing the effectiveness of science educators and those who support them by inter alia:

- Building capacity and expertise of teachers.
- Providing practical support for teachers and learners.

While the programme involved teachers, technicians and students this paper is primarily concerned with the experiences of teachers and their reaction to the professional development programme provided. Two programmes of intervention were evaluated using survey methodology combined with a qualitative strand of focus groups, interviews and observation to illuminate the factors and processes involved in the effectiveness of the professional learning. Survey 1 involved 1043 individuals who had participated in the programme between 2005 and 2008 plus a survey conducted in 2010 of 817 participants who had taken part in SSERC provided CPD between 2008 and 2010. The paper reports and comments on the results of these surveys. The study took place at a time of rapid curricular change in Scotland with major reform in the shape of Curriculum for Excellence (Humes, 2013) and a time of increasing economic uncertainty (Hepburn, 2010). Provision for CPD is clearly important in supporting the implementation of curricular change, however, it is often one of the first casualties when local authorities or districts are aiming to save money. Certainly, at such times the quality and effectiveness of the CPD on offer becomes increasingly significant in meeting teacher needs (O'Brien, 2012).

The findings emphasise the importance of providing teachers with access to experiential CPD within a "gap-task" approach that includes opportunities to reflect on their practice with peers and Science (STEM) experts, return to school to pilot ideas and skills acquired and reconvene later to evaluate and share lessons learned. This particular Scottish experience is compared and contrasted with the findings of other international studies of the impact of professional learning interventions.

#### **PAPER 4 ABSTRACT**

Professional Update: a Scottish solution to encouraging and ensuring teacher effectiveness, teacher quality and professional learning, Tom Hamilton and Ken Muir, General Teaching Council for Scotland

Issue

How does a national system ensure that teachers keep up-to-date with considering their effectiveness, quality and professional learning? The role of GTC Scotland (GTCS) will be outlined and then explored in relation to Professional Update (PU).

The relevant legislation for GTCS is the Public Services Reform (General Teaching Council for Scotland) Order 2011, which defines the role and remit of GTCS, giving substantial statutory powers. It also gives GTCS a 'duty to make re-accreditation scheme' by making and publishing 'a scheme setting out measures to be undertaken for the purposes of allowing it to keep itself informed about the standards of education and training of registered teachers.' This GTCS has entitled Professional Update.

In Teachers Matter (OECD, 2005) it was noted that while an increasing number of countries were developing Standards for teachers 'recertification' was a 'comparatively rare practice'. (P101) Aware of this and developments in other professions where recertification was common, GTCS began considering a scheme to allow teachers to keep themselves up-to-date and to show they were maintaining required Standards. Politicians also pay attention to such matters and in 2008 Peter Peacock (a former Minister for Education) writing in the Times Educational Supplement Scotland suggested a requirement should be introduced for 'teachers to re-register every five years or so, in order to establish continuing fitness for the modern task of teaching.' In the run up to the 2011 GTC Scotland legislation, GTCS was aware that it would include a requirement to introduce a 're-accreditation scheme' and hence proceeded working towards this. A 'Chatham House Rules' seminar was held and thereafter a working group representing all the key constituencies was formed to progress matters.

The paper will outline the collegial and consensual way the working group and GTCS took forward the development of what became PU. In line with the values of GTCS and a legislative requirement to consult, extensive professional dialogue was entered into leading to two years of piloting and the eventual roll-out of PU in 2014/15. The paper will expand on the key principles of PU which are that teachers have a responsibility to consider their own development needs with an entitlement to a system of supportive Professional Review and Development, giving confirmation that they are maintaining the high standards required. It will also explore a key premise of Professional Update that it supports and enhances professionalism in a positive way, which is in line with research suggesting the importance of teacher self-efficacy (Schleicher, 2015), rather than simply giving financial incentives or acting in a punitive way, as some other systems do. (OECD, 2009).

Analysis will be provided from evaluations carried out by GTCS of the development of PU and the paper will conclude by considering what messages Scotland might give to other international systems.

# **PTM Roundtable Discussion**

Title: Kentucky Rising: Nine Building Blocks for a World-Class Education System

Topic: Policy translations and mistranslations

Abstract ID: 3461

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Science Centre Tower Base North 1

Author/Speaker: Anthony Mackay

Company/Organisation: Centre for Strategic Education

Co-Authors: Betsy Brown Ruzzi and John De Atley

Presenting Author: Anthony Mackay

# Summary of session:

### Kentucky Rising: Nine Building Blocks for a World Class Education System

- Chair Anthony Mackay (past President ICSEI), Senior Advisor, NCEE, will provide the context for Kentucky Rising initiative and relate this reform agenda to other school and system improvement efforts.
- Betsy Brown Ruzzi, Vice President, NCEE, will outline key findings from national and international gap analysis and identify policy implications.
- John De Atley, Director, Kentucky Rising, NCEE, will address stakeholder and political challenges associated with high stakes state wide education reform initiative.
- Prof Chris Chapman, ICSEI Board Member, Discussant, will reflect on issues presented and relate these to other examples of whole system reform.

"Kentucky Rising" is a statewide initiative in the State of Kentucky USA. It is intended to enable its citizens to enjoy broadly shared prosperity in a fiercely competitive international economy. Reaching that goal requires a world-class workforce.

Since the Kentucky Education Reform Act was passed in 1990, Kentucky has moved from close to the bottom of the states in school performance to middle of the pack. The state is now committed to reach the top of the pack, not just in the United States, but also in the world.

That will require the state to carefully examine how Kentucky compares to top performers in the US and world on every major factor-from the quality of its teachers to the way it finances its schools-that affects the ability of its schools to educate students to the highest standards in the world and function well in a global economy.

Kentucky asked the National Center on Education and the Economy (NCEE), experts in international systems of education, to partner with the state to develop the initiative. Researchers at NCEE have been studying the strategies used by the countries with the best education systems for more than a quarter of a century. They have identified Nine Building Blocks for a World-Class Education System. Not all of the best-performing countries are equally strong in all of these areas, but, again and again, the stronger a country or a state is in these arenas, the more likely it is that they will find a very high performing system.

Through the winter and spring of 2015, Kentucky has been engaged in gathering data on its own performance in each of the Nine Building Blocks, comparing that data to the comparable data for the states and nations with the best-performing education systems. That information is being used to identify gaps in performance for each building block, and that information, in turn, will be used to involve citizens, agencies, and institutions all over the Commonwealth, both public and private, in the development of a multi-year, comprehensive effort to position Kentucky to enable its citizens to enjoy broadly shared prosperity.

This Roundtable will explore the stage reached in an ambitious whole of system reform effort. The use of international benchmarking will be discussed and the challenges of a complex political and stakeholder environment will be presented with the purpose of illuminating educational policy dilemmas and possibilities.

# **RCEL Paper Session**

Parallel Session 3 Session:

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Science Centre Tower Base North 2

Chair: Val Corry

#### PAPER 1: ABSTRACT

Student and School Factors Influencing Achievement Growth in Rural Malawi: A Multilevel Analysis, Kyoko Taniguchi, Hiroshima University

Improving primary student achievement is a significant issue in most developing countries. The Southern and Eastern African Consortium for Monitoring Educational Quality reported the significant factors influencing grade 6 student achievement. It is a cross-sectional data, which measured achievement at one point in time. However, achievement growth is more relevant as an output of schooling. This study explored factors influencing student achievement growth in primary school in Malawi by using a multilevel analysis. To pursue this aim, the following three research questions were answered: (1) what is the proportion of school-level variance on overall variance? (2) what student factors influence student achievement growth? (3) what school factors influence student achievement growth after controlling student factors?

The data, which were 1476 grade 5 and 1,294 grade 7, and 30 head teachers, 224 teachers and 169 members of the school management committees and parent and teacher associations, presented in this study derive from the field research conducted over six-month period during the academic year 2012-13 and 2013-14, with English and mathematics tests and questionnaires. In the analysis, two-level linear regression was employed: student level for the first level and school level for the second level. First of all, the null model was created to examine the proportion of school-level variance on overall variance. Then, three models were constructed to analyse factors influencing student achievement growth: (1) Model 1 added student variables to the null model, (2) Model 2 added school variables to the null model and (3) Model 3 added both student and school variables to the null model.

The results for grades 5 and 7 showed that approximately 29% and 8%, respectively, were explained by school-level variances. In grade 5, this proportion was greatly larger than that in developed countries. It meant that schools could play a significant role to improve student achievement. In contrast, in grade 7, it was not much larger. In grade 5, at the student level, significant features included taking extra classes and speaking language of instruction, while, in grade 7, the significant factor was student gender. At the school level, there were not significant factors in both grades. It meant that school variables included in the analysis, such as mean socioeconomic status, mean number of grade repetitions, class size, school location and school facilities, did not affect student achievement growth. These results suggest crucial implications for policy makers to make remedial measures.

#### PAPER 2: ABSTRACT

School Improvement using Design Thinking in Rural South India, Akanksha Bapna, Namrata Sharma, Manavi Gupta, Aditi Parekh, Nandini Sood and Kiran Sethi

Design for Change (DFC) is a global movement that introduces experiential learning to students in schools, and operates under a framework called Feel-Imagine-Do-Share (FIDS). Under this framework, children are encouraged to Feel a problem that bothers them, Imagine a way to make it better, Do something to make a change and Share their story of change with the world. Through this experiential learning approach, the DFC model aims to introduce 21st century skills to students, foster a collaborative learning environment that is interactive and engaging[i],[ii]¬¬, and improve critical thinking and problem-solving skills[iii] for the participants.

An in-depth analysis conducted in Tamil Nadu State in India using the maximum variation sampling strategy measured the impact of a design-thinking program on students, teachers and parents in ten rural schools. At the end of the program, students had acquired the ability to understand and articulate complex social problems, design creative solutions and propose means of implementing change. Participants demonstrated higher creative skills as compared to non-participants. Based on self-reported student responses, confidence, and social consciousness were the most commonly inculcated skills for participants. Several years after the completion of the projects, students continue to report better communication skills, improved teamwork and greater confidence levels.

Teachers in participating schools demonstrated a greater ownership of school activities and improved classroom interaction. Teachers began taking the responsibility for motivating students to bring about change. Execution of projects under the design-thinking model not only changed the parental perceptions of education, it led to a positive change in parental attitudes towards government schools.

Significant community level improvements were observed as a result of activities initiated through the DFC program. For example, in Bettatti, alcoholism was addressed; in Kalachery, the issue of rampant suicides in the community was tackled; in Tiruvallur child abuse was brought to the fore as an issue and in Karur, sanitation was taken up as a cause. Following the FIDS process, not only do the students and school create a positive impact on the community, but also succeed in making long-term and sustainable change in society.

[i] Thomas, Dennis, J. R. Mergendoller, and A. Michaelson. Project-based learning: A handbook for middle and high school teachers. (1999)

Jones, Beau Fly, Claudette M. Rasmussen, and Mary C. Moffitt. Real-life problem solving: A collaborative approach to interdisciplinary learning. American Psychological Association. (1997)

[ii] Holm, Margaret. Project based Instruction: A Review of the Literature on Effectiveness in Prekindergarten. (2011)

[iii] Mergendoller, John R., Nan L. Maxwell, and Yolanda Bellisimo. The effectiveness of problem-based instruction: A comparative study of instructional methods and student characteristics. Interdisciplinary Journal of Problem-based Learning 1.2. (2006)

## **PAPER 3 ABSTRACT**

A Study on Relationship between School Learning Types of Students and School Characteristics in South Korea, Sung Sik Kim, Seoul National University of Education

The excellent academic achievements of Korean students have been well known. While the relationship between Korean schooling and student achievement has been examined for a long time, the answer is not conclusive yet. More attention should be paid not only to student achievements, but also processes to improve student learning in a school. In this context, the research questions are addressed: (1) Considering achievement and school learning engagement, how can the students be categorized? (2) What school variables is related to separate the categorized groups(types)? (3) What are policy implications for improving a quality of student school learning?

The study has analysed 13,185 students of 9th grade in 207 Korean middle schools. Cluster analysis is employed to classify student school learning types, using academic achievement and school learning engagement as criteria variables. And then Generalized Hierarchical Linear Model (GHLM) is employed to identify school characteristics related with student school learning types.

The result showed that students' school learning could be divided into four groups in terms of achievement and school learning engagement: (1) lethargic-troublesome, (2) connected-adapted, (3) endearing-anxious, and (4) achievingrecognizing. Each group has different characteristics. (1) The students of the lethargic-troublesome group attain low educational achievements and face various difficulties in school life, due to psychological, social, experiences and relationship difficulties. (2) The students of the connected-adapted group have low educational achievements but generally enjoy and satisfy their school lives. These students have little difference with the first group in terms of background variables such as parents' education and income. And the relationship with friends and teachers at school are better than the first and third group. (3) The students of the endearing-anxious group may be located between the second and the last group. In terms of psychological emotions, experiences, and relationship, they generally hold lower level than the connected-adapted group (the second group). (4) The students of last achieving-recognizing group exhibit the highest level in almost areas in comparison with other clusters.

The analysis of GHLM on school characteristics related with student learning types indicated that students' friendship, school principal's support for teacher, academic press to students, and emphasis on student personality have a significant effect on student school learning types, controlled for the students' individual characteristics. In particular, the students' friendship variable distinguishes the connected-adapted group from the lethargic-troublesome group. The students' friendship variable and the academic press to student variable are main factors to divide the connected-adapted group and the endearing-anxious group. And the students' friendship variable and the school principal's support for teacher variable differentiate between the achieving-recognizing group and the endearing-anxious group.

Finally, policy implications are discussed based on findings. First of all, the teachers' effort to form a positive relation with students at a personal level is important in order to encourage students' engagement and participation in school learning. The effort will be able to make actual differences, after improving teacher's capability to form appropriate educational relationship with students, changing teacher organization into professional community, and establishing cooperative school governance.

#### **PAPER 4 ABSTRACT**

Teaching in Mixed-Raced Schools: Creating Conditions for Effective Learning Contexts, Thandeka Chapman, University of California San Diego

This paper explores effective teacher practices in racially and culturally diverse secondary settings. Current research on students of colour in racially diverse settings in the U.S. has problematized the relationship between the teachers and students as a barrier to student learning. A lack of trust, support, and high expectations often create barriers to student learning for students of colour with White teachers. Furthermore, the literature on culturally relevant teaching espouses a view of teaching in which teachers must be empathetic and knowledgeable about the cultural and racial experiences of their students. The culturally relevant teaching paradigm becomes more complex as student populations become more diverse and secondary teachers are responsible for teaching 120-160 students each day. Teachers are faced with the goal to connect with students from multiple backgrounds unlike their own experiences.

In 22 ninety-minute focus group interviews with 97 participants, from six schools in four districts in the U.S., high students of colour were asked to discuss their experiences in mixed-raced high schools. The participants' ages ranged from 14–19 years. Two-thirds of the participants were girls. The racial breakdown of the students included African American (74), Latino/a (5), and Asian American (4), bi-racial (10), Native American (2), multi-racial (2) students. Researchers used contact summary sheets to summarize the main points of emphasis from the group, note significant issues, and identify recurring themes from previous interviews. A five step systematic process was adapted for a research team analysis. Concerns for data validity were addressed through the use of a collective team process in which all five members of the research used identical protocols for data collection, conducted the steps to analyse the data, and worked together throughout the collective analysis process.

During the interviews the participants were asked the following two questions: Can you tell me about an adult at school that you have a good relationship with? Why do you like that person? Themes of good teacher practices were identified using participants' answers. Strong common themes were:

- A willingness to provide the student with extra help at convenient times,
- An explicit belief in the student's ability to learn the material,
- A valued common experience(s) or interest(s) between the student and the teacher.
- A willingness to listen to a student's personal issues.

These themes open spaces for a more nuanced understanding and an articulation of specific practices that build strong teacher-student relationships that reduce students' barriers to learning. Using data from the study, the author will discuss the merits of school connectedness, current research focused on mixed-raced schools, and formations of culturally relevant pedagogy at the secondary level. The paper focuses on strand five, researching the conditions for effective learning, because it explores effective teacher practices and teacher attitudes that lead to school climates in which students may thrive.

# **PC Paper Session**

Session: Parallel Session 3

Thursday 7 January 2016 14.00-15.30 Session Date and Time:

Location: Science Centre Clyde 1

Dr Margaret McCulloch Chair:

# PAPER 1 ABSTRACT

Sense-making of Networking in Business-University-School Partnership: Exploration of First-mover Advantage in Partnership Process in Hong Kong, Kelvin Kwan-wing Mak and Tracy Chui-shan Wu, The Chinese University of Hong Kong.

Networking for school improvement has been considered as fourth phase of school improvement (Muijs, 2010). School network could lead to substantial school improvement, which widening opportunities and sharing resources for schools (Muijs, West, & Ainscow, 2010). Participants in school network share ideas, practices and resources with others from different contexts. Network participants have to make sense of the new ideas and initiatives exchanged in the network with its original context (Coburn, 2001; März & Kelchtermans, 2013). They assimilate new knowledge and practices into their existing understanding (Hill, 2001). They transform the unfamiliar reform measures into practices that they are familiar with. In this process, network participants can harmonize the old and new ideas and fit them together (Jennings, 1996). The sense-making process is essential for participants to enact the initiatives in a meaningful way to them (Weick, 1995, 2008; Weick, Sutcliffe, & Obstfeld, 2005), that decide the whole content and process of school improvement programme.

This paper applied case study approach to reveal the sense-making process between participants from business, university and school sector at their initial stage of collaboration in a school improvement project. At the beginning of collaboration, bi-parties negotiations were found instead of tri-parties collaboration because three parties contributed their own resources and expertise to the network during different stage of collaboration. School participants started negotiation and sought resources with business partners before contacting university partners for professional advices in school development. The reason behind was rational and instrumental as drawing extra resources to the school was their initial motive to join this project. In this case, the first-mover advantage of school-business partnership to decide on the content and path of collaboration was happened. It occupied the key position in the development of project. University partners had to adjust the decided content afterwards or explore other collaboration platform for school improvement. This process might cause overloading in capacity for school improvement. After a period of time, when tri-parties collaboration began, three parties smoothed out the programmes in the school improvement projects. The alignment of objectives and values in this project was gradually formed and guided the future pathway of further collaboration.

This paper suggests the notice of first-mover advantage is an important aspect in collective sense-making process. School and university should take an active role in the planning of school improvement programme in the network, in order to bring in the value of teacher development and school improvement at initiate stage. University participants can facilitate the collective sense-making process among all three parties and help to build shared objectives and values for school improvement.

#### PAPER 2: ABSTRACT

State, Program, and District Support for Implementing Diverse School Improvement Efforts: Results from a Multi-Year Study of the Ohio Network for Educational Transformation, Sam Stringfield, Vicki Plano Clark, Ann Allen, Kathleen Carr, Bryan Boyd, Jill Lindsey Audra Morrison, Amy Farley, Greg Sellers and Jacinda Dariotis, University of Cincinnati

As part of its winning \$400,000,000 Race to the Top (RttT) proposal, the Ohio Department of Education funded the Ohio Network of Education Transformation (ONET). ONET was an effort to use a variety of reform types to improve often lowachieving, high-poverty schools. We will report results from a multi-year, mixed-methods study of the ONET designs' implementations, and steps toward institutionalization.

The study included quantitative analyses of data from the 37 participating schools, and multi-year case study data from two schools from each of the five high school reform designs that were funded. The five reform designs included nationally distributed reforms, such as AVID (avid.org), the Asia Society's International Studies School Network (ASIA/ ISSN), the increasingly popular Early College model, New Tech, and locally evolved Science, Technology, Engineering and Mathematics (STEM) reforms.

Each school received three years of funding to support implementation. Four of the design teams provided national facilitators for schools. All 37 schools received unusual, ongoing support from an Ohio-based group funded to serve as an intermediator between the school/system and the national design team.

- The ONET project provided an unusual opportunity to examine several current issues:
- What are general and reform-specific pathways and barriers to reform implementation, across sites and designs?
- What site specific contexts support, inhibit, or kill reform efforts, regardless of reform design?
- Given the funding for a state-specific partner to work across all designs to facilitate implementation, to what extent, in what contexts, was this unusual element facilitative of school improvement and of sustaining of any intended changes?

Two years of data gathering at the 10 case study sites (2 per design) included analyses of archival data of the reforms chosen, schools' initial proposals, the choice of schools for participation, schools' choices of reforms, state-generated monitoring documents, and limited data from the state's student and school data warehouse. Qualitative data were gathered through classroom observations and interviews with teachers, program coordinators, principals, and central administrators involved in the reform designs.

Until final follow-up data are gathered this fall, all findings are tentative. However, several findings already seem clear.

- Consistent with prior research, levels of implementation range from virtually no implementation to islands of strong implementation amid larger sea of non-implementation, to relatively strong implementation.
- Levels of support from school and district administrators, reform team members providing professional development (PD), and between-PD-sessions, and the state's funded state-support people all varied substantially. In some sites virtually all these components worked in a negotiated harmony, to positive effect. At the other extreme, instability or indifference at several of those levels, especially regarding personnel turnover at any/all levels resulted in failing reform and faculty cynicism that will make future reform efforts more challenging.
- While the only variable that appeared to be strongly associated with success regardless of reform design and context was the unwavering support of a stable principal, there were several variables that, in different combinations, appeared to lead to reform collapse.

Implications for future research and practice will be discussed.

#### PAPER 3 ABSTRACT

Could a Novel Partnership End the Governance and Improvement Merry-Go-Round in Detroit, Betsann Smith and Ashley Johnson, Michigan State University

Marked by decades of school failure and mismanagement, the Detroit Public Schools have been subjected to constant governance and management reform. As with the New Orleans schools following Hurricane Katrina, Detroit has been dragged through district takeover, district downsizing, bankruptcy and aggressive school choice legislation drawing almost half of the city's children into charter schools. For all of it, data on Detroit student achievement is as dismal as ever: only 4% of Detroit students reached proficiency benchmarks on the 2013 NEAP report card.

Detroit now faces a novel from of re-regulation through a portfolio management plan overseen by a non-partisan Commission that would have authority over public and charter school openings, sitings and closings throughout the city but leave operations to a restored school board and charter school managers (Coalition for the Future of Detroit Schoolchildren, 2015). Advocates propose that the Commission might rationalize the distribution of schools around the city, coordinate resource and service allocations, for example, by overseeing efficient parent information systems and resolving transportation and special education barriers, and promote school quality overall.

While power brokers negotiated creation of the new Commission, community-organizing groups in Detroit have sought to revive parent input and local control. Their work and advocacy pushed Detroit parents into key roles in the creation of school quality reviews and report cards central to Commission decisions and parent choice behaviors (Johnson, 2015).

Many observe that the proposed structure is a traditional district structure dressed in new clothes. Others promote the Commission proposal as an innovative set of partnering arrangments that offer new governance and a promising way forward (Lake et al, 2015).

This paper explores the potential of the proposed arrangements to "reduce the number of bad schools and increase the number of good schools" as promised. It first recounts the competing interests and political battles to create the Commission and also, the illustrative struggle to create the school report cards that would inform Commission decisions and parent choice actions. It then considers whether and how these arrangements could support more intense and pervasive development of essential supports for school improvement, drawing on recognized frameworks develop by Bryk et al. (2010).

For data, the paper draws on public documents and data, interviews and local inquiry and evaluation reports on Detroit schools sponsored by several foundations and advocacy groups.

The paper is submitted to the Partnership and Collaborations thread but speaks to the Policy translation and Self-evaluation threads also.

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Lake, R. & Jochim, A. et al. (2015). Fixing Detroit's Broken School System: Improve Accountability and Oversight for District and Charter Schools. Education Next Winter 2015

Johnson, A. (2015). An Examination of A Parent Empowerment In Detroit. (Doctoral dissertation). Michigan State University

# PAPER 4 ABSTRACT

The self improving school system and balancing the tight-loose dilemma: What can primary school headteachers in England tell us? Jon Barr, Meadowbrook Primary School

In England the period of two decades of perceived centrally directed school change has been replaced in the last six years with a reduction in the size of the central English Department for Education, a reduction in the number of education quangoes and a reduction in the size and capacity of the middle tier in the system; the local education authorities.

This has been accompanied by a stated intention in England to create a self improving school system (Hargreaves 2010) where the improvement in the education system is led by schools and is built upon a foundation of school to school support, school based system leaders and partnership. A self improving school system (SISS) has not been achieved anywhere previously in the developed world at scale (Barber 2014). The initial questions that led this research focused on primary school headteachers' responses in 2014 to the national landscape in England and their impact on the development of the formal clusters that are a key foundation for an SISS. The literature review refocused those guestions towards the tight-loose dilemma (Whelan 2009) in all school systems and whether an SISS in England can achieve the balance needed for a high performing school system.

Through dialogue with primary school headteachers this study explores their responses to their local landscape and their achievements and ambitions with respect to partnership and collaboration between their school and other schools.

It reflects upon the implications of their views for the ambition to create a self improving school system in England and builds on the approach of who perceived latent classes of response to the new landscape in England. It explores the challenge of balancing the tight-loose dilemmas in a school system in relation to school autonomy, system control and system outlook (Caldwell and Spinks 2013).

This research finds headteachers proactively responding to the challenge of forming new partnerships irrespective of their response to the new educational landscape. The study's conclusions emphasise the centrality of trust within the school system and collaborations within it and trusts relationship to the investment of social capital and the resulting transactional costs and benefits to the headteacher and their school.

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# **PC Paper Session**

Session: Parallel Session 3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Science Centre Clyde 2

Chair: Professor Stephen McKinney

#### PAPER 1 ABSTRACT:

Promoting immigrant parental involvement for school improvement, Christina Hajisoteriou and Panayiotis Angelides, University of Nicosia

Research on parental involvement should voice up the views of all actors involved in the school-family partnership, from head-teachers and teachers to parents and children. Nonetheless, traditionally, research in parental involvement has not engaged the beneficiaries of such activity, meaning the children, per se. This research aims to fill in this gap by providing a number of important insights into immigrant parents' school involvement by engaging in the research all actors involved in the partnership. It aims to examine: (a) the ways in which immigrant parents' school involvement has been defined and implemented by head-teachers, teachers, parents' and children themselves; (b) the barriers which impede immigrant parents' involvement in Cypriot schools; and (c) the implications for the development and implementation of practices which promote immigrant parents' involvement in Cypriot schools. Lastly, the study aims to indicate successful ways in which immigrant parents' school involvement may take place and contribute towards school improvement.

Our research draws upon a Multiple Perspectives Approach, which has been used as a framework for examining complex social systems that contain 'high level of uncertainty and disagreement'. Immigrant parental involvement is often inhibited because of the multiple cultural perspectives attached to the notion by the various involved actors. On the other hand, Multiple Perspectives Approach enables the researchers to bring in as many perspectives as possible on a situation when analysing it, while supporting decision-making for interventions.

The findings of this research showed that there was no evidence of a clear process of development of school policies for promoting immigrant parental involvement. Although the participant head-teachers argued that they envisioned the development of collaborative networks between teachers and parents, most of the teachers who participated in this study explained that this was often not the case because of various barriers inhibiting such collaboration. Teachers referred to impediments including immigrant parents' social class and therefore, low socio-economic situation, deprived educational background, and language inadequacies.

Finally, we argue that if we are interested to improve our schools teacher training should encompass their ethical, efficiency, and pedagogical orientation, enabling them to promote the academic and social development of culturally-diverse children. Ethical orientation refers to the values and interpersonal attributes, and orientation to diverse people, while efficiency orientation includes the organisational skills and abilities to act in various roles and situations.

# **PAPER 2 ABSTRACT**

Student monitoring: A case study from one Brazilian city, Paulo Garcia, Leandro Prearo, Maria do Carmo and Romero Marcos Bassi

Quality of Brazilian education has been monitored with the aid of the Basic Education Development Index (IDEB), created in 2007, which combines students' achievement, based on the subjects of Language (Brazilian Portuguese) and Mathematics, and school flow (taking into account dropout numbers and student' failure rates).

In some Brazilian cities, the IDEB has been growing, constantly, indicating higher levels of teaching quality. This research, using a case study (Yin, 2005), mixed methods, aims at investigating the reasons for improvements on IDEB in one of the richest Brazilian cities (HDI - almost 0,9). In the city, there are 20 schools in elementary education, almost 400 teachers, and 12.000 students (OEGABC, 2015).

This study was, initially, done using the data from School Census 2011/2013/2014. Table 01 shows the city results from 2011.

Year	Students' achievement	School flow	IDEB
	Ensino Fu	ndamental I	
	(students t	from 6 to 10)	
2011	6,87	0,94	6,4
2013	7,12	0,93	6,6
2014*	7,70	0,97	_
	Ensino Fu	ndamental II	
	(students fi	rom 11 to 14)	
2011	6,47	0,80	5,2
2013	6,53	0,83	5,3
2014*	6.65	0,90	_

Data from School Census - \* 2014: data from local assessment.

Data from Table I shows that the results have been growing since 2013 in students' achievement, school flows, and therefore on IDEB. In a second phase, we used interviewers with principals (N=37) aiming to understand the improvements reasons.

Data analysis involved a grounded theory approach (Strauss; Corbin, 1998). Most of principals were women (almost 85%), average age (45), over five years of experience, and majored in pedagogy. The results showed the existence of common project created among schools and Department of Education. This project focuses, profoundly, on student monitoring. It was initiated in 2012, and is been conducted by the school principals and teachers.

The purpose of the monitoring project, according to its documentation, is to follow all the students accomplishments (cognitive, non-cognitive, social, and emotional), coming from various sources, especially from teachers. As from this understanding, individualized actions were created in order to improve students' achievements.

Data showed that the main goal of the principals was to identify and examine all students' characteristics, analyzing it, in detail, in all school data. To complete this task, they used interviews, questionnaires and document analysis, analyzing: 1) Students (all grades, correlating them to gender, age, socioeconomic status; students absenteeism, age-grade distortion, dropout rates, student homework, student/teacher/subject results, students difficulties on the contents in each teaching unit, class, teacher, student well-being, students motivation for studies, sense of belonging and security, study habits of leisure). 2) Families (socioeconomic status, parents' education and profession, participation in school). 3) School (infrastructure, climate and school culture). 4) School management (types of leadership, school organization, types of students monitoring); 5) Teachers (type of classroom management, absenteeism rate, professional development, students interest, types of lesson plan). Principals had in-service education weekly, school visits, and meetings with parents.

One of valid conclusions for this study is that better results are been achieved, using a robust project of students monitoring conducted by school principals, teachers, and department of education.

# PAPER 3 ABSTRACT

Stronger Communities: Building community capacity to improve opportunities for families and children, Adele Rowe, Chris Chapman and Neil Mathers, University of Glasgow.

Children's lives are complex and shaped by a wide range of interacting contexts, ranging from the family, school and neighbourhood, to national policies and strategies. There are many factors within these contexts that may prevent children doing well, such as poverty, poor family support or emotional vulnerability; while there are other factors that can help children to succeed against the odds, such as positive social networks, good school experiences, and access to sufficient material and financial resources. Neighbourhoods with higher concentrations of children living in poverty may compound existing disadvantages as various combinations of stressed services, limited social networks, and restricted education, leisure and employment opportunities can contribute to poorer outcomes for children and young people.

Stronger Communities is a community initiative led by Save the Children, in partnership with five other leading children's charities, STV Appeal and the University of Glasgow, that is founded on the belief that community-led approaches can improve the life chances of children and young people growing up in deprived areas. Stronger Communities aims to unite and empower local people to establish community-led partnerships to drive improvements in public services and opportunities for families, children and young people at a local level. The programme is currently being developed in one community in Renfrewshire and another community in Perth and Kinross.

Researchers from the Robert Owen Centre are evaluating the initiative to identify lessons in implementing a programme of this kind and its potential to impact on local communities and local services. The key research questions are how local communities can be empowered to engage with service providers and whether such a process can result in improvements to local services and opportunities for families, children and young people in deprived areas.

The conceptual underpinnings of the Stronger Communities programme centre around asset based approaches which focus on identifying the strengths and capabilities of individuals or communities and harnessing these to promote change for the better. The approach stands in contrast to a needs based approach which concentrates on weaknesses and 'fixing' problems and is associated with 'doing to' rather than 'working with'. Drawing on asset-based approaches, Stronger Communities aims to mobilise assets within the two communities to build community-led public social partnerships that can effect change.

This paper draws on early findings from the evaluation. Contextual analyses of the two areas based on secondary data and qualitative interviews with a range of stakeholders provide a picture of the world as it is for the communities who live there. The paper discusses how the contextual analyses has been used to guide the programme by identifying local strengths, needs and priorities for change and the tension between its findings and an asset-based approach. The second part of the paper focuses on implementation, drawing on lessons from the programme's development and initial findings on what does and does not work. The paper concludes by proposing a logic model to explicate how Stronger Communities might affect the opportunities of children and young people.

# **LDP Symposium**

Title: Education Leadership Trails Through Scotland, Ontario and England:

Intersections, Diversions and Dead Ends

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3307

Session: Parallel Session3

Session Date and Time: Thursday 7 January 2016 14.00-15.30

Location: Science Centre Auditorium

Chair and discussant: Andy Hargreaves, Brennan Chair, Lynch School of Education, Boston College.

Adviser to the Premier and Minister of Education of Ontario.

# **Overview of Symposium**

Paper 1: Leading Educational Improvement: Ontario's Leadership Strategy: Carol Campbell, Professor of Leadership and Educational Change, OISE University of Toronto. Adviser to the Premier and Minister of Education of Ontario);

Paper 2: Education Leadership in Scotland: Gillian Hamilton, Chief Executive, Scottish College for Educational Leadership (Scotland)

Paper 3: Leadership Developments in the English Education System 1995-2015Alan Boyle, Consultant and Director Leannta Education Associates, former Assistant Director & Head of School Improvement in London Borough of Haringey (England).

Since the year 2000 education systems have invested resources to develop leadership in the belief that this will have a positive influence on school improvement. School leadership is considered to be a vital link between system policy and classroom teachers. We understand that, within schools, teachers have the most important impact on students' achievement and the quality of school leadership has the most important impact on teachers' performance.

This symposium examines the development of education leadership in England, Ontario and Scotland since 2000 through three papers, one from each country. Presented together, the papers reveal similarities (Intersections) and differences (Diversions) in policy and practice within and between the systems with reminders about unsuccessful, or discontinued, initiatives (Dead Ends). The Chair will open up discussion between delegates at the symposium who may have personal experience and important views to contribute.

Each paper will consider research at system level about the effects of policy as well as anecdotal evidence from study visits and exchanges between school and district leaders from the three jurisdictions over the last twelve years.

The symposium will analyse the impact of leadership development on students' learning and their achievements. It is closely linked to the main theme of this Congress, 'Connecting teachers, schools and systems: Creating the conditions for effective learning' and contributes mainly to sub-theme 2: Leadership development and practice to build sustained improvement

#### **ABSTRACT PAPER 1:**

Leadership development and practice to build sustained improvement. Carol Campbell, Ontario Institute for Studies in Education, University of Toronto

During 2003, a new government was elected in Ontario, Canada, with a priority commitment to increasing student achievement, reducing gaps in student achievement, and increasing public confidence in publicly funded education. A recently renewed vision for Ontario education, Achieving Excellence (Ontario Ministry of Education, 2014), includes updated goals for achievement, equity and public confidence, plus a new goal for promoting well-being. Throughout the Ontario goals and strategies, a sustained focus on developing leadership at all levels of the education system is vital (Campbell, 2015).

Through the Ontario Leadership Strategy (OLS), each school district is provided with funding and support to develop and implement a Board Leadership Development Strategy (BLDS) for: recruiting and selecting leaders; placing and transferring leaders; developing leaders; and coordinating support for leaders (Ontario Ministry of Education, 2012). Approaches to leadership development and practice are intended to be informed by the Ontario Leadership Framework (OLF) (Leithwood, 2012), which contains five priority areas: setting directions; building relationships and developing people; developing the organization to support desired practices; improving the instructional program; and securing accountability. A revised and updated version of the OLF now also contains personal leadership resources (cognitive, social and psychological). Drawing on interviews with policy makers and school leaders (Campbell et al., 2015a), the presentation will discuss the benefits and limitations of the OLS. Successes include the development of a common language and research-informed approach to leadership practices which can support formal leaders' recruitment, professional learning, performance development and evaluation.

Limitations, however, are that the OLS applies only to formal leaders in schools (principals) and districts (officials). In practice, the development of leadership for educational improvement extends beyond formal leaders only. In our research, we have identified the need to attend to leadership development throughout the education system, including in government and for teachers. Creating a government culture and structure for the leadership of educational change, includes attention to sustained and supportive political leadership, capable political and official leadership for strategy and action, and developing the role of the government education department (Campbell, 2015). For teachers, there need to be opportunities for teachers to learn and develop their leadership "by doing" rather than by studying leadership in the abstract. The presentation will examine Ontario's Teacher Learning and Leadership Program (TLLP) which supports experienced teachers professional learning, leadership development, and sharing of knowledge and practices. Themes concerning teachers' developing leadership practices include learning about: collaboration; building relationships; creating a vision and sharing leadership; planning a project; implementing a project; going public with their teaching; and learning technology. (Campbell et al., 2014; Campbell et al., 2015b).

Moving forward, a broader vision of leadership for learning is being developed to encompass leadership practices throughout the education system. This moves beyond the current OLF's focus primarily on the leadership of organizations (schools and districts), albeit with an instructional focus. Rather leadership for educational improvement needs to be distributed and cultivated throughout the education system with networks for innovation and improvement between and among educators.

#### PAPER 2 ABSTRACT

Leadership development and practice in Scotland: to build sustained improvement, Gillian Hamilton, Scottish College for Educational Leadership, Scotland, UK

This paper will explore the expectations of school principals from Scotland. It will focus on the shifting expectations of the role of principals over time, identifying both the similarities but importantly key differences, in light of these growing expectations. The author will share how Scotland is working to support leadership development in the widest sense, in order to build capacity of the teaching profession before focusing specifically on the preparation of aspiring principals, and in continuing to support and challenge principals already in post.

Principals in local authorities across Scotland continue to refine their practice as they work to bring alignment and coherence in support of improved student achievement and well-being in their schools. They are deepening their understanding of their role as 'lead learner' through focused, collaborative efforts in order to foster the contextual conditions that enhance teaching, leading and learning. In so doing, these leaders are constantly reflecting on their practice and focussing their efforts to support all students while ensuring that all voices are valued in the process.

In addition, there is an increasing focus in Scotland on the importance of leadership (from teacher to system) in raising students' achievement with a national commitment to close the attainment gap between the most and least disadvantaged young people. We will explore the work of the Scottish College for Educational Leadership to bring coherence to professional learning in leadership across the system.

#### PAPER 3 ABSTRACT

Leadership developments in the English education system 1995 – 2015, Alan Boyle, Leannta Education Associates

Attention to school leadership became a high priority in England after 1995. Alarm was raised when Ofsted inspection reports judged that half the schools in England had good or better leadership (Ofsted 1996). The other half were satisfactory, or worse.

Secretary of State for education, Gillian Shephard announced the introduction of the National Professional Qualification for Headship (NPQH) at the Tory party conference in 1995. By 2015 'satisfactory' was no longer deemed to be good enough by Ofsted and the category was changed to 'requires improvement'. Even so, 84% of primary schools had good or better leadership with secondary schools lagging slightly at 77% (Ofsted 2015).

In this paper we will trace the development of school leadership through the English school system over the last 20 years. First we will draw attention to the English school context following the 1988 Education Reform Act which transformed education from being a public service to a system of school choice for parents.

We start by considering the NPQH programme introduced in 1997 as political control shifted from Tory to New Labour. The Blair government was firmly committed to NPQH and supporting school leadership. We highlight changes to the programme when responsibility was transferred to the brand new, £25million, National College for School Leadership (NCSL) in 2000 and it was announced that the qualification would be mandatory for all new headteachers by 2002 (Gunther 2012). Secretary of State for education David Blunkett also provided an additional £30m funding for a Leadership Programme for Serving Headteachers.

In 2004 the government published the first National Standards for Headteachers in England (DfES 2004). We examine the six key areas and compare them to the NPQH programme. In its 2005 election manifesto the Conservative party promised to scrap NPQH. Although they were not elected it revealed one of the few differences in education policy between the main parties. Meanwhile, NCSL was exploring new models of school leadership. In 2006 a new charity called 'Future Leaders' was jointly established by NCSL, Ark and the Specialist Schools and Academies Trust. The initial programme trained 20 leaders with no education experience to become school leaders in London. We trace developments at this charity to 2015.

Two influential, reports about school leadership were published in 2007 by Price Waterhouse Coopers and the Policy Exchange (PwC 2007 & O'Shaughnessy 2007). We consider their recommendations at a time when Ofsted was reporting that 75% of headteachers were good or better. The NPQH eventually became mandatory in 2009 but not for long. The Coalition government replaced New Labour in 2010 and from 2012 NPQH is no longer compulsory in England. Neither is the requirement that headteachers should be qualified teachers.

Finally we compare the revised National Standards for Headship published in 2015 with the original version and consider what lies ahead (DFE 2015).

# **Parallel Session 4**

Friday 8 January 2016

11.00 - 13.00

# SE Innovate! Session

Title: We measure what we value and we value what we measure: alignment, balance and

consistency

Topic: Self-evaluation: schools and systems improvement

Abstract ID: 2932

Session: Parallel Session 4

Friday 8 January 2016 11.00-11.30 Session Date and Time:

Location: Argyll Suite 1

Author/Speaker: Lisa Riegel

Company/Organisation: Educational Partnerships Institute, LLC

Co-Authors: Belinda Gimbert

Lisa Riegel Presenting Author:

Presentation Method: Innovate!

# Abstract

Since Race to the Top and the era of accountability, schools measure success with test scores and graduation rates. Unfortunately, they do not collect data necessary to understand underlying reasons for their results. Because we measure what we value and we value what we measure, schools have narrowed their focus and strayed from their core values in an attempt to improve test scores. Educators have grown weary and many have adopted a compliance mentality. This presentation details a values matrix process that helps principals move their staff from compliance to commitment. Instead of focusing on outcomes, such as math or reading scores, principals focus on building values teachers believe lead to student success academically and developmentally. Through this process, school leaders identify a number of ways to evaluate their practices and improve school outcomes related to academic growth, school climate, teacher professionalism.

The values matrix process helps leaders see that educator beliefs, identity and behavior are interconnected and influence each other. When we ask teachers to change their behaviors, we are essentially asking them to change their identities and beliefs, which is why policy-driven change is often met with highly emotional responses. Effective change management begins with clear vision and measurable behavior we can track. Unfortunately, many schools create strategy that lives in a three-ring binder on a shelf or becomes pretty wall decorations and slogans on letterhead. Without clarity around purpose and expectations, each new program or initiative seems to be "one more thing," and mission statements and slogans become useless jargon that is disconnected from everyday practice. While action plans are often part of the strategy process, schools often place too much emphasis on student test scores. Without capturing data around behaviors that impact test scores, educators are unable to determine reasons for their results. This lack of clarity leads to wasteful spending and assumption-driven decisions.

The values matrix process builds the ABCs - Alignment, Balance and Commitment. It engages the entire staff in a consensus-building process that yields a one page road map for school reform. School leaders use the values matrix to inform professional development, resource allocation, parent engagement and teacher leadership. Once the behaviors in the matrix are defined, school leaders can design or identify measures to track a variety of behaviors. Anecdotal evidence and initial data show this process has positive impact and research on the process is being designed, so we can describe the impact.

This presentation aligns with the "Self-evaluation: schools and systems improvement" strand. The values matrix process includes consensus building strategies to ensure all voices are represented, and the final product serves as a social contract among all stakeholders, including parents, students, school leaders, teachers, and community partners. It details specific, observable behaviors each stakeholder must do to build the school values and provides structure for accountability. During this presentation, participants will learn how to use the process and how other school leaders have used it to move a staff from a compliance mentality to a true commitment to school reform.

# **Mixed Paper Session**

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.30-13.00

Location: Argyll Suite 1

Chair: Moyra Boland

### **PAPER 1 ABSTRACT**

Using design based research to improve the lesson-study approach to professional development in Camden (London), Chris Brown, Carol Taylor and Lorna Ponambalum, UCL, Institute of Education.

#### **Objectives**

This paper reports on the Haverstock primary to secondary transition project. Designed to improve the experience of transition to secondary school for vulnerable pupils in Camden (London), the project used Lesson Study to help primary and secondary practitioners work together to develop effective cross-phase pedagogical approaches to teaching English/ literacy and science. The paper has two specific aims: 1) to report on how a Design Based Research (DBR) method was used to tailor the Lesson Study approach to the Camden context; and 2) to provide data on the impact of the DBR led Lesson Study approach.

#### **Perspectives**

The Design Based Research perspective argues that studies of 'what works' should be concerned with questions of 'who designs an intervention' and 'why'; and the double hermeneutic that exists between research and practice (Gutierrez and Penuel, 2014). DBR is described by Anderson and Shattuck (2012:16) as an approach "designed by and for educators that seeks to increase the impact ... and translation of education research into improved practice".

# **Data sources**

The Haverstock Primary/Secondary Transitions project was conceived with the purpose of bringing together primary and secondary teachers from the London Borough of Camden in order that they might employ Lesson Study (Dudley, 2014) to develop effective cross phase pedagogical approaches/strategies to teaching English/literacy and science to support the transition of year 5 to year 8 students. A total of 18 schools were engaged in: 1) nine Lesson Study sessions throughout the course of the year; and 2) a workshop to examine impact.

#### Methods

Primary and secondary schools have their own particular ways of working and these are not especially well suited to fostering cross-phase collaboration. In addition, using Lesson Study is a new phenomenon in English schools and using Lesson Study in a cross phase way rarer still. Correspondingly the project employed a DBR approach to the development and implementation of cross phase Lesson Study. That is, we (i.e. participating teachers from these schools, the Assistant Head project lead from Haverstock school, and researchers from the Institute of Education) sought, as a collaborative partnership, to design, test and refine cross-phase Lesson Study in a real educational context, with a view to establishing a basis for its future roll out.

#### Results

Impact data shows that, as a result of the project, teachers are better able to identify ways of improving practice that impacts on the outcomes of their students and receiving feedback so that their improvement efforts can develop iteratively. We have also built practitioner capacity in relation to: 1) understanding and evaluating impact; 2) cross phase collaboration; and 3) engaging in, managing and tailoring a process of cross-phase Lesson Study. DBR-capacity building is also viewed as a vital precursor to the project's ongoing sustainability: it is only when practitioners take ownership of an initiative that it will continue and, we argue, feelings of ownership have flourished because practitioners were deeply involved in the creation and development of the initiative.

#### PAPER 2 ABSTRACT

Flexibility as a tool for improvement, Sebastjan Cagran, National School for Leadership in Education

Introducing the right forms of flexibility could help teachers improve their skills with activities, such as job rotating, networking, teamwork and collaboration. With knowledge retrieval, utilisation and sharing through interpersonal activities the learning capacities of teachers and schools could be improved. The purpose of the paper is to present a case study that examines how flexibility can be applied to help teachers improve their skills through networking, collaboration, knowledge sharing, training or receiving coaching and mentoring from someone who understands these skills. In the case study, the functional flexibility or organizational flexibility was examined. Employees can be transferred to different activities and tasks within schools, among schools and even within the education system. Job rotation, networking and professional communities of practice are labels given to the functional flexibility scheme to be considered. The objective of the case study was to introduce flexibility in the Slovenian labour market of education and to examine how this could help to achieve teachers' development and improvement'. The cross-sectional study involved observations and data analysis of a quantitative survey. Data include observations of network meetings, SPIN analysis and informal conversation with teachers. In addition, a survey was designed to separately collect data from 99 teachers and 75 head teachers. The results demonstrate that schools frequently do not exercise the flexibility. The most frequently used form is the employment for a limited time. In that relation, a negative position of teachers towards that type employment was noticed, since temporary employment contracts do not provide the appropriate level of security. The application of functional flexibility within the case study, however, showed different results. The results show that teachers, included in the case study, improved their skills through networking, collaborating in communities of practice and knowledge sharing. For the purpose of measure, we used the list of ten skills most sought after by employers (Hansen and Hansen, 2014). The most significant progress was noticed at teamwork, planning and organising, flexibility, and problem solving skills. On the other hand, the least progress was noticed in the field of communication skills and computer literacy. As already identified in the preliminary researches (Cheng, 2011 and Retna and Ng 2006), teachers prefer to use interpersonal interactive methods of collaborating and knowledge sharing. The finding indicated social capital that was build in between networks had an important influence on teachers' improvement. The trend of flexibility in the field of education should move away from the fixed term contracts and focus on the use of several different elements of flexibility. Using other elements of flexibility, linked for instance to the organization of work, space, time, etc., could lead to a more effective and flexible teacher, and in the end to a better improvement of teachers.

#### PAPER 3 ABSTRACT

Using Different Measures of Teaching Quality to predict Student Learning in Mathematics: An Exploratory Study, Charalambos Charalambous, Ermis Kyriakides, University of Cyprus.

Introducing the right forms of flexibility could help teachers improve their skills with activities, such as job rotating, networking, teamwork and collaboration. With knowledge retrieval, utilisation and sharing through interpersonal activities the learning capacities of teachers and schools could be improved. The purpose of the paper is to present a case study that examines how flexibility can be applied to help teachers improve their skills through networking, collaboration, knowledge sharing, training or receiving coaching and mentoring from someone who understands these skills. In the case study, the functional flexibility or organizational flexibility was examined. Employees can be transferred to different activities and tasks within schools, among schools and even within the education system. Job rotation, networking and professional communities of practice are labels given to the functional flexibility scheme to be considered. The objective of the case study was to introduce flexibility in the Slovenian labour market of education and to examine how this could help to achieve teachers' development and improvement'. The cross-sectional study involved observations and data analysis of a quantitative survey. Data include observations of network meetings, SPIN analysis and informal conversation with teachers. In addition, a survey was designed to separately collect data from 99 teachers and 75 head teachers. The results demonstrate that schools frequently do not exercise the flexibility. The most frequently used form is the employment for a limited time. In that relation, a negative position of teachers towards that type employment was noticed, since temporary employment contracts do not provide the appropriate level of security. The application of functional flexibility within the case study, however, showed different results. The results show that teachers, included in the case study, improved their skills through networking, collaborating in communities of practice and knowledge sharing. For the purpose of measure, we used the list of ten skills most sought after by employers (Hansen and Hansen, 2014). The most significant progress was noticed at teamwork, planning and organising, flexibility, and problem solving skills. On the other hand, the least progress was noticed in the field of communication skills and computer literacy. As already identified in the preliminary researches (Cheng, 2011 and Retna and Ng 2006), teachers prefer to use interpersonal interactive methods of collaborating and knowledge sharing. The finding indicated social capital that was build in between networks had an important influence on teachers' improvement. The trend of flexibility in the field of education should move away from the fixed term contracts and focus on the use of several different elements of flexibility. Using other elements of flexibility, linked for instance to the organization of work, space, time, etc., could lead to a more effective and flexible teacher, and in the end to a better improvement of teachers.

### PAPER 4 ABSTRACT

Combining the best of two worlds: Integrating data-use with research informed practice for school improvement, Chris Brown, UCL. Institute of Education

Evidence use is needed to deal with the challenges faced by many school systems worldwide (Brown, 2015). To date, approaches to school 'evidence-informed improvement' typically fall into two distinct camps: data-use and researchinformed practice. Generally, the first involves the analysis and use of data to improve educational practice (Schildkamp & Poortman, 2015). The second, research-informed practice, represents "a combination of practitioner expertise and [the] best external research" (www.education.gov.uk, 2014). Both, however, share the aim of improving teaching and learning outcomes. There is much overlap between these two approaches. By seeking effective ways to identify, develop and share best practice, for example, both have reached a similar understanding of the need for:

- · Collaborative teacher learning processes;
- Cycles of inquiry that involve the identification of need, the development, practical trial, iterative refinement and dissemination of new approaches to teaching and learning;
- The use of tacit knowledge in the process of knowledge creation,
- Collaborative data/research-informed improvement, in Professional Learning Communities (e.g. Stoll et al., 2006).

Both approaches have proved effective. For example, when research is used as part of high quality ongoing professional development, it can positively contribute to teacher, school and system performance (Cordingley, 2013; Mincu, 2013). Likewise, effective data-use can improve a schools' functioning in terms of increased student achievement (Campbell & Levin, 2009; Lai, et al., 2009). Taken together, both approaches seek to tackle the same goals in similar ways, but each has areas of deficit that mirror the strengths of the other. For example, while data-use teams are effective at identifying educational problems and their underlying causes, they typically depend on their own capacity in designing improvement measures. They thus run the risk of designing improvement measures based on data, which research has already shown do not work. Conversely, research-informed practice ensures that improvement measures to tackle issues of teaching and learning are steeped in what has been effective elsewhere, but it is not always apparent that the improvement measures fit with the context of the specific school, and truly tackle the causes underlying the problems faced by the school.

With this conceptual paper, based on an extensive literature review, we argue that there is both merit and benefit in joining together what are currently two disparate approaches and in bringing together researchers who, until now, have worked separately. We propose a new combined approach to research and data-use that involves:

- Continuous and systematic cycles of inquiry,
- Data-use to identify needs of teachers and learners
- Research-informed knowledge creation to aid the development of improvement measures;
- Refinement and trialing of improvement initiatives using effective joint practice development; and
- Evolving feedback loops in order to ascertain feedback.

While working with this approach, facilitators build conditions of trust and collaboration to ensure maximum benefit, and stimulate knowledge mobilization to aid school and system reform and improvement. Taken together, integrating datause with research-informed practice is likely to be the best of two words, thereby potentially leading to more effective and sustainable educational improvement.

# SE Innovate! Session

Title: A European project to support leadership development and school self-evaluation

Topic: Self-evaluation: schools and systems improvement

Abstract ID: 3275

Session: Parallel Session 4

Friday 8 January 2016 11.00-11.30 Session Date and Time:

Location: Argyll Suite 2

Author/Speaker: Fiona Stephens

Company/Organisation: Canterbury Christ Church University

Co-Authors: Dr Robin Precey

Presenting Author: Fiona Stephens

Presentation Method: Innovate!

# Abstract

Partners in a consortium that represents five partner European HEIs would like to take this opportunity to disseminate information on their Erasmus funded project, iQEREL (International Quality Evaluation Resource for Education Leaders). The project to develop this evaluation resource is in its early stages and an Innovate session would present an opportunity share information about the project with an interested audience and also to obtain feedback about how best the evaluation resource can be enhanced to meet the needs of European school leaders. The project plan is to develop a virtual learning environment that will offer literature and case studies to support the school improvement agenda. This resource will also offer opportunities for discussion and forums on issues of joint educational interest to school leaders and encourage a network of European school leaders as it develops from initially being a tool for Masters students on leadership programmes to something that school leaders and schools generally can access.

A key imperative underpinning the proposal for this project is a clear recognition of the need to attract, retain and support the highest calibre of educational leader possible. In the context of the increasing emphasis on school autonomy and accountability in European schools, it is essential that leaders have highly developed competences and the concomitant knowledge and skills to mediate policy initiatives in order to reform and improve our schools systems. This is particularly relevant, this project team would argue, in the area of school evaluation which can function as both a summative and formative approach to accountability. Many of the accountability systems in place at the moment in Europe, e.g. Ofsted, are based on a view of the world that is one of relative stability and predictability. In reality this is not true as the world of education is complex and uncertain and requires new leadership and management knowledge, skills and competencies to work within difficult potential tensions including greater collaboration in increasingly competitive international, national and local environments and flexibility and adaptability with a clear, resolute focus on the core purpose of education

The approaches that will be used in the session would be to share information on the project, and what has been achieved to date and then to encourage session participants to share their ideas about what kind of resources and opportunities would be helpful for school leaders in this context. This feedback can then help inform the resource design of our resource in 2015-2016.

As well a supporting the main theme of the ICSEI 2016 conference this Innovate session would also resonate very appropriately with subthemes of the conference: 2. Leadership development and practice to build sustained improvement and 6. Self-evaluation: schools and systems improvement, as the project is about augmenting leadership development with a resource that provides literature and case studies of good practice and offers opportunities for self-evaluation on aspects of education that are not always considered in most external evaluation contexts, for example, leadership development, learning environment and children's well-being.

# LDP Paper session (A)

Parallel Session 4 Session:

Session Date and Time: Friday 8 January 2016 11.30-13.00

Location: Argyll Suite 2A

Chair: Ken Muir

#### PAPER 1 ABSTRACT

The implications of teacher professionalism for the work and development of school leaders, Raphael Wilkins, The College of Teachers, UK.

The context of this paper is the recent phase of fresh thinking about teacher professionalisation in England, which has led to the establishment of a new, independent Chartered College of Teaching: a process in which the author has been closely involved. This new policy environment opens up implementation choices by school leaders and other opinion-formers which will determine whether the full potential benefits of professionalisation will be aspired to. This paper argues that a fully professionalised status for teaching would have profound implications for the work that school leaders do, and for the processes of their professional learning.

School leaders have two roles. They manage institutions, where they are *in* authority; secondly they are senior members of the teaching profession, where they are *an* authority. The latter receives little attention in current leadership development, but that would have to change if the profession takes over from government more of the work of leading professional practice. In their roles as senior, leading, members of an established self-governing profession, school leaders collectively will need to take on a suite of new functions; and individually in their senior executive roles will need to approach some of their current functions differently.

The new roles which should be asserted collectively concern the shifting balance of functions between government and the profession which would be an expected outcome of professionalisation. These include collectively contributing significantly to the development and advocacy of education policy; the long term planning and visioning for the role of schools in society; the generation, management and use of education research; the content and standards of teacher training; the management over time of the cadre of experts a self-governing profession needs; and public advocacy for the profession. Whereas a workforce of operatives is directed and supported by external experts and officials, a mature profession grows its own experts, and endorses the work of universities, rather than the other way round.

The current and continuing roles of school leaders which would need to be approached differently concern emerging understandings of professional, as distinct from managerial, working relationships between senior and less senior practitioners, which should form an important element of the process of professionalisation. These include how school leaders undertake functions in and beyond their own institution in relation to coaching and mentoring; the assessment of standards of professional practice; expert consultancy; professional ethics and professional conduct discipline; and achieving balance in professional learning aims between the needs of the employing institution and the longer term needs of the profession and the career interests of individual practitioners.

This paper is the outcome of a combination of conceptual research, in-depth interviews with the founding proposers of the new Chartered College, analysis of school leadership standards from several countries, and scholarship on the work of professions. It aims to challenge assumptions and stimulate debate.

#### PAPER 2 ABSTRACT

Is teachers' instructional leadership (IL) a lever for school improvement? Lessons learned from emerging teacher IL development in outstanding schools within a centralised and partially decentralised educational system in Europe, Maria Kaparou, University of Southampton.

The critical role that instructional leadership (IL) plays in creating and sustaining a learning culture has gained international currency while teaching quality and leadership are recognised as the two key influences on student learning within European governments' reform agendas. This paper examines the enactment of instructional leadership in outstanding secondary schools, and the relationship between leadership and learning in enhancing student progress and encouraging teachers' professional learning in England and Greece. A multiple case design was adopted, focusing on two secondary schools with outstanding performance, within each country, using the interpretivist paradigm. The main lessons learned from this cross-country comparative study are related to the emergence of collaborative patterns of leadership for 'learning for all'. Developing teachers' learning improvement and leadership capacity have been striking examples of co-constructed instructional leadership in the English sample schools, while an unofficial instructional 'teacher leadership' culture suggests potential for reconsidering leadership in Greek state schools. The study makes a unique contribution to knowledge by developing a grounded theory model of instructional leadership that is particularly apposite for highly-centralised education systems, such as that found within Greece.

#### PAPER 3 ABSTRACT

Leading for learning and classroom practice, Laura Rožman and Andrej Koren

There is broad body of literature and researches on leading for learning, mostly focusing on headteachers, how they can or have to promote teachers and children learning to enhance student's achievements. The paper has an ambition to go deeper. It starts with characteristics of effective teaching according to resent researches, theories and good practices that enhance it. Secondly, it deals with leading for learning, exploring headteachers leading that improve teaching and learning at the classroom level. Thirdly it explores how/if both, leading for learning and teaching practices are connected or at least if they are correlated. On that basis the design of a research on leading for learning and its impact on teaching will be presented. As Meta-Analyses indicate positive correlation between leading for learning and students achievements, correlation between leading for learning and characteristics of teaching will be explored.

Leadership for learning is rather problematic when it comes to its definition, although the concept is present both in literature and in professional discussions and practice. Leadership for learning still raises a lot of dilemmas. The biggest of them all is how to put leadership for learning into the framework which would cover all the key elements that affect the effective learning and teaching at the class level. However, most of theorists and researchers agree that leading for learning focuses on enhancing learning at all levels of school, leadership for learning focuses on enhancing active learning and teaching methods.

The aim of the research is to explore the factors and effect of school leadership on learning and characteristics of teaching. To explore how and if leading for learning effects didactical characteristics of teaching.

A combination of qualitative and quantitative methods for collecting data will be used, the quantitative approaches will give the basis of statistical comparisons and statistical induction, and qualitative approaches will give better insight and the possibility of causal explanation. It is expected, that higher presence of leading for learning on the level of school leadership, is reflected in a higher rate of use of active forms of learning and teaching in the classroom.

The research in progress will be presented with dilemmas in combining two scientific fields - pedagogic and leadership in education and with awareness of limitation in researching correlation between leading and characteristics of practises in classroom. Discussion will be opened on research methods: Classroom observation, interviews with headteachers and questionnaire for teachers - are they appropriate and which methods could be used for better research results?

#### **PAPER 4 ABSTRACT**

Teacher Leadership: A study of leaders in action, Dorothy Andrews and Joan Conway

In 1996 Katzenmeyer and Moller related the potential for teachers to exercise leadership as a sleeping giant whose "time had come". They posed that as teachers believed in their capacity to lead, they would take increased schoolwide responsibilities and, in so doing affect teaching and learning across the school. Since that time, many authors have written about and advocated for widening teachers' responsibilities beyond the classroom. As this concept has taken traction, teacher leadership has been explored within the contract of distributed leadership (Harris, 2008; Spillane, 2006). Spillane calls for more studies to capture leadership in action, while others have problematized the reality of teacher leadership within organisational structure, especially the relationship between principal (and formal leaders) and teacher leaders. Much has been written about the importance of instructional leadership of the principal, often negating the importance of instructional leadership of teachers. Others have questioned the evidence that teacher leadership does make a difference to student learning outcomes. Our concept of teacher leadership while drawing from other researchers' understandings, for example, Muijs and Harris (2003), Durrant, and Frost (2004), Katyal and Evers (2004), has been informed by research outcomes of the Leadership Research International (LRI) group (Crowther et al., 2009; Crowther & Associates, 2011). We have established a Teachers as Leaders Framework that recognises schools as social systems which have clearly defined roles and expectations and are managed and worked by individuals with particular personalities, needs and dispositions.

This paper focuses on teacher leaders in action having positive impact on the quality of teaching and learning, student success, including learning outcomes and the relational nature of leadership that is developed within schools enabling teacher leadership to flourish. The findings are drawn from two longitudinal studies in two Australian education systems. These mixed methods studies provide empirical evidence of enhanced student success as a result of whole school improvement in action at both school and system levels. Furthermore the case studies, used to explore the contributing factors to the schools' success, affirm the notion of the importance of teacher pedagogical leadership that has flourished as a result of an enabling culture supported by the principal and the system.

The images of leadership presented in this paper provide clear evidence of the importance of culturally-contextually based pedagogical practice developed and actioned by teacher led professional learning communities (Hord, 1997, 2004). Developing capacity for the professional learning community for ongoing deep reflection, learning and action has been the work of teacher leaders working in a mutualistic relationship with the principal, namely parallel leadership. The nature of parallel leadership (Andrews & Crowther, 2002), that is teacher pedagogical leadership and the principal meta-strategic leadership, is explored so as to provide examples of teacher leaders in action.

Overall evidence of enhanced student achievement, sustainable professional learning, sustainable organisational structures and learning practices are presented as the outcomes of leaders in action.

# LDP Paper session (B)

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.30-13.00

Location: Argyll Suite 2B

Chair: Celia McArthur

#### PAPER 1 ABSTRACT

Identifying and Analysing Intercultural and Globally Minded Educational Leadership Preparation Programs, Jacob Easley and Pierre Tulowitzki, Eastern Connecticut State University.

In today's age of the 21st century global economy (OECD, 1995) schools need to foster learning environments that correspond to the knowledge economy and learning society. Adequate educational leadership, and in this case globally minded leadership, is key as it is an important school-based factor for determining students' learning (Leithwood et al., 2010; Scheerens, 2012). Yet, in the US the federal policies remain largely muted in this regard. And while development and training efforts for school principals have increased in many European countries, the degree of professionalization varies heavily as does the content of curricula (OECD, 2008). Taking an international perspective, limited growth regarding globally minded school leadership preparation and development can be found (cp. Easley & Tulowitzki, 2013).

The purpose of this exploratory study is therefore to identify, describe, and compare the components of (specific) existing, intercultural and globally minded leadership preparation programs in the US, in Europe, and around the globe; and to understand the policy-based processes, challenges, and needs of support for program development. Globally minded leadership can be understood as a dynamic, systemic, and anthropologically oriented enterprise that attends to the relationships among the global and local contexts, while recognizing the reciprocal function of these relationships within the profession.

Much of the existing research in this area is derived from the case study approach. And while there are debates within the field as to whether or not there exist distinct cross-national methods per se (Hantrais, 2008), the work presented herein is understood to be a conceptual, emergent design intended to inform future research. This study is informed by a previous study on policy formation of intercultural and globally minded educational leadership preparation. Based on this existing research, the authors developed a standardized questionnaire for assessing leadership preparation programs. It covers program proficiencies, content, and unique program features that advance the development of globally minded leadership.

The previous study showed that limited growth regarding globally minded school leader research and development can be accounted for. Furthermore the increasing internationalization of university programming to include expanded course offerings and greater opportunities of international exchanges that bring students face-to-face with perspectives different from those indigenous to their home cultures speaks directly to the need for a shift in leadership preparation to better address the impact of globalization and intercultural exchange on youth learning in schools.

The next step of the study is to distribute this questionnaire to institutions with eligible leadership preparation programs. Several institutions and programs have already been identified and some of them contacted. It is planned to consult with members of ICSEI, UCEA, BELMAS and AERA and collaborate to identify additional existing intercultural and globally centric leadership preparation programs. The collected data will be analyzed in order to create a matrix of program features and policy procedures. The findings will be used to inform the next generation of policy formation for 21st century leadership preparation program development.

### **PAPER 2 ABSTRACT**

Global City Leaders: The leadership, lives and aspirations of Generation X leaders in London, New York City and Toronto, Karen Edge, UCL Institute of Education.

This paper draws on evidence from a three-year ESRC-funded research project exploring the careers, identities and aspirations of 60 Generation X (under-40-year-old) principals and vice principals in London, New York and Toronto. Based on the findings of the study, we argue that understanding the experience and priorities of this new generation of school leadership is imperative to create new and fit-for-purpose strategies for their recruitment, development and retention.

The paper introduces the overall project rationale and a detailed explanation of the design, collection and analysis of the interviews conducted with 65 leaders in each of the second and third year of the study which form the basis of this paper. Short city-based policy/practice context summaries are provided including snapshots of school leadership roles, responsibilities and accountabilities. Next, the literature review focuses on global cities, generational theory, Generation X, school leadership and brief overviews of recruitment, career theory and retention. In turn, we present the most pressing and timely findings from within and across cities including:

- Career trajectories: Early leadership, shoulder-tapping, job-hopping and time in post
- Professional learning: Desired learning preferences and mentoring
- The realities of leading as a Generation X: The opportunities and challenges of leadership
- Generation X leadership: Priorities, strategies and school improvement
- **Future aspirations**: What do young leaders want to be when they grow up?

These findings also provide much food for thought for policy, leadership development and researchers committed to the recruitment, development and retention of this emerging cohort of leaders. This paper will be of interest to policy makers, academics and leaders. The paper provides insight into this new cadre of leaders, their views and ambitions and posits new strategies for assisting school and policy leaders in recognizing and developing opportunities for evidence-based challenges and supports for Generation X leaders.

#### **PAPER 3 ABSTRACT**

I will leave the school at the end of this term: The voice of Young Heads in Chile, Sergio Galdames, Luis Ahumada, Carmen Montecinos and Karen Edge, PUCV/UCL-IoE.

### **Objectives**

Coming from a larger comparative international study, aimed to characterize the role of young leaders, this paper explore the perspectives of young Heads in the Global City region of Santiago/Valparaiso - Chile. This paper reports on the vision of young school leaders about their careers, specifically about retention in their current school.

# Theoretical framework

The Chilean educational policy landscape has experience systematic and continues reforms since the early nineties (Mizala, 2007). However, transformation in the school leadership are recent. The introduction of a public selection process for Heads in 2011 and professional developments programs for current and new school leaders in 2011, suggests an increasing recognition of leadership and the potential arrival of new/younger school leaders. Internationally, another body of work have stressed a potential shortage of school leaders (Bush, 2011). While there are different reasons explaining this issue, one of the key element is the lack of system capacity to retain and effectively plan the succession school leaders (Jacobson, 2005). Additionally, recent studies have stressed that younger generations of school leaders are presenting different expectations and demanding new working conditions than older generations (Edge, 2013).

Coming from a qualitative approach, in deep interviews were performed to 10 Heads under 40 years (4 males and 6 females) from government-funded schools in the Global City region of Santiago/Valparaiso (Chile). The interviews explored the following four topics: Educational policies (focusing on leadership); Work-Life balance; collaboration and learning within the school; and Personal career decisions. All interviews were audio recorded. Audios were transcribed and then analyzed using content analysis around the main topics of the study. As presented in the title of this paper, all the participants declared leaving the school shortly at the end of their current term (between 1 to 4 years). While most expressed the will to move to another school, others declared an interest in going up in the educational system, usually seeking the role of the local administrator.

The main reasons behind this decision differ. Nevertheless, it appears to be a recognition that a school leader's career has different stages, which includes specific challenges, skills and locations. Most of them refers to the phrase "I think I (will) hit the ceiling here". There is a desire to learn and to know different contexts, to develop different skills and to achieve greater goals.

Regarding the question about "what will keep you in the job?", the general answer was "nothing". In some cases, the answers move between "greater autonomy" and "more resources", both connected with the idea of building larger projects.

There are abundant studies addressing the issues related with the exodus of school leaders. Considering the entry of a new generations of young leaders, attention must be placed on the current educational policies to ensure the stability of the system and increase the retention of this 'precious' human talent. This paper will support further enquire and decision making to build sustained improvement.

### **PAPER 4 ABSTRACT**

Leadership, life and family: the gendered experience of young women leaders in London, New York and Toronto, Juilet Horton, Liz Robinson, Katie Drucker, Donalda Chumney and Karen Edge

Global Cities are seen as key sites of influence and innovation and indicative of international trends. In education, low aspirations for leadership positions and an escalating retirement rate have seen leadership shortages within these large urban areas. As such, an emerging and younger generation of leaders are taking the helm of many urban schools and are stepping into school leadership positions at earlier ages than their predecessors. It is possible, as a new generation, they are bringing new priorities and approaches to their roles yet there is a paucity of research exploring their experiences.

In response, our three-year ESRC-funded research project explores the working practice and leadership experiences of Generation X school leaders in three Global Cities - London, New York and Toronto (Foreign Policy, 2008). Taking a generational perspective, we focus specifically on leaders under the age of 40 (Generation X) as they have they have experienced the most rapidly expanding technological era and are thought to be globally minded, techno-literate, informal and pragmatic (Zemke et al, 2000). As these traits differ from those of their predecessors (i.e. Baby Boomers) we believe this new generation may have alternative perspectives on and approaches to leadership Initial findings from the larger study suggested a strongly gendered leadership experience for Generation X leaders specifically related to work/life/ family management. Many of the young women in our larger study have taken on senior leadership positions earlier while simultaneously starting a family later than previous generations. Consequently, we witnessed increasing tensions between work and life felt most prominently by this group. To understand the specific and unique experiences of this generation of women leaders, we nested an additional gender-focused study within our larger research project and conducted supplementary gender-focused interviews with 30 female principals and vice-principals across the three cities. Interviews explored their leadership experience; the opportunities and challenges they face in relation to work/life; their future educational leadership aspirations; and their recommendations for policy and practice.

Drawing on gender interview evidence, the paper presentation the overall study rationale and the research literature informing the design and analysis including: global cities and urban education, urban staff turnover and the emergence of Generation X leaders; gender and educational leadership; wellness and well being in high - demand jobs. Data gathering and analysis strategies are described and the most salient findings are presented in detail including: frustrations surrounding the simultaneous planning of career and family; work/life balance aspirations and role models; importance of family support and issues; and, the notion of a glass floor influencing career progression. The paper makes a contribution to the academic literature related to educational leadership, education in global cities and the generational explorations of the sociology of work. It also marks the establishment of a new theoretical proposition for exploring the role of gender, generation and leadership within schools while contributing to strategic policy imperatives to support and retain women leaders.

# **RCEL Innovate! Session**

Title: Teachers need healthy, safe and supportive learning environments too! Circling as a pedagogical tool to build community and teachers' social emotional competencies

Topic: Researching the conditions for effective learning

Abstract ID: 2979

Session: Parallel Session 4

Friday 8 January 2016 11.00-11.30 Session Date and Time:

Location: Argyll Suite 3

Authors/Speakers: Trista Hollweck and Karen Bouchard

Company/Organisation: University of Ottawa

Presenting Authors: Trista Hollweck and Karen Bouchard

Innovate! Presentation Method:

# Abstract

A multitude of programs and curricula have been developed to promote students' social and emotional learning (SEL). Specifically, SEL describes the process of acquiring skills to develop: emotional self-awareness, social-awareness, responsible decision-making, self-management, and relationship management (Jennings & Greenberg, 2009). Although teachers are routinely tasked with the implementation of SEL initiatives in the classroom, research consistently demonstrates that they receive little SEL training and lack direct experience with SEL 'in action' (Brackett et al., 2012; Buchanan, Gueldner, Tran, & Merrell, 2009). The consequences from this absence of formal teacher training on SEL implementation are further exacerbated by the few opportunities that teachers have to reflect on their own social and emotional competencies. Certainly, literature has indicated significant associations between teachers' emotions and their cognition, motivation, and behaviours, including teacher well-being and job satisfaction (Sutton & Wheatley, 2004). In recognizing the pivotal role of social and emotional skills for both students and teachers, it becomes evident that teachers require formal opportunities to reflect on their own social-emotional competencies in order to facilitate this learning for their students.

Classroom circles have been recognized as an effective method for developing students' SEL (Costello et al., 2010). Current circling processes find their roots in traditional aboriginal practices, and are further influenced by restorative justice approaches. Circling in schools has been used as a pro-active strategy for students to explore their emotions, build positive relationships with teachers and peers, and has been recognized as an integral component in the effective TRIBES learning community process as well as successful bullying prevention programming (Costello et al., 2010; Gibbs, 1994; Olweus, 1993). Circling typically involves the meeting of members from a shared community, where participants engage in meaningful conversations designed to: enhance listening and responding skills; promote empathy; and work towards developing cohesiveness and understanding amongst members of the circle. While the benefits of classroom circling for students have been extensively recognized, there is only a small emergent literature that acknowledges its potential use with educators (Boyes-Watson & Pranis, 2010), especially with teachers-in-training. Despite this scant attention, scholars have argued that circling could be similarly used with students and teachers to develop social and emotional competencies and improve the learning context in classrooms, teacher education and professional development.

The purpose of this 'innovate!' session is to explore circling pedagogy and SEL literature, share best practices, and encourage participants to reflect on the role teachers' own social-emotional competencies plays in effective SEL implementation. This 30 minute session will report on the findings from a qualitative research study examining circling as a pedagogical tool to support the development of teacher candidates' social emotional competencies and its influence on their classroom practice. Participants will experience a large-group community circle and discuss how circling approaches can be used to improve the learning context in both teacher education and teacher professional development.

# LDP Paper session (A)

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.30-13.00

Location: Argyll Suite 3A

Chair: Christine Forde

#### PAPER 1 ABSTRACT

A study of the perspectives of new headteachers upon leadership preparation and their first year of practice in secondary school in the Republic of Korea, Yoonjeong Lee, University of Warwick.

This paper draws on an interpretive study of the perspectives of first-year headteachers in secondary education in Seoul, the Republic of Korea (Korea). Education in Korea has been highlighted for teacher quality and their high standing in the PISA tables; on the other hand it is being criticised for high levels of student stress and low rankings in university world league tables. While there are different views on Korean education, many countries are using the Korean model, so gaining insight of this topic is crucial.

In a highly centralised education system, Korean headteachers reported that they have limited power and authority. Unlike many other Western countries, however, headteacher is a highly sought-after position and selection processes are very competitive. This study shows enlightening stories about educational leadership preparation and practice in Korea.

This largely qualitative study employs interviews, shadowing of headteachers, and some documentary analysis. Thirty-three interviews and twenty shadowing sessions were conducted. Most participants were first year headteachers. Interviews covered: motivation to become a headteacher; preparation for the headteacher's role; support for the headteacher in their first year; levels of satisfaction/dissatisfaction among headteachers; work life balance; and their approach to school leadership.

Through the process of data analysis, some key findings have emerged. First, both male and female headteachers' main motivation was described as to 'make their educational philosophy come true'. This was seen as a realistic aspiration as they saw the role of a headteacher as influential and carrying high status within a school. Secondly, it was found that headteachers felt well-prepared for their role, and, with varying degrees of confidence, believed they could carry it out successfully. This was because they had succeeded in getting through a competitive selection procedure to attain the job. Especially in the process of becoming a headteacher, many of them had experienced working in the Office of Seoul Metropolitan Education as an officer and policy maker. Thirdly, new headteachers felt confident of understanding the Ministry of Education, and the Office of Education policy goals, and felt they could influence education policy. They also saw themselves as having an interpreting role between policy and teachers. This meant that they aimed to be responsive to the concerns of teachers in their schools and their typical leadership style was one of inclusive or distributed leadership. Many in particular talked about offering 'servant leadership' and this reflected their mind-set in performing their role. In a centralised education system, many democratic features were revealed in Korean headteachers' practice.

#### **PAPER 2 ABSTRACT**

How School Principals' Attitudes Predict Their Use of Data in Their Leadership Practices - Results of a Quantitative Study Conducted in Germany, Ramona Buske, Martin Stump and Olga Zlatkin-Troitschanskaia, Johannes Gutenberg-University Mainz.

In line with recently modified policies on quality assurance in education in Germany, school administrators across the country now are expected to enhance schooling through systematic use of empirical data. Although a multitude of studies have been conducted of the influence of principals' leadership practices on teachers' use of data (e.g., Wayman, Spring, Lemke, & Lehr, 2012), little is known about the determinants of principals' use of data.

One theory is that principals' attitudes towards scientific findings influence their use of data. Bach, Wurster, Thillmann, Pant, and Thiel (2014) found that when principals perceived data as useful, they incorporated that data in their leadership practices. The principals' opinions on the source, validity, and justification of scientific knowledge (epistemological beliefs) can be important influential factors as well (Urhahne, 2006; Priemer, 2006). In this paper the relationship between principals' attitudes towards scientific findings and epistemological beliefs and their use of data in their leadership practices is investigated to identify predictors of their use of data.

Data for this study were from a cross-sectional study conducted in 2012 in the state of Rhineland-Palatinate, Germany in which principals from 297 schools of various types completed standardized questionnaires on their leadership behavior (e.g., external evidence orientation, internal evidence orientation, evidence substitute orientation; Stumm, Dormann, & Mohr, 2010), their attitudes towards scientific research and new scientific knowledge, and their epistemological beliefs. The relationship between principals' leadership practices and potential determinants thereof was analyzed empirically using structural equation modelling. The statistical software used in the analyses included SPSS and SmartPLS for variancebased partial least squares (PLS) path modelling.

The findings indicate that the principals' attitudes towards scientific research and new scientific knowledge as well as their epistemological beliefs influenced their use of data minimally; however, a negative attitude towards scientific knowledge resulted in an evidence substitute oriented approach to leadership. A significant albeit small effect was seen between epistemological beliefs and a school internal evidence oriented approach to leadership. Results and plausible reasons for them as well as limitations of the study will be discussed during the presentation.

Principals' systematic use of data in their leadership practices is essential to promoting teachers' use of data in their classroom practices and, therefore, to sustaining improvement in education. However, to establish methods to help principals incorporate research findings in their daily practices and hone their leadership skills it is necessary to identify the determinants of their use of empirical data. This study contributes to the literature on school leadership as it provides insight into principals' reasons for rejecting empirical findings or for adopting and incorporating them in their leadership practices and provides suggestions as to how principals can ensure their practices are in line with current educational policies.

### PAPER 3 ABSTRACT

Exploring the sustainability of school effectiveness: effective schools in poor areas, 10 years later, Xavier Vanni, Juan Pablo Valenzuela and Liliana Morawietz, Center for Advanced Research in Education, University of Chile.

The purpose of the study was to understand the sustainability of school effectiveness over a relatively long period of time (2002-2013), based on 14 primary schools serving students from low socioeconomic status, located in different Chilean cities, all of them previously identified as particularly effective (Bellei et al., 2004). We explored the following issues: How did their effectiveness evolve over time? What factors and process explain the trajectory of those "effective schools" over these ten years?

Although it is well known that school change is a long-term process, few researchers have studied schools over a long period (Reynolds, 2014); thus, there is a lack of analysis about the question of sustainability of schools effectiveness (Madden, 2001; Creemers & Kyriakides, 2010; Dinham & Crowter, 2011). Evidence consistently shows that schools which can be identified as effective at one moment, can deteriorate its performance, despite the fact that comparative studies show a high level of stability of schools' performance for limited periods and greater volatility for longer periods (Doolaard, 2002; Mangan et al., 2005; Hallinger & Heck, 2011).

This is a follow up study of a multiple instrumental case study (Stake, 2003). Specifically, we undertook qualitative case studies of fourteen schools previously studied. Each case study was conducted through interviews to current and former members of the schools (principals, teacher, and students), direct observation and the analysis of documents and statistics. After this, we conducted a cross cases analysis oriented to elaborate more general hypotheses and identify patterns among schools (Eisenhardt, 1989).

The analysis showed it is highly difficult to sustain high effectiveness for schools working with low-income student populations. About eight of the fourteen studied schools have either maintained or improved their educational performance during the last decade; but a significant decrease in school's performance is observed in the others. Noticeable, public schools decreased their performance more often than private subsidize schools.

Secondly, both internal and external factors were associated with the sustainability/non-sustainability of school effectiveness. Some external factors identified were: changes in the student composition of the schools, level of competition between schools, and the role of local education authorities. In turn, the most relevant internal factors identified were: school leadership, their stability and succession; the level of stability/change of teachers, and the internal process of induction for new ones; the development of a professional learning community and a culture of collaboration and trust; and the development of school capacity to adapt to the changes and to keep a strong collective identity.

Summarizing, we explained the sustainability of school effectiveness by its capacity to manage the political and institutional dimensions which means that they have had a good school leadership team, which emphasized the development of school professional and social capital because it allows stability to the pedagogical or technical dimension of schools, as well as strengthen of a school community that shared an internal culture.

### **PAPER 4 ABSTRACT**

A review of transformational leadership research in China between 2005 and 2015, Peng Liu

This paper used evidence from 233 transformational leadership studies in the Chinese language published between 2005 and 2015 to explore the theoretical development and nature of transformational leadership, the effects of moderating and mediating variables, the antecedent of transformational leadership, and its effects on organizational and people's variables. The seven research questions that guided this review were designed to explore diverse aspects of transformational leadership. In answer to the first question, about the definition of transformational leadership in Western and Chinese literature, this review concludes that Bass's definition is the one most commonly used in Chinese academia; Chinese scholars have further validated Bass' (1985) transformational leadership model and also have further developed this theory. In particular, Li & Shi (2005) formulated a new Chinese transformational leadership model based on both Bass' model and their own survey of Chinese business sectors. In the Chinese literature published during the examined period from 2005 to 2015, 58.8% of the Chinese transformational leadership research used Bass's transformational leadership theory as a theoretical framework, and 33.3% of the research used Li & Shi transformational leadership theory. The second research question was about the research methods used in transformational leadership research in China. Among the 233 transformational leadership articles reviewed in this paper, 38 were theoretical studies, 4 were qualitative studies, 183 were quantitative studies, and 8 employed mixed methods in their research. As for the third question, about the antecedent of transformational leadership, further research needs to be conducted in order to help further understanding in this regard in the Chinese context. The fourth question was concerned with the roles of moderating and mediating variables in the relationships between transformational leadership and outcome variables. The review identified 23 specific mediators and moderators. The mediating and moderating effects were mixed with medium-level effects; similar research in the education field needs to be encouraged. The final question was about the effects of transformational leadership on organizational and people's variables in the Chinese school context. At the individual level, 6 variables (turnover intention, employees' voice and silence, job performance, organizational commitment, job satisfaction, and employees' creativity) were identified, and the findings showed that there were strong relationships between transformational leadership and these variables. Team-level research was dominated by the relationships of organization citizenship behavior and team performance with transformational leadership. The research results showed that these relationships are significant. At the organizational level, the research findings indicated that there are strong relationships between transformational leadership and organizational performance and organizational creativity.

This study concludes that the Chinese literature on transformational leadership has mainly used Bass' leadership theory in both non-education and educational contexts. This indicates that there is a lack of indigenous study of transformational school leadership in the Chinese school context, although Liu (2013) published a Chinese transformational school leadership model in an English journal. In comparison to the management field, the Chinese transformational leadership research in education is in its infancy, and further transformational school leadership research in the education field is in demand in China.

## LDP Paper session (B)

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.30-13.00

Location: Argyll Suite 3B

Chair: Gillian Hamilton

### PAPER 1 ABSTRACT

Leadership Identity Construction Practices: the Case of Successful Israeli School Principals, Dorit Tubin, Ben Gurion University of the Negev.

Principals' ability to lead school toward its goals depends to a large extent on their leadership identity that influences the clarity of their mission, the way they see themselves as educational leaders, their self-awareness, and acceptance of their authority by their followers. Based on DeRue and Ashford's (2010) approach, leadership identity is defined as the meaning attached to the principal's role on the personal, relational, and collective levels. A meaning that depends and creates job embeddedness, occupational embeddedness and organizational embeddedness (Feldman & Ng, 2007). To influence others to assume the follower role and attribute leadership identity to themselves, principals are engaged in a claiming-granting process involving verbal/nonverbal and direct/indirect actions. The goal of the present study is to explore these leadership identity construction practices to better understand the delicate relations between successful school principals' identity formation practices, and how these practices influence others and the principal's leadership identity in return.

An instrumental multi-case study was conducted on four successful school principals in large Israeli high schools, employing interviews, observations and document analysis. The data were collected through 2012 by a team consisting of three researchers. Within and between cases analysis was conducted to identify embeddedness forces and categorize leadership claim practices.

The findings reveal that all four successful and experienced principals were strongly embedded in their leadership role, principal occupation and school organization, due to strong forces of fit (with core beliefs, aspirations and other identities), links (with people and place), and sacrifice (of loose current links and broken former links when accepting the leadership position). It was also found that the studied principals used numerous leadership identity claim practices such as controlling other's time and presence, checking, backing and praising (direct verbal); rewarding, asking for solutions, name dropping and acknowledging weakness (indirect verbal); handshake and eye contact, improving the physical environment and personal presence (direct nonverbal); and reorganizing the hierarchy, nominating the fittest and developing esprit de corps (indirect nonverbal).

The study has several contributions. First, the findings challenge the three embeddedness types in the case of successful experienced principals. While the fit, links and sacrifice forces were found to be a useful tool for analyzing principal embeddedness, they could not effectively serve to discern between embeddedness in the role, occupation and organization. The second contribution is the notion that leadership claim practices support hierarchical leadership and distributed leadership alike. The third theoretical contribution is the connection between embeddedness and leadership identity claim practices by demonstrating how one supports the other. Practically, the findings can serve a principal preparation program to increase awareness of leadership identity work, and as a diagnostic tool for serving principals seeking to clarify their leadership identity and improve their ability to lead their schools toward success.

### **PAPER 2 ABSTRACT**

Comparing school leadership in effective and less effective high schools in Jamaica, Tamara King, University of Huddersfield.

Various strands of school effectiveness research have united around the understanding that school leadership is important to student outcomes. Notwithstanding a rich and varied research literature and advancements in the conceptual and methodological underpinning of research in the field, the type of school leadership and how it works to influence student achievement remains a black box (Leithwood & Jantzi, 2006; Spillane, Halverson, & Diamond, 2001). Moreover, not much is known about how leadership is enacted and practiced in schools with varying record of performance in Jamaica. According

to Scheerens (2001) developing countries can shake up and enliven school effectiveness research because they are able to highlight the ways that, partially culturally embedded, contextual conditions are relevant to the development of the field's knowledge base. Utilising a case study research design, this research investigates how principals lead in effective and less effective Jamaican high schools. It maps the leadership behaviours, approaches and priorities in five cases and gauges leadership's role in facilitating those school conditions that have been linked to quality learning (e.g., quality of teacher pedagogy, school organisation, principals' influence on teachers' motivation and working conditions, school culture, the building of trust among teachers, promoting teacher collaboration, etc.). These school conditions are shown to be major conduits, through which leadership impacts student achievement indirectly (such as under, Hallinger and Heck's, 1998 mediated-effects model). Therefore, the extent to which these conditions are honed and sustained within each case study school is examined. Leithwood and Jantzi (2006) framework outlining four broad categories of leadership (setting direction, developing people, redesigning the organisation and managing the instructional program) as well as the leadership practices associated with each, has been used as a comparative tool for analysis. Similarly, May, Huff and Goldring's (2012) outline of the type of activities carried out by principals which are key to establishing the link between leadership and student achievement was also used as an analytical lens: (a) principals' involvement in framing and sustaining their schools vision or mission and planning specific goals and strategies for school improvement; (b) instructional leadership functions such as monitoring instruction and providing feedback, analysing student data, and supporting teachers' professional development; (c) their work to enhance the organizational and social structure in their schools; (d) their efforts to improve the culture and climate in their schools; and (e) their investment in their personnel by hiring and retaining qualified teachers. Data gathering methods included qualitative interview and unstructured observation, while constructivist grounded theory (Charmaz, 2014) approach to data analysis has been employed to tease out and illuminate and findings. Findings suggest that leadership in more effective case study schools is able to communicate a sense of trust, autonomy and empowerment among teachers. Additionally, the practice of leadership in Jamaican schools was closely shaped sociological factors such as its school's history and context (families' background and education, their socio-economic status, geographical location in terms of suburban or inner-city) than leadership frameworks independent of those contexts.

### PAPER 3 ABSTRACT

Making the Difference with Transformative Principalship: A case study of successful leadership in a low academic achievement school in Puerto Rico, Joseph Carroll-Miranda, Nydia Lucca, Reinaldo Berrios, Javier Carrion, Sandra Macksoud and Michelette Quiñonez, University of Puerto Rico.

Puerto Rico-- a Caribbean and Antillean country-- as a territory of the United States of America experiences continuous changes in its public policy and regulations related to education. These changes take place as a result of the programs and innovations proposed by local and federal (United States, U.S.) agencies. Among them are proposals to reform the curriculum and the administrative structures, as well as a new classification for schools, based on the principles of the Flexibility Plan, a recent educational agreement between the Puerto Rico Department of Education and the U.S. Department of Education, which began its implementation in August 2014.

In this presentation we will share the findings of a case study conducted by the Puerto Rico International Successful School Principalship Project (ISSPP) research team. The research is sustained by the scientific literature of the ISSPP (Day, 2014; Day & Leithwood, 2007; Jacobson, Day, & Leithwood, 2005; Leithwood & Riehl, 2005; Moss, Krejsler, & Kofod, 2008), as well as other research findings reported in the literature (Chen, 2008; Ferrão, & Couto, 2014; Tan, 2008; Teddlie, 2003). Methodology-wise, this case study followed the specifications of the ISSPP Handbook (Day, 2014), pioneering this kind of research in the Caribbean region. To accomplish this investigation several research strategies were used, among them: semi structured interviews and questionnaires to the school principal, principal's life story, semi structure interviews to teachers, parents, the School Board, and the focus group technique with students.

The school under study was officially classified as a low performing school for over 10 years. Our findings show that this low performing public school has transformed its environment, culture and academic performance in such a way that it may be considered a turnaround school. Students, who come from a poverty background, used to promote a disruptive school climate and showed low academic achievement; teachers used to demand constant and direct supervision, and parents were almost invisible, before the transformation began. A major result of the improvement program is that in a few years, this school improved its academic achievement in the state administered standardized tests (PPAA Pruebas Puertorriqueñas de Aprovechamiento Académico). As such, this school is considered in transition. This case study will share: 1) the principal's strategies that provoked positive changes in the school, 2) describe the principal's leadership style, 3) share the perspectives of: a) teachers, b) parents, and c)students on such initiatives, 4) share the academic results of such strategies and, 5) share the school principal's identity.

The findings served as foundations to analyze in depth what does successful leadership consist of, which practices and styles characterize it, as well as which criteria the different sectors that compose the school community use to define it. Photos, diagrams and direct quotations from participants will be used in order to present a solid case study of school improvement in the Caribbean region.

### **PAPER 4 ABSTRACT**

A Study on Effective Principal Leadership Factors, Hechuan Sun, Xiaodong Wang and Sailesh Sharma

This study aims to find out what are the effective school principal leadership factors or indicators that Chinese teachers consider or expect. It is a part of a China national social science research funding project (本文属于国家社科基金"十二 五"规划教育学国家课题BDA120028的研究成果)。It tries to expand the domain knowledge of effective school principal leadership. Qualitative methodology combined with quantitative one was used in this study. The distributed questionnaires consisted of eight factors and 40 indicators. The rating instrument was a five point Likert Scale (from 1 to 5). In total, one hundred Chinese school teachers were participated and surveyed. The methods such as factors analysis, t-test and one-way analysis of variance were used to analyze the collected data. It provides empirical insights about what effective school principal leadership factors that Chinese teachers considered. According to the results of t-test and one-way analysis of variance, there were no significant differences between and among the respondents' gender, areas and years of teaching experiences in rating those factors. The findings argue that the 16 extracted indicators have not only revealed the expectations of Chinese teachers toward school principals, but also have drawn a three-dimensional-image of what a good and effective school principal should be. This study has provided implications for all school stakeholders, particularly for school principals, head-teachers, school leaders and educational managers both in and outside of schools.

# LDP Symposium

Title: Equity, inclusion and the education of immigrant and minority students:

A dialogue between research, practice and policy

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3433

Session: Parallel Session 4

Session Date and Time: 8 January 2016 11.00-12.30

Location: Castle Suite 1

Author/Speaker: Karen Seashore Louis

Company/Organisation: University of Minnesota, USA

Co-Authors: Jason Johnson

Helen Fisk Katarina Norberg Niall MacKinnon Leif Moos

Karen Seashore Louis Presenting Author:

## Overview of symposium

This symposium will consider the choices made by school leaders as they strive to create schools that are effective for immigrant students. The United States and Europe are both experiencing increases in the proportion of citizens born outside the country. The successful education of immigrant children, especially children of different racial or ethnic backgrounds from the plurality of the population, is an important challenge facing school leaders and policymakers. The session will focus particularly on the links between caring school environments, student engagement, and creating high standards for immigrant children. Similarly, the session will feature both empirical work and commentary, with an emphasis on incorporating the voices of practicing school leaders.

The program deliberately draws on the experience of school leaders (Fisk, McKinnon and Storbakken), those who are preparing school leaders (Norberg and Seashore Louis), and those who study policy related to inclusion and school improvement (Johnson and Moos). The purpose is to open up the discussion about what is needed to create collaborative professional capital from all affected groups and stakeholders in order to facilitate the integration of newcomers into the educational system and, ultimately, to prepare them to be effective adults.

This highly interactive session will operate as a "Town Hall" meeting rather than a traditional symposium. Each of the participants will make brief 5-7 minute presentations. Each presentation will focus on developing a critical question of leadership practice, preparation and professional learning for school leaders, and "managing up" in the space between the school and municipal/national policy. Each brief presentation will be followed by a quick discussion of the critical question raised by the presenter(s) that will be moderated by the session organizer. After the rapid-fire presentation of the issues, the audience will be asked to develop their own set of critical questions in smaller groups, which will be summarized as an agenda for ICSEI.

### **PAPER 1 ABSTRACT**

What are we learning about student engagement in a predominantly immigrant school? Jason Johnson

Johnson, with a team of graduate students working on a caring research project, investigated a predominantly immigrant charter K-8 school to understand how student engagement relates to caring environment using mixed methods through teacher and student interviews and by employing Exploratory Factor Analysis (EFA). Because this charter school is academically successful in terms of high academic achievement and high traditional student engagement measures, this paper will present the factors that emerged from the intersection of school caring literature and traditional student engagement literature in order to identify the factors that may contribute to the success of the school. However, one of the interesting contextual factors is that this particular school is a high-demand charter school that typically has over a thousand students on the waitlist and the directors have more control over school management than traditional public schools Therefore, our critical question is what role does school leadership play in creating a caring and highly engaging environment for immigrant students and to what extent does this role extend to school leaders in traditional public schools who are more restricted in traditional institutional settings?

### **PAPER 2 ABSTRACT**

Creating high expectations: International Baccalaureate school for immigrant and minority children, Helen Fisk

Fisk and Storbakken are the administrators and founders of a successful K-8 charter school which serves a diverse, urban immigrant population. The school's vision is to create "active, compassionate, and lifelong learners who have the human and technological skills to be productive and successful world citizens." The presentation will focus on how Global Academy has implemented the International Baccalaureate Programme to create a school environment in which the knowledge and experiences of immigrant children are seen as assets to the educational program rather than deficits to be addressed. The critical question Fisk and Storbakken will raise is how a school's culture and academic program can be designed to promote high expectations while valuing and embracing the experiences of all children.

### PAPER 3 ABSTRACT

Capacity and Leadership Development needs in Sweden, Katarina Norberg

Dr. Norberg will discuss the Swedish situation, focusing on the professional learning needs of school leaders. The presentation will be based on the School Leader Training Program's work in researching, developing needs assessments, and meeting the development and learning demands of school leaders who are situated in schools that have recently received a large number of immigrants in countries ravaged by war. Despite the fact that immigration is not a new phenomenon in Sweden and some school leaders have been grappling with its implications for years, it is a much newer phenomenon for others. In addition, there is a serious lack of capacity regarding how to organize education for immigrant students. Municipalities and schools are poorly coordinated to meet the needs of both newly arrived and relatively settled immigrants, particularly from war-torn countries. Municipalities, which bear the legal responsibility, have weak policy frameworks and few qualified staff. New legislation, which will go into effects just prior to the ICSEI conference, is supposed to guarantee professional teaching and equity in terms of preparation classes, language education in both Swedish and the student's mother tongue, and pastoral care, regardless of where the school is situated. Consequently, the National Agency of Education has initiated an in service program for principals with the purpose to enhance the competence of experienced school leaders who find themselves in recently diversified settings. Beside knowledge concerning legislation and rules, the principals have to challenge school's culture and tradition and promote intercultural education. The critical question Norbert will raise is whether a welcoming country such as Sweden is able to muster an adequate level of rapid collaborative development action to sustain the integration of newcomer children and their families.

### **PAPER 4 ABSTRACT**

Learning from a multi-ethnic rural school, Niall MacKinnon

MacKinnon will focus on his work with teachers who have been successful in working with immigrant and multicultural heritage children. His position as a school leader allows him to draw from a variety of case examples that suggest that teachers, if given proper support from leaders and peers, are able to draw children into an engaged learning environment. Importantly, these teachers may not, at first glance, appear to be "excellent" given external assessment standards. But, observing the developmental process of both individual students and classrooms over time, one observed educational environments that absorb the variety of student potential based on (1) a deep understanding of individual student needs, (2) continuous assessment that provides evidence that helps to transform the learning activities of children who are "different" and (3) and adaptation of the formal curriculum to fit student's psychological and social needs. Based on his experience, MacKinnon will argue that more centrally developed policies and one-size-fits-all prescriptions will inhibit a school's potential for integrating newcomers. The audience will be asked to debate the challenge of developing school leaders and teachers in rural schools who have the capacity to address increasingly high expectations regarding student performance while, at the same time, creating adaptive caring and personalized cultures that reflect the developmental needs of immigrant and multi-ethnic students (and teachers) in challenging circumstances.

### **PAPER 5 ABSTRACT**

A Danish policy perspective in a global environment, Leif Moos

Professor Moos will begin with the policy context in Denmark, which has traditionally been open to immigration but now has strong anti-immigrant influences at both the national and municipal levels. He will discuss how the national government, municipalities and schools react to the anti-immigrant rhetoric, and how it challenges the adaptation of schools to the influx of immigrants. He will then go on to discuss, in particular, the struggles of municipalities to manage the changes in schools in the absence of comprehensive policy solutions. The challenges seen in Denmark, he will argue, are a consequence of the nature of "European policy conversations" and policy making which pay little attention to needed social adjustments and to the development of educational policies that will harmonize with the reality of rapidly changing demographics in many communities. Thus, the focus of his critical question will be on strategies for changing the larger policy conversations both within countries and transnationally.

## **TE Innovate! Session**

Title: Management and distribution of virtual laboratories for researchers and students

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 2899

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 12.30-13.00

Location: Castle Suite 1

Michael Karski and Tomasz Siemek Authors/Speakers:

**Action Education Center** Company/Organisation:

Michael Karski Presenting Authors:

Presentation Method: Innovate!

### Abstract

During this session you will get know with unique solution for management and distribution of virtual laboratories -CloudLabs, which are designed for researchers and students. You should join this session if you ever wanted to prepare a private lab environment to deliver a training or a class, or maybe you if you ever needed to share a test environment before launching a new product. Probably you spent a lot of time on preparation, even if you used some scripts to make it easier. At the same time you needed to remember that the prepared user environment available locally and throughout the access period, and you want to use your valuable assets, such as PCs in the classrooms. Many things to, huh? We were in the same place at our Education Center, so that's the main reason why we create CloudLabs and why we want to share it with you. With CloudLabs you can automatically deploy and distribute hundreds of predefined lab environments, which are available 24/7, to users within minutes. Students and teachers can use the courses and perform laboratories from any computer, which is connected to the network. Despite providing classes for students you can use CloudLabs for conducting scientific research involving the university infrastructure as well as SaaS model with using the infrastructure of the supplier.

## TE Symposium

Title: Different forms and levels of cooperation between and within schools facing challenging

circumstances: Approaches and practices for collaborative professional development of

teachers and network-based school improvement

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3229

Session: Parallel Session 4

Session Date and Time: 8 January 2016 11.00-13.00

Castle Suite 2 Location:

Tanja Webbs Author/Speaker:

Company/Organisation: Institute for School Development Research/TU Dortmund University

Co-Authors: Michael Pfeifer and Heinz Günter Holtappels

Presenting Author: Michael Pfeifer

## Overview of symposium

Schools in socioeconomically disadvantaged areas are struggling under very difficult conditions, which include not only external factors, e.g. learning deficits of students and a lack of parental support, but also internal factors, e.g. high staff turnover (Chapman & Harris, 2004; Stoll & Fink, 1998). Therefore, these schools have a higher risk to show lower output, i.e. poor results in academic achievement of students due to high-stakes tests (Racherbäumer et al., 2013). That is why they are often referred to as "underperforming" or even "failing" schools.

Compared to these rather ineffective schools also effective schools facing challenging circumstances can be identified (Holtappels, 2008). According to contingency theory and opportunity to learn theory especially effective schools in low-SES contexts succeed more in organizing internal school features than ineffective schools in order to create a fit between external conditions and the educational process. This, in turn, promotes sufficient and adequate opportunities to learn for students, fosters the student's academic performance and enhances the schools' output (Creemers et al., 2000; van de Grift & Houtveen, 2006).

Several studies reveal, that among other school quality features, like a clear focus on learning and teaching, distributed leadership, using evaluation data and continuous professional development of teachers, particularly collaborative practices and positive relationships between the stakeholders within schools as well as between schools and the local community differentiate between effective and ineffective schools in deprived regions (Muijs et al., 2004; Reynolds et al., 2001). In general cooperation is a crucial factor for school development and instructional improvement, which can occur between different partners, in different forms and on different levels (Kyriakides et al., 2010). It is evident that collaboration in schools has diverse benefits, like shared visions and goals, consistent practice, mutual support and joint learning (Steinert et al., 2006).

The overarching theme of the symposium focuses on different forms and levels of collaboration for improving the quality and effectiveness of schools facing challenging circumstances. The symposium addresses the main question, if certain configurations of collaboration have specific conditions and effects for professional development of teachers and for school improvement in schools confronted with challenging circumstances. This links the symposium to the conference strand No. 1 "Teacher effectiveness, teacher quality and professional learning".

Theoretical approaches and empirical investigations concerning different forms and levels of school collaboration will be presented in the symposium. This includes the cooperation between schools and the local community, e.g. other schools, as well as the collaboration within schools, e.g. teachers and parents. Finally different arrangements of collaboration are discussed with regard to their potential for successful and sustainable development of schools, which have to deal with difficult situations.

#### PAPER 1 ABSTRACT

Untapping the potential: using networking and collaborative enquiry for school and system improvement, Chris Chapman

It has been argued that teachers working in schools serving deprived and at risk communities have to work harder to achieve positive outcomes (Mortimore and Whitty, 1997). We would argue that rather than working harder they need to work smarter and that one way of doing this is through structured networking and partnership activity. The case for this focus is supported by an emerging body of evidence indicating networking and partnerships have a role to play in school and system reform efforts (Hadfield and Chapman, 2009; Ainscow, 2015). Most recently, in the United Kingdom this has included high profile interventions such as the London and City Challenges, Challenge Cymru and the new Scottish Attainment Challenge, all of which have strong networking components.

This paper draws on the lessons from a national networking and partnership initiative in Scotland. A programme of work that, along with Scottish Government's Raising Attainment for All initiative has informed the development of the Attainment Challenge. The School Improvement Partnership Programme (SIPP) involves a diverse range of eight partnerships involving 14 school districts and 44 schools. The partnerships adhere to a common set of principles and are underpinned by the use of research and enquiry to promote improved outcomes for students at risk and from disadvantaged backgrounds. The project involves a range of actors from across the education system and beyond, school districts (education and other services), Education Scotland (Scotland's national agency for school improvement), and the Robert Owen Centre for Educational Change (University of Glasgow). However, it is driven by teachers working together to lead change within and across groups of schools.

This paper draws on the findings presented in the second annual report of this programme of work (Chapman et al. 2015). Findings relate to the power of the range of collaborative action research methods used within SIPP, particularly in relation to lesson study, improvement science, instructional rounds and collaborative action research. SIPP has provided an important mechanism for professional learning and for staff to take on formal and informal leadership roles. There is also evidence that building relationships across organisational and geographical boundaries can help build innovative approaches to tackling disadvantage. This has been captured through social network analysis, documentary evidence, interviews and observation.

The first section of this paper provides a context for SIPP by reflecting on the national policy agenda and the ideas and evidence that informed the development of the initiative. The second section of the paper explores the function and forms of collaboration within SIPP. Specifically, this section will discuss the principles and practice of school, local authority, national agency and university collaboration, along with the opportunities, issues and tensions associated with using within-school, between-school and beyond school collaboration to tackle educational inequality issues. In conclusion, the paper will consider the implications for future developments in policy and practice designed to have a positive impact on outcomes for children at risk and from disadvantaged backgrounds and reflect on the challenge of creating more equitable and coherent education systems.

### **PAPER 2 ABSTRACT**

An evidence-based strategy of building networks between schools in challenging circumstances, Eva Wisberg, Heinz Gunter Holtappels, Nina Bremm, Annika Hillebrand and Tanja Webs

Especially in the context of educational reforms during the last decades the research activities and educational policies concerning the improvement of schools in challenging circumstances increased internationally (MacBeath et al. 2005; Clarke 2005; Harris et al. 2006). However, the empirical evidence about features of effective schools in difficult situations is not sufficient yet. Particularly schools in deprived areas, e.g. with low students' basic learning skills, unfavorable socioeconomic background or insufficient support, need to work harder or more adaptive to compensate learning deficits of students and lack of resources in the students' homes (Mujis et al., 2004).

Empirical results reveal that school-to-school networks can help schools in challenging circumstances in terms of supporting each other by copying strategies and building the capacity for school improvement (Chapman, 2008). It is evident, that the collaboration between schools has the potential to foster the learning processes of the participating teachers and to improve their teaching practices as well as the students' learning performances (Berkemeyer et al. 2010). In this context the aim of the project Developing potentials - Empowering schools is to enhance school development processes in schools facing challenging circumstances in the Ruhr Metropolis by building networks, where schools with similar needs regarding to pedagogical features can work together on their challenges and learn from each other. In addition, every single school is provided with support services that fit their individual structural and pedagogical needs.

While in most of other German network projects schools are put together in networks of similar school types or regions, Developing potentials - Empowering schools uses a different strategy to connect: Networks are built up evidence-based between schools with a similar social context and with alike process quality characteristics on school and teaching level.

Considering the project objectives, the research questions are:

- 1. Can we identify types of schools with similar process quality characteristics and pedagogical features, in order to form school networks with similar developmental profiles?
- 2. Are there systematical differences between these school groups regarding their context (student composition) and output (students' attitudes and convictions) characteristics?

The results reported are based on survey data of teachers (n=1.105), parents (n=2.145) and students (n=3.183) of 36 secondary schools in North Rhine-Westphalia. Essential external and internal features of schools were measured. By using a latent class analysis (LCA) with aggregated data on school-level, different types of schools can be identified, which vary in their school quality characteristics.

The results are used to build up six school networks. Every network consists of schools with similar development profiles regarding to process quality characteristics like teacher cooperation or quality of teaching. The main topics of the networks - based on the results of the analysis - are 'Teacher cooperation regarding to differentiation in heterogeneous learning groups', 'Instructional quality' and 'Use of Resources'. Based on these aspects, aims and needs for development of networking as well as a suitable development support for schools will be defined.

Regarding the school development process the paper discusses the opportunities and limitations of an evidence-based investigation for needs of development and interests.

### **PAPER 3 ABSTRACT**

Approaches to Collaborations between Schools in Challenging Circumstances, Parents, and the Community in the Context of Organizational Development, Sarah Eiden, Christine Neumann, Isabell van Ackeren.

Research on school effectiveness and school improvement in socioeconomically disadvantaged areas shows that schools can use various measures to deal with difficult conditions (Racherbäumer et al., 2013). According to Henchey and Muijs external collaboration is a central feature of school quality and its intensification is an important element of systematic school development (Henchey, 2001; Muijs, 2003) as it strengthens the social capital of schools.

Collaboration, as it is reported in organizational research, is an important element of organizational resilience. This approach focusses on different ways of communication and collaboration that strengthen organizations in difficult situations. Characteristics of organizational resilience are an organization's overall situation awareness, the management of vulnerabilities and an adaptive capacity to deal with new situations as they arise (McManus et al., 2008). According to this, these elements of organizational resilience enable organizations to recognize risk factors – like disruptions of routines, crises, and stresses and strains - at an early stage. Then these organizations use internal and external resources - like collaborations - to cope with their difficult conditions successfully and to learn from expected and unexpected challenges (Vogus et al., 2007).

The ideal of external collaboration for schools includes reciprocal parent-teacher-relationships and the collaboration between the school and institutions or facilities in the local community - altogether focused on the support of children's learning. Through this collaboration - inside and outside of school - the school wins important supporting resources. What is even more, the school may be able to increase its innovation potential (Muijs, 2003).

Especially schools in socioeconomically disadvantaged areas are challenged to develop appropriate concepts for collaboration. For example, traditional offers of teacher-parent-collaboration can be ineffective in case of mostly underprivileged parents. Traditional offers of collaboration often require certain resources from parents and thus do not reach those parents that do not have the required means (such as time, language or system knowledge). Perceptions of "normality" that are implicitly assumed in teachers' offers of cooperation can affect and reinforce social inequality when only privileged parents benefit from these opportunities (cf. Bourdieu, 2005; Lareau, 1989)

The presentation deals with the relevance of external collaborations for school effectiveness and development – especially at schools in difficult situations. Therefore, data will be presented which were generated from a quantitative study of the project Developing Potentials - Empowering Schools at 36 secondary schools in North Rhine-Westphalia, situated in socially disadvantaged areas (e.g. schools with high proportion of students with low-educated parents or parents with different native languages). The first survey on the schools' current institutional and environmental conditions focused on the identification of schools' potential for change, their specific challenges, support needs and their interests of development.

First data document the different forms and frequencies of collaboration, rated by the school principals, teachers and parents. Preliminary findings indicate differences in parental involvement and local cooperation partners according to the students' compositions. Beyond that, first analyses point out, that schools with different levels of organizational resilience show different forms and frequencies of collaboration. Possible consequences for the development of schools in challenging circumstances are discussed.

### **PAPER 4 ABSTRACT**

Conditions of different forms of teacher cooperation and their effects on school and teaching development in schools with challenging circumstances, Tanja Webs, Heinz Gunter Holtappels, Michael Pfeifer, and Annika Hillebrand

Cooperation between teachers belongs to key characteristics of school quality and is a crucial factor for school improvement. Several research results prove that teacher cooperation has positive influences on teachers' work life, e.g. coping with stress and professional development as well as on quality of teaching and students' achievements (Kyriakides et al., 2010). Beyond this, teacher cooperation plays an important role for school development by building up shared goals and establishing effective teaching and learning practices in classrooms. But it is also evident, that teacher cooperation itself is i.a. positively influenced by distributed and instructional leadership (Townsend, 2014). Especially effective schools in disadvantaged areas are characterized by professional learning communities, where teachers work together to develop their professional knowledge and improve their instructional practice to support students' learning (Muijs et al., 2004).

However, in school reality teacher cooperation does not only show a different intensity but also different forms. According to Gräsel et al. (2006) three forms of teacher cooperation focusing on instruction can be distinguished, which vary in their requirements and functions for professional and instructional development: 1) exchange of work-related information and material, 2) division of work and 3) co-construction.

Referring to this differentiation our study investigates the impact of different forms of teacher cooperation on school and teaching improvement in schools in deprived areas. Moreover, school features are examined, which affect cooperation, like principal leadership and working climate as well as institutionalized team-structures, e.g. planned times for collaborative work. The paper follows four research questions:

- 1. How often do teachers realize each cooperation form in their everyday work?
- 2. Can specific school conditions of cooperation be identified?
- 3. Can differential effects of cooperation on school development be found?
- 4. Which collaboration form mediates between school features and school development?

The investigation is embedded in the study Developing Potentials - Empowering Schools. The sample consists of 36 secondary schools in the Ruhr Metropolis in Germany. Relevant stakeholders (principals, teachers, students and parents) were surveyed by standardized questionnaires capturing external and internal working conditions of schools. The analyses conducted for this paper are based on teacher data (n = 1.105) and include reliable scales measuring the teachers' perceptions of relevant school features (cronbach's alpha > .61).

At first, differences in the frequency of cooperation are examined with significance tests. In a second step, structural equation modeling is used to analyse relationships between the cooperation forms, their conditions and effects. Finally, direct and indirect effects of structural and cultural school features - mediated by the cooperation forms - on quality improvement are investigated.

Preliminary results indicate that demanding cooperation forms depend stronger on structural school features and have a greater impact on school quality development, but teachers realize them rarely.

From a scientific point of view the findings emphasize the importance to distinguish between different cooperation forms, which vary in their frequency and correlations with other variables. From a practical perspective the results reveal the necessity to strengthen challenging, but effective forms of cooperation by implementing special working conditions.

### **PAPER 5 ABSTRACT**

Quality of teaching in schools with low scores on central exams, Wim van de Grift, Iris Uffen, Jan Folkert Deinum

### Conceptual approach

When in a certain year, the average results on the central exams are below 6, the output of that school is qualified as low. According to the 'opportunity to learn theory', students of schools with insufficient results do not get sufficient opportunities to attain the minimum aims of the curriculum, because of insufficient curricula and/or weak teaching quality (Van de Grift & Houtveen, 2006; 2007).

#### Research question

Does the quality of teaching in schools with insufficient average scores on the central exams differ from other schools in the same region with sufficient scores on the central exam?

### Sample

In the northern part of the Netherlands, the quality of teaching of 600 teachers working in 53 departments of 21 schools for secondary education were observed. For each of these schools the averages scores on the central exams (in the year before the observation took place) were derived from the national data system. 4 departments of 3 schools had average scores below 6.

#### Method

The ICALT observation scales were used for observing the quality of teaching. This instrument consists of 3 scales for measuring the basic skills of teaching: creating a safe and stimulating learning climate, performing efficient classroom management, and giving clear and structured instruction, and 3 scales measuring more complex skills of teaching: activating students, teaching learning strategies and differentiating instruction to diverse students' needs. All scales are reliable (Cronbach's a >.70) and have predictive value for student engagement (Van de Grift, 2007; 2014). During half a day, observers were trained until they reached sufficient (>.70) consensus with each other and with an extern criterion while observing the same video-taped lessons.

### Main findings

Teachers in schools with low scores on the central exam have significantly lower scores on educational climate, classroom management and instruction. The differences are around half a standard deviation, which is a medium size effect. No significant differences between schools with sufficient and insufficient scores were found in the more complex teaching skills (activating students, teaching learning strategies and differentiating instruction to diverse students' needs).

### Conclusion

Teachers working in schools with low scores on the central exam show on average lesser basic teaching skills than teachers in ordinary schools in the same region.

## **PC Innovate! Session**

Title: Systematic Educational Reform in Scotland

Topic: Partnerships and collaborations: schools, agencies, government, research

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 12.30-13.00 (13.15)

Location: Castle Suite 2

Authors/Speakers: Graham Donaldson and Chris Chapman

> David Istance and Andrew Hargreaves Bill Maxwell and Fiona Robertson

Presentation Method: Innovate!

### Abstract

This session will examine an approach to educational reform in Scotland that spans both the main conference theme and each of the six sub-themes. It will look at implementation of the reform in relation to the development of policy on the curriculum, teacher capacity and leadership and draw out broader implications for reform of this nature and on this scale.

Scotland embarked on a major curriculum reform programme in 2004, 'Curriculum for Excellence', that has moved progressively across all sectors (3-18), including formal qualifications at the end of secondary education. The reform reimagined the curriculum in relation to four capacities to be developed in Scotland's young people throughout their period of schooling and created a structure of Curriculum Areas, each of which was elaborated in terms of Experience and Outcomes described at successive levels from Early to Level 4 and three aspects to be developed across the curriculum: literacy, numeracy and health and wellbeing. The framework was, as before in Scotland, non-statutory but was much less prescriptive than previous guidance and gave considerable scope and responsibility to schools to interpret and adapt the guidance in their own context.

Following a review of teacher education in 2010, 'Teaching Scotland's Future', Scotland has also embarked on major teacher reforms covering initial teacher education and career-long professional learning. A Scottish College of Educational Leadership has also been established with distributive leadership as one of its main areas of focus. These reforms have stressed the need for strengthened collaborative partnerships involving schools, local authorities and universities.

The session will explore the sub-themes on the conference through the lens of the Scottish reform programme. Teacher effectiveness, teacher quality and professional learning are integral to the implementation strategy as is the central place of leadership development and practice in building sustained improvement. Partnerships and collaborations have been at the heart of the approach, spanning central government, national agencies, local authorities, schools and teacher unions. The curriculum reform has had a very strong focus on establishing the conditions for effective learning, particularly in relation to pedagogy and assessment. A third strand in the reform programme has been an approach to inspection and accountability that is founded on self-evaluation.

The session will bring together a panel of national and international experts to explore the implications of the reform. The panel will include representatives of government and Education Scotland, the national development body, together with academics from the Robert Owen Centre at Glasgow University.

A particular feature of the session will be insights gained from an OECD study of curriculum reform in Scotland and representatives of the team that undertook the study in 2015 will join the panel. In that way there will be an opportunity to consider issues associated with global policy influences, to set the Scottish approach in a wider context and to receive an external view on the learning to be gained from the Scottish experience to date.

This will be a facilitated session, drawing out themes and issues and encouraging active audience participation. A discussant will also engage with the issues and help to draw out the key learning.

# LDP Paper session (A)

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.00-12.30

Location: Castle Suite 3A

Chair: John Daffurn

### PAPER 1 ABSTRACT

Leadership and inquiry-based working in Dutch primary schools, Lisette Uiterwijk-Luijk, Meta Krüger and Monique Volman, Marnix Academie / Penta Nova.

This PhD study investigates the relation between inquiry-based working by school boards, school leaders and teachers and its impact on the inquiry habit of mind of pupils in primary schools in The Netherlands. The first part of this PhD-research consisted of a survey amongst 36 members of School Boards, 79 school principals, 249 teachers and 1002 pupils. The second part of this research, which is presented in this proposal, consists of a multiple case study. The aim of this second part is to gain insight into factors of success in which school boards, school leaders and teachers influence each other in inquiry-based working and to gain insight into the effect of inquiry-based working on pupils' inquiry habit of mind.

Inquiry-based working is becoming increasingly important in education (Earl & Katz, 2006; Krüger & Geijsel, 2011; Schildkamp, Ehren & Lai, 2012), mainly because it is found to contribute to educational improvement and professionalization of teachers. According to Katz and Dack (2014) inquiry-based working will interrupt existing routines in the service of real professional learning. Schools that work inquiry-based are more conscious of their educational quality, are better able to perceive weak spots in the instructional process, and make more focused adjustments for educational improvement (Krüger, 2010). Earl and Katz (2006) identify three key capacities for inquiry-based school leadership: having an inquiry habit of mind, being data literate, and creating a culture of inquiry. In this study these capacities are also used as a template for inquiry-based working by school boards and teachers. Leadership is perceived from a distributed perspective: in addition to the school board and the school leaders, teachers also provide guidance on inquiry-based working.

A multiple case study research design is used. Instruments used are semi structured interviews; document analysis; observations of classroom practices and meetings. All data will be analyzed by using deductive and inductive coding (Miles, Huberman & Saldaña, 2014). A within-case analysis will be applied, which will lead to three case specific reports. The results of the analysis of each case study will be submitted to a cross-case analysis in which the cases will systematically be compared for similarities and differences in success factors in inquiry-based working.

The first case study identified multiple factors that promote inquiry-based work at school: a clear educational vision, the organizational structure, inquiry-based leadership of the principal and a focus on innovation. The results of the analysis of the collected data of the other two schools will be published in the final paper.

Research in this field predominantly focuses on data-based-decision-making, excluding aspects like establishing a culture of inquiry in the school and working with an inquiry habit of mind. In this study, we explicitly include these aspects. We examine through what ways inquiry-based working leads to school improvement and whether it leads to stimulating pupils' inquiry habit of mind. Our approach whereby the whole chain of influence is explored from school board to pupil, is not yet done before.

### **PAPER 2 ABSTRACT**

Risky Journeys': critical pedagogies in teacher-led, enquiry-based school development, Judy Durrant, Canterbury Christ Church University.

This paper reports on a meta-analysis of teachers' and head teachers' accounts of ten projects in which the author's University worked in partnership with a school or group of schools to support teacher-led development. Each project supported teachers' action research with a view to improving aspects of learning and teaching or wider dimensions of school improvement. Teachers chose their own focus for development, sometimes within an overall theme. Head teachers supported the projects at strategic level and sometimes participated alongside teachers. Each project was facilitated by the

University, scaffolding clarification of teachers' values and concerns, choice of focus, methodology and ethics (emphasising integrated, creative and inclusive approaches), planning outcomes and impact and sharing the learning emerging, using well-established principles and protocols (Durrant 2014). Most projects ended with an event planned and led by teachers, in which they shared what they had done and learnt with a wider audience, supported by publication of written accounts. The projects were not linked to an academic award, although in some there was optional Masters accreditation or professional recognition (Teaching and Learning Academy).

Analysis of publications and presentations connected with the projects was undertaken in order to answer the following questions:

- How do teachers and head teachers situate their development projects in relation to internal and external school improvement priorities and requirements?
- What kinds of outcomes and impact are reported?
- What evidence is there of critical pedagogy (Giroux, 2011) underpinning participants' agency in improving student learning, professional development and organisational development?

The analysis is distinctive in that it focuses on what teachers chose to report to each other and publish more widely, rather than emphasising data framed by a researcher's questions or an evaluative format. It is also free from the constraints of academic requirements such as Masters level assessment criteria. Qualitative meta-analysis enables exploration of teachers' and head teachers' language and emphasis in presenting enquiry-based leadership and its impact. It examines the extent to which critical pedagogy has been developed amongst students, teachers and head teachers, and how this has affected children's learning and concepts of professional practice. Analysis of outcomes and impact embraces both qualitative and quantitative improvements in learning and changes in leadership, organisational and professional cultures. At the heart of each project is an agentic approach (Bandura, 2001) where teachers, moving from practical to discursive consciousness, instigate change (Giddens, 1984; Elliott, 1998).

The paper concludes with a consideration of how such approaches can contribute powerfully to contemporary school improvement and the critical issues for head teachers and others held accountable at organisational level. How can head teachers manage the risky journey of 'letting go' so that teacher-led enquiry and development can flourish? How might such partnership work best be situated politically and professionally, within contested notions of evidence-based practice (Biesta, 2007)? Should such projects merely be conceived as a quest for 'what works', or as a means by which human agency can effect social as well as organisational change?

### **PAPER 3 ABSTRACT**

On the way to a culture of inquiry-based working in Dutch secondary education, Angela Giezen and Marco van der Zwaard, Baudartius College.

This study investigates the development towards a culture that stimulates inquiry-based working in a secondary school. The aim is developing the inquiry habit of mind of teachers and school leaders, which becomes visible in using the accessible data in school for school improvement.

This study focuses on inquiry-based working according to Earl & Katz (2006) and Krüger (2012;2014): Inquiry-based working is using data systematically on the level of students as well as the level of the school, together with colleagues (teachers and school leaders), to make decisions from an inquiry habit of mind which lead to continuous improvement for their own practice and the whole school. According to Katz & Dack (2014) inquiry-based working will interrupt existing routines in professional learning. Stimulating inquiry-based working requires from school leaders to have a strong vision towards it, based on common views about its added value (Zwaard, 2014). School leaders have the opportunity for modelling a collaborative dialogue about data use within and across job roles. Leaders may wish to monitor how they talk about and model data use, so that they are consistent in modelling data use (Jimerson, 2013, p.8). Modelling and participating in the dialogue is important for school leaders to build a culture of inquiry in school.

This study is a case study based on a survey that was post to explore the views of teachers and school leaders on inquirybased working. We focus on the school leaders at the level of each of the three locations and the management of the whole school. Meetings between the various leaders have been observed and interviews have been held with the school principal, location leaders and team leaders. The study is prepared by a special study-group formed by location leaders and a teacher. They give feedback to each other, practice the professional dialogue while talking about the study and do some of the research-steps themselves. This provides intersubjectivity on the analysis and interpretation of the qualitative data.

At this stage of the case study, the research results are restricted to the change process in the school. Firstly the school leaders learn how to conduct a professional dialogue, in which data are used in order to test assumptions and to ground decisions. Secondly, the communication about the vision on inquiry-based working and the translation into practice of teachers is under way in the school. Thirdly, the distance between teachers and school leaders came to surface, which is important because if this is not been seen on time it can stagnate the changing process (Ardon, 2008;2011). In a following stage, results will concentrate on the way in which school leaders can build sustained improvement with regard to inquirybased working.

In most cases inquiry-based working is investigated this means conducting a zero measurement which provides an estimate of the perceptions of teachers and school leaders. Stimulating a culture of inquiry-based working in secondary schools is a complex research field, especially when talking about conducting practical studies. This case study is exemplary for other secondary schools with similar aims on stimulating inquiry-based working.

## LDP Paper session (B)

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.00-12.30

Location: Castle Suite 3B

Chair: Beth Dickson

### PAPER 1 ABSTRACT

Distributed leadership for school improvement in contexts of changing school reform policies, Stephen Anderson, Javiera Marfan and Magdalena Fernandez Hermosilla, OISE University of Toronto.

### Introduction

This paper draws from a case study investigation of school improvement in Chilean primary schools carried out by researchers affiliated with the Centro de Investigaciones de Políticas y Prácticas en Educación, based at the Pontificia Universidad Católica de Chile. We explore factors that help explain leadership distribution in the schools associated with education policy reforms underway in Chile that involve new expectations and resources for school performance, especially for schools in high poverty contexts.

### Context

Chilean primary schools have a principal (director) who is the administrative head of the school and a teacher leader (jefe técnico pedagógico) with primary responsibility for instructional support to teachers. While there is research on the role of principals in Chilean schools (e.g., Weinstein & Muñoz 2012), the interaction between principals and their pedagogical heads has not been systematically explored. The work of school leadership teams ("equipos directivos") is also an uncharted area of school leadership research. Since 2006 Chile has experienced major system-wide education policy reforms in response to public pressure to improve the quality of public education. New legislation has increased funding for schools serving low income students. The new resources come with increased performance expectations (e.g., school improvement performance goals and plans, external technical assistance providers). The government also established a new quality assurance law and office and a new system of school supervision. This study examines school leadership distribution within this new policy environment.

Theory. Prior research offers a battery of concepts for describing leadership distribution: e.g., holistic or additive (Gronn 2000); division of labor, co-performance, parallel performance (Spillane 2006); planful, spontaneous, anarchic (Leithwood et al 2006). Our analysis also incorporates research on effective school leadership--establishing goals and expectations; resourcing strategically; planning, coordinating and evaluating teaching and the curriculum; promoting and participating in teacher learning; and ensuring an orderly and supportive environment (e.g., Robinson et al 2009). We did not assume that leadership is uniformly distributed across all leadership functions (Anderson 2012).

#### Methods

The investigation was based on interviews with school personnel (principals, pedagogical heads, leadership teams, teachers, parents) carried out during six school visits over two years. Initial analysis involved the production of case reports, with an emphasis what school personnel regard as critical processes and factors in their efforts to improve teaching and learning. This paper represents one strand of cross-case analysis utilizing Stake's (2006) method of multi-site case study analysis.

### **Findings**

External policy changes shaped the potential for changing patterns of leadership distribution in the case study schools. How the schools respond to these possibilities depends upon decisions made by principals as well as by decisions affecting the implementation of new expectations and resources by municipal education authorities. Existing professional norms and practices in the local school cultures influenced how the possibilities for more shared and distributed forms of leadership were taken up. Where changed leadership roles and practices did not quickly result in noticeable improvements in student results on the national accountability tests, teacher enthusiasm for more shared and distributed forms of leadership remained tenuous.

### **PAPER 2 ABSTRACT**

Developing relationships between principals and middle leaders to promote school improvement? Jaana Nehez and Lisbeth Gyllander

This paper presents results from an ongoing study on middle leaders in schools and preschools in Sweden and the relevance of principals' participation in the middle leaders' professional development and work. Leadership is promoted as one of the most important factors to affect teaching and learning. Previous research shows that leaders that focus relationships with teachers and participate in teachers' professional development have great impact on student outcomes. A shift from an individual to a distributed perspective is also seen in both research and practice. The principal is no longer a sovereign leader. Instead leadership teams are leading schools and there is an attempt to view all teachers as leaders.

In Sweden it has become common to use middle leaders to promote local school improvement and professional development. In the municipality of Helsingborg a kind of middle leaders, called process leaders, have been initiated. PhD Students at the local school board have designed a program for these process leaders. A follow-up study, conducted in 2012 with 65 process leaders, 300 teachers and 20 principals, served as a starting point to further develop the program, the initiation of process leaders and the process leaders' possibilities to promote improvement.

According to the results from the follow-up study the process leaders had minor influence on their colleagues class room work. However, they had impact in the practice of teachers' professional learning. Process leaders mostly worked with micro processes, facilitating peer meetings on pedagogical issues. Principals however wanted the process leaders to get more involved in macro processes, planning and leading the strategic work of school development. The opinions among the principals about the benefits of having process leaders differed. Some principals regarded the process leaders as threats to the principal role. Others highlighted the possibility to improve school development with the help of the process leaders. Most of the principals experienced that they should have participated in the program to be able to get a better understanding of the capacity of the process leaders and to create more proficient ways of working together as a team.

Based on results both the program and the initiation process were improved. A study was designed with 4 principals and 30 process leaders. Following questions were focused: How does the participation of principals in a program for process leaders promote the work of the process leaders? What are the challenges and possibilities for the principals and the process leaders compared to those presented in the follow-up study? Data is gathered through observations and interviews with both the principals and the process leaders. Preliminary results show that development of relationships between principals and process leaders promote school improvement in the way that principals are more aware of how to use process leaders. Findings also indicate that the process leaders seem to be more involved in macro processes. But are the principals constraining the process leaders' creativity and in what ways do the process leaders' involvement in macro processes affect their impact in classrooms?

#### PAPER 3 ABSTRACT

Developing constructively aligned teaching and leading practices - enablers and constraints, Lisbeth Gyllander Torkildsen

The paper describes and problematizes an ongoing project involving 300 upper secondary school teachers and 18 school leaders. The aim of the project is to raise the quality of education, and the equity between schools, by developing a common approach to teaching, learning and school development.

Constructive alignment and assessment for learning have been applied at both teacher and leadership levels. At the school leader level assessment for learning has been connected to school leaders' abilities: to clarify intensions and criteria for quality in school development; to build professional learning communities (PLC) and create dialogues and structures that make teachers' comprehension explicit; to provide feedback leading development of practices forward. School leaders therefore need to develop activities and evaluations methods that are linked to quality objectives and create relevant development activities for teachers.

The project builds on three communicative spaces that recur in a cyclical process. The school leaders meet once every month for dialogues on construct, project focus and content. Teachers' and students' needs serve as basis along with international research on assessment, validity and school leadership. Two dialogue conference, involving teachers and school leaders, are held every semester. The conferences focus on different aspects regarding constructive alignment and assessment for learning. Between these conferences teachers work in professional learning communities at school level, where they discuss their experiences, and share ideas, on how to implement the epistemological beliefs behind constructive alignment and assessment for learning in their own practices. To validate the process two constructs are used. At the teacher level the construct is based on the Swedish curriculum for upper secondary school. In order to design high quality learning environment teachers need abilities to create and develop teaching and learning activities that are accessible and engaging for the students. The construct at the school leader level is somewhat more complex. Since there is no national document on what constitutes a high quality school practice, the school leaders are required to build such a construct in order to validate this school development initiative.

Data have been gathered through surveys, observations and field notes. Data covering a period of 1,5 years was analyzed using Kemmis et als. (2014) theories of practice architectures. Several enablings were found. Findings indicate that culturaldiscursive, material- economic and social-political arrangements enabled the building of mutual constructs and concepts, created conditions for communicative spaces and built trust and community. However, different pre-understanding and epistemological beliefs, lack of time and structures for PLC at school level, and lack of trust and community in cross school groups constrained the development. At the leadership level the lack of a construct on high quality practices constrained school leaders possibilities to validate teachers' practices and the progress of the project.

Conclusions drawn from the analysis has led to a greater focus on building a construct that support school leaders in developing high quality practices. The construct will build on research and theories on quality in education, excellence and equity, student agency and participation, leadership and data analysis.

#### **PAPER 4 ABSTRACT**

The Socialization Theory as a Framework to Study the School Leadership, Magdalena Fernandez, OISE - University of Toronto.

This paper explores the socialization theory as a framework to study how principals learn about their craft. Socialization, in simple words, is the process of learning a new role (Crow, 2007). As cited by many scholars researching about socialization, Merton (1957,1963,1968 as cited in Leithwood, Steinbach & Begley, 1992; Lacey, 1977; Wentworth, 1980; Parkway, Currie & Rhodes, 1992; Blase, 1985; Van Maanen & Schein, 1979) defines socialization as the process by which an individual selectively acquires the knowledge, skills, and dispositions needed to perform adequately a social role within a group of which they are or they seek to become a member. Principals socialization has been studied in the context of different countries (i.e. United Kingdom, China, Turkey, Mexico, Thailand, Spain, Corea, Canada, Chile.) This literature is rich in contributing with describing the process in which school leaders are immerse when they enter the job for the first time (stages) and the common problems confronted during these first years (Garcia Garduño et al, 2011). As a result of the socialization process is the emergence of a "cultural perspective", a coordinated set of ideas and actions that are useful to deal with problematic situations in both commonplace and unusual matters going on in the workplace. It seems controversial though; that many studies find that socialization occurs informally and many times does not prepare principals to deal with the usual or unusual matters going on in the workplace.

Socialization theory provides both an institutional and biographical perspective to study the process of learning a role. On the one hand, focuses on the organization as the context in which theses processes occur, where institutions have a certain power in terms of introducing and providing opportunities for the development of the role (or not); and, on the other hand, the individual is portrayed as having agency, where they engage actively and selectively in learning their new role through activities, experiences by themselves or in interaction with other members of the organization. This is a comprehensive lens to study the way principals learn their craft, and how they engage in different opportunities to develop their role of leadership and school improvement.

As a result, studying principals' socialization allows understanding institutional supports or, in many time, absence of support in the educational system. Studying how different methods of socialization affect the way principals are learning may serve to create better supports and educational policy for leadership development connected to the needs of school organization and their improvement.

## **PC Symposium**

Title: Collaborating to strengthen an infrastructure for learning

Partnerships and collaborations: schools, agencies, government, research Topic:

Abstract ID: 3276

Session: Parallel Session 4

Session Date and Time: 8 January 2016 11.00-12.30

Staffa Location:

Author/Speaker: Anna-Lena Godhe

Company/Organisation: University of Gothenburg

Co-Authors: Berner Lindström

Presenting Author: Anna-Lena Godhe

## Overview of symposium

In this symposium, we describe collaboration projects between municipalities and higher education in Sweden where the aim has been to integrate ICT in schools and preschools through an open process of collaboration at different levels. One of the intentions with the projects was to evade focusing on technology and instead regard the digitalization of education from a infrastructure perspective. Guribye (2015) regards the notion of infrastructure as a complimentary view of ICT as mediating artifacts. Infrastructure is then understood as a collection of resources that are both physical, technological and/or social (ibid.). To be able to participate in practice, it is important to learn and cope with the infrastructure in that environement. Guribye (2015) exemplifies how tools that are supposed to support learning hook into other parts of the infrastructure and thereby become embedded in the structures.

Historically, a number of projects have been implemented in Swedish schools with the aim of promoting ICT in schools. Investments in technology and in-service training, have been carried out at different levels; as investments in technological infrastructure and professional development. However, either the technology itself or the handling of it has often been in focus in regard to the use of ICT in schools (Karlsohn, 2009). In the symposium we stress the need to take a pedagogical approach when integrating ICT as well as the need to consider how the use of digital devices relate to content matters and

The presentations in the symposium outline how teachers, school leaders, process managers from the municipality and researchers from the university have met regularly over several years. The collaboration was designed as a long-term open process in order to enable a reflexive process between participants at different levels. A central tenet in the development process was the practice-close cooperation between different actors and institutions. Some salient aspects of how the collaboration has contributed to school development in general are accounted for in this symposium. Furthermore, how the collaboration has aided in developing the use of ICT in diverse preschool and school practices is explicated.

The symposium includes four presentations where each focus on different challenges that arise when attempting to integrate digital technology in an educational setting. These challenges concern both teaching practices and teachers professional development. Transformations in literacy education related to the use of digital technology is in focus in the first two presentations. Challenges concerning the multimodal character of many texts today is explored in relation to content issues, reading literacy and assessment. The third presentation focuses on the everyday use of tablets in preschools. The process of implementing the tablets is explored as a journey in relation to both how the tablets are used, but also concerning the collaboration between the preschool teachers and the researchers. The fourth presentation concerns challenges encountered when teachers communicate in social media. Questions regarding where teachers draw the line between what they regard as private and what is professional is explored in this presentation.

### PAPER 1 ABSTRACT

Making room for educational innovation: opportunities and challenges in literacy classroom, Sylvana Sofkova Hashemi, Katarina Cederlund and Lisa Adamson.

Present day literacies involve more than reading and writing skills engaging students in multimodal meaning-making and participation in network-based and constantly changing digital spaces (Jenkins et al., 2006). As education in general is in the process of transforming traditional print-based instruction into digital formats, questions are raised about how technology and literacy meet and influence pedagogy. With access to digital technology in class and use of multiple semiotic systems when representing meaning, students and teachers are expected to handle diverse textual forms, to "read" images and other modes of communication along with print in literacy work.

Based on results of practice-close research, we have studied the challenges that digital technology imposes on literacy education in diverse classroom contexts in Sweden. Different qualitative studies have been undertaken where the empirical data consist of video recordings, interviews and classroom observations. Our aim is to problematize and capture the complexity of this educational transformation from different angles and in this way to advance understanding for the situated accounts of practices, designs and interaction and the impact on literacy education.

We highlight the tensions and challenges teachers face in relation to educational traditions in teaching, school culture and innovative/new instructional approaches to texts and writing/reading pedagogy. We approach literacy education in early years as well as older ages at primary school by notions of multiliteracies (Cope & Kalantzis, 2000), models of digital writing development (Merchant, 2008), structure of pedagogical discourses (Bernstein, 2000) and structural resources in classroom settings (Lave, 1988; Lave & Wenger, 1991).

We show that learning objectives, knowledge focus and organization around technology in the classroom have consequences for which teaching and learning that take place. We demonstrate that the issue of digital technology and literacy does not only concern teachers' competencies and choice in education, but not least, what enables or constrains their work.

### **PAPER 2 ABSTRACT**

I would like to have more input - what else could be done? - Uncertainty in assessing multimodal texts, Anna-Lena Godhe and Therese Haglind.

Assessment is an integrated part of education which influences how teaching is organized and signals which knowledge is of importance (Erstad, 2008). Being able to read and write texts, on paper or on screen, is a vital part of education (e.g., Lankshear and Knobel, 2008). However, with the use of digital technology in the classroom it is possible to create texts consisting of several ways of expressing meaning such as images, sound, written and spoken language.

Based on classroom observations, we will in this presentation disclose and analyze the uncertainty expressed by both students and teachers, in relation to how to assess multimodality. We will also argue that the criteria for assessment found in national documents do no give students and teachers adequate guidelines, but instead tends to add to their uncertainty. As Cope et al. (2011, p. 84) conclude, what is measured in literacy assignments has not caught up with changes that mean that it is no longer enough to use words alone for representation.

The empirical findings are based on video recordings from different classrooms as well as interviews with both students and teachers. The teachers have been involved in a project that aimed to create lesson designs where the use of ICT was integrated. During the process of designing the lessons, the teachers claimed that they wanted to get away from the written text as the primary way for students to present their knowledge In the lessons they designed the students were instead asked to create films.

The theoretical framework of cultural historical activity theory (CHAT) has been utilized in the analysis of the empirical data (Engeström, 2009). In CHAT activities are conceptualised as activity systems and boundaries may occur in and between activity systems. The activity of creating multimodal texts can be regarded as a boundary practice since it resembles activities that are more common in activity systems outside of the educational setting (Engeström, 2009). Students may have been engaged in creating multimodal texts in other contexts, but when the activity is undertaken in an educational context, the assessment of the text becomes of importance. Multimodal texts created in an educational setting relate to several activity systems and shows the signs of ambiguity often connected to both people and objects at the boundary. They become ambiguous since they may both connect and divide the activity systems involved (Akkerman & Bakker, 2011). The multimodal texts relate to boundaries between established and emerging practices, and between activity systems in different settings. Moreover, the boundary between different ways of defining the concept of literacy comes into play.

To create multimodal texts in an educational setting becomes an ambiguous activity, since students are assigned to do a task incorporating different kinds of expressions, but the multimodal aspects of the text are largely overlooked in the assessment of the texts. This ambiguity may lead to an enforcement of the written and spoken language as the valued way of expressing meaning in education, rather than opening up for a multitude of expressions.

### **PAPER 3 ABSTRACT**

Preschool Teachers' Practice and Career Development, Martina Borg and Torbjörn Ott.

Teachers' professional development regarding technology has commonly focused on technology operation rather than the use of technology as tools for learning. Matzen and Edmunds (2007) suggest that if professional development regarding technology is presented in the context of practice, teachers are more likely to change their instruction with the assistance of technology. In this presentation processes within a joint effort between a Swedish municipality and a university, are described and analysed. During a period of eighteen months five preschool teachers met with a researcher from the university and a school developer from the municipality for discussions about the implementation of tablets in the preschools. Different aspects were emphasized at different preschools. One focused on the everyday use of tablets in practice, another focused on tablets as tools for cultural bridging in an ethnically mixed preschool, and yet another on tablets as tools for documentation of learning. In the spring of 2015, the preschool teachers were revisited for interviews in order to follow up on the long-term effects of the project.

During the project, all of the preschool teachers experienced developments in the practice due to the use of tablets. Towards the end of the project the preschool teachers were invited to give a lecture at the preschool teacher education in the university. This activity was not planned for at the start of the project. However, in the interviews in 2015 the preschool teachers talked about this lecture as one of the more important features of the development process. At the university, the lecture was so appreciated that some of the preschool teachers were invited to return to the university to give the lecture annually. One of these preschool teachers was later employed at the university. Two preschool teachers were engaged in giving lecturers in the municipality on local strategies for ICT implementation. The task of developing ICT strategies was however later given to a school developer employed at the central level of the municipality. The two teachers stated that after that, their interest in deploying ICT declined.

The empirical data indicate that the participation over time was an important factor. If more profound changes are the aim of the professional development, it requires substance and stamina (Kim et al. 2013). The preschool teachers describe their journey from then to present. Four out of five preschool teachers state that the cooperation with the research community and the possibility to reach out and share their experiences were important parts of the project. When they were given responsibility, and the opportunity to select subtopics for their own practice development, they discovered new ways of using the technology in their everyday practice.

New methods for using the technology were generated from practice circumstances and authentic issues, not seeking general solutions. A conclusion that could be drawn from this is that practice development must meet local demands and that there is a need for some kind of carrier or professional progression for the preschool teachers to remain engaged in the development of their practice.

### **PAPER 4 ABSTRACT**

At the boundary between what is private and what is professional, Niklas Karlsson and Elisabeth Rietz.

Teachers are to a large extent responsible for their own professional development, parts of it will take place outside their working hours and it also derives from their own interests. This private-professional development to some extent take place in exchanges on social media. To communicate on social media today belongs to everyday practices for many teachers as well as school leaders and may involve communicating with parents on blogs or being a member of groups associated to their profession. Using social media for professional development means getting involved on a voluntary basis. Their own engagement and urge is important since these activities are not usually organised by the educational institutions where the participants work (c.f. Forte, Humphreys et al. 2012, Carpenter & Krutka 2014). Using social media for professional development within educational institutions means that it is possible to create new arenas for pedagogical discussions.

In this presentation a study which aims to investigate what kinds of problems that occur when social media is used as part of school development and to foster pedagogical discussions at the workplace, is presented. The activities of preschoolteachers, from two pre-schools, in Facebook groups have been studied and group interviews have been conducted.

For those preschool teachers who use social media in their private-professional development it is natural to communicate with colleagues outside their working hours. However, for others, it is stressful not to be able to forget their work during their spare time. Two problems are apparent when attempting to make the private-professional development part of school development. One problematic area concerns the engagement of the preschools teachers and that their engagement varies. This area also involves whether social media is used for private-personal communication or for professional development. Another problematic area concerns the preschool teachers lack of experience as well as their trust in communicating online with colleagues. The participants felt uncertain of how to communicate in writing and did not feel confident enough to express their opinions. Booth (2012) states that trust is one of the key enablers for knowledge sharing in online communities and lack of trust is probably the main reason why participants did not actively post in the Facebook group.

In the presentation the discussion about problematic areas, which concern how social media is used for pedagogical discussions, will be further developed.

## **PC** Roundtable

Title: Exploring the meaning and application of evidence-informed practice

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3035

Session: Parallel Session 4

Session Date and Time: Friday 8 January 11.00-12.30

Location: Shuna

Author/Speaker: Carol Campbell

Company/Organisation: Ontario Institute for Studies in Education, University of Toronto

Co-Authors: Julie Nelson, Sandra Nutley and Louise Stoll

Presenting Author: Carol Campbell

Presentation Format: **Round Table Discussion** 

### Abstract

We propose to facilitate a round-table discussion to contribute to the partnerships and collaborations strand of the ICSEI Conference. The round table will focus specifically on the role of research evidence in informing schools' approaches and the opportunities for collaboration between teachers and researchers.

Our proposed round-table discussion will be facilitated by two leaders in the field of evidence-informed practice (EiP) based in Canada and England and supported by two 'expert discussants' based in Scotland and England. The facilitators will draw participants' attention to a special issue (SI) of Education Research Journal (ERJ) that they will be co-editing, on the theme of EiP. The journal will be issuing a call for papers in January 2016 - around the time of the Conference, and the round table discussion will provide a unique opportunity for researchers, teachers and other educational stakeholders to debate some of the questions (outlined below) that we hope to investigate. Discussions and debates about the role of evidence in an educational context are not new (Weiss, 1979; Hargreaves, 1996). Indeed, a variety of programmes and resources have been developed over recent decades aiming to improve the quality and usability of educational research and ultimately, its impact on teaching practice (Bevins et al., 2011; Borg, 2010; Gough, 2013; Haslam, 2011; Hulme, 2013). However, EiP is still very much a topic of academic and professional discussion and activity.

Many studies describe a challenge related to improving the supply of good-quality research evidence for practice. Considerably less attention has been given to the demand for research evidence among teachers – how this can be nurtured; how it manifests itself; and the extent to which teachers find it suitable for their professional needs. There has also been insufficient focus on the role of teacher-led research and the extent to which this integrates with the production and use of academic research. Furthermore, the mediating processes that connect evidence and practice require further development, research, and assessment (Campbell and Levin, 2012; Nelson and O'Beirne, 2014).

We aim to explore both conceptual and application themes in our round-table discussion incorporating five key questions:

- 1. How is the term EiP understood and how does it vary according to stakeholder? To what degree is there synergy between understandings?
- 2. How can the nature and extent of schools' and teachers' evidence engagement best be measured and what are the associated challenges?

- 3. What is the relationship between EiP and positive outcomes for different groups? What constitutes a 'positive outcome' in the context of EiP?
- 4. How do evidence-informed schools or teachers undertake their practice? What are the facilitating conditions for EiP in schools?
- 5. What strategies are effective in mobilising knowledge or implementing evidence in practice? What are the drivers and inhibitors?

Expert discussants will offer short considerations of conceptual and application issues followed by open discussion on the above themes and linked to developing research, practice and policy collaborations for EiP among the ICSEI community.

# **RCEL Symposium**

Title: Validity issues and challenges in researching the effectiveness of school inspections

Topic: Researching the conditions for effective learning

Abstract ID: 3047

Parallel Session 4 Session:

Session Date and Time: 8 January 2016 11.00-12.30

Location: Jura

Author/Speaker: Marcus Pietsch

Company/Organisation: Leuphana University, Lueneburg

Institute of Education, London;

Johannes Gutenberg University, Mainz Institute for Education Monitoring, Hamburg Eberhard Karls University, Tuebingen

School of Education, Durham

Co-Authors: Melanie Ehren

Presenting Author: Marcus Pietsch

## Overview of symposium

Validity is the most important factor to consider when developing educational measurement systems and instruments. Whereas validity plays a significant role in the modern psychometric literature and in designing high stake tests it is extremely neglected when it comes to school inspections. Thus the purpose of this symposium is to provide an overview on the actual state of research on validity in the field of school inspections and to clarify the high relevance of designing valid inspection systems when it is about stimulating school improvement through and evaluating the effectiveness of school inspection systems.

The symposium brings together researchers and practitioners who are interested in supporting schools to enhance their practice and increase their effectiveness by the means of a professional and evidence-based school support and monitoring system and therefore closely articulates with the ISCEI conference theme of 2016: Connecting teachers, schools and systems: Creating the conditions for effective learning.

The first paper sets the tone for the entire symposium by providing an overview of how to apply theoretical advances of validity reflected in the literature and the research standards in the context of school inspections and analyzes the validity evidence for school inspections in Europe. The paper clarifies that it requires some evidence of real value, which usually means visible or directly testable evidence somewhere along the line of implications of the program to support the intended interpretation of a result for the proposed use.

The three subsequent papers then draw on the presented concept of validity and examine critical methodological issues and challenges in validating the effectiveness of school inspections. According to the idea of consequential validity which should be tested by means of reliable empirical evidence, they present research designs as well as empirical studies regarding three aspects of which can be assumed that they are particularly relevant for stimulating school improvement through inspection: "Features of the School Inspection", "External Impulses and Pressure" and "School Features".

The symposium is an ICSEI MoRE symposium and therefore mainly focuses on methodological issues. The format of the symposium is a paper session with inputs from the four presenters (15 minutes each), who provide a focused overview on their current research, two discussant contributions of 10 minutes each, leaving 10 minutes at the end for questions from the audience. The symposium is chaired by Dr. Marcus Pietsch and Dr. Melanie Ehren. As discussants, Dr. Martina Diedrich and Professor Peter Tymms sum up the outcome of the symposium, clarify the importance of validity for the practice of school inspections and outline the need for further research activities.

### PAPER 1 ABSTRACT

Validation of School Inspection Frameworks and Methods, Melanie Ehren and Marcus Pietsch

Many school inspection systems use structured protocols and decision rules to guide their data collection and to come to an overall assessment of the school as providing insufficient, sufficient or good educational quality. The development and use of such measures automatically raises the question of validity.

However, validity is rarely studied in the field of school inspection and no attention has been paid to recent theoretical advances. This paper presents Kane's (2013) notion of an argument-based approach to validation as a way to develop hypotheses on the intended interpretation of inspection results. We will present a set of hypotheses underlying inspection models in six European countries, which were reconstructed through structured interviews and document analyses as part of an EU comparative study. Additionally, we will follow the Standards for Educational and Psychological Testing (AERA, APA & NCME, 1999, 2014) to describe five types of evidence that can be used to test the reconstructed argument and hypotheses.

For each type of validity evidence we provide an overview of available studies from the respective countries. We find that validity is investigated unsystematically and in a cursory manner and that particularly "test content" lacks empirical evidence, whereas "response processes" have been studied rather frequently. Furthermore, the review indicates two common challenges in thinking about the validity of school inspections. First, due to a difficult trade-off between the level of specificity of the inspection criteria, and the subsequent gaming of the assessments by schools, inspection frameworks become self-fulfilling prophecies. Second, the standardized nature of inspection frameworks prevents adequate consideration of the different social contexts within which schools operate and creates difficulties in how school inspectors interpret the meaning of inspection criteria in light of diverse contexts. This requires standard setting procedures to locate inspection judgements on what counts as 'reasonable' or 'effective' within a particular context.

### **PAPER 2 ABSTRACT**

Video vs. in vivo Ratings of Classroom Teaching Quality, Samuel Merk

Questionnaire-supported expert ratings of classroom teaching quality are a standard method of both, school inspection as well as educational research. As widely used as this method is, it comes along with a lot of methodological problems. Some of them, for example rater severity or intra rater consistency could be methodologically handled by using manyfacet Rasch models and generalizability theory. Both methods require designs that make sure that different raters rate the same lesson and the same rater rates with different raters. So typically the choice of an appropriate rating design underlies methodological and practical requirements: The most informative design would be a Complete (Fully Crossed) Design (Eckes, 2011), were all items of a questionnaire in all lessons are rated by all raters. However this design would need a lot of resources. So in practice there are other rating designs predominant. Either a connected data set is established using an incomplete block-randomized design or all raters rate the same videographed lessons (Myford, Marr & Linacre, 1995; Myford & Wolfe, 2000) before they start rating classroom teaching quality in a real world setting.

The latter approach which we call video approach is much more economic and the standard procedure for checking interrater-reliability within school inspections (Taut & Rackoczy, in press). But there are doubts of its validity because a videotape could not transport all the real world information from the classroom to the rater. The in vivo block-randomized approach avoids these problems but would be a waste of resources, if there are no differences to the video approach.

The current study examines interrater reliabilities of N1 = 9 raters who rated N2 = 20 videotaped lessons and who furthermore rated N3 = 60 lessons with a 30-item rating instrument (Pietsch, 2010) in a block-randomized design in the field. We applied separated many-facet Rasch models to the video and in vivo sampled data which yielded three main results:

First, the ratio of range rater severity variance to variance of teaching quality is much higher in the video case, meaning that either the teaching quality is underestimated/ overestimated in the video/ in vivo case or the rater severity is overestimated/ underestimated in the video/ in vivo case or both. Second, the IRT infit and outfit rater statistics, which describe to which degree raters use the instrument in a consistent manner are higher in the video case. And finally, the estimated item difficulties of teaching quality vary heavily between the two approaches.

Whereas raters tend to rate videographed teaching insofar idiosyncratic or overly inconsistent, raters who rate classroom teaching within a real world setting apparently provide rather muted ratings that suggest a central tendency or, alternatively, a halo effect. Thus it seems that video ratings are no good choice for indicating real world inter-rater reliability and consistency for classroom observations within school inspections.

#### PAPER 3 ABSTRACT

The Pressure to Improve: A probabilistic Approach for Modeling Local School Markets, Sebastian Leist

The role of accountability pressure is a crucial element in understanding the operation of inspection systems. For Reezigt and Creemers (2005) as well as for Altrichter and Kemethofer (2015) "pressure to develop" is an important external condition for effective school improvement. The main idea is that stakeholders put pressure on schools by using choice/voice/exit options as a response to inspection reports and may intensify the competition for student enrollment within local school markets that way.

Popular approaches define schooling markets a priori either according to administrative boundaries, or based on areas of responsibility of municipal authorities, or they group schools based on the location of schools, taking into account travel costs (time, distance) between these locations. The assumptions of these approaches are problematic and may cause incorrect estimates which may lead to biased results on the impact of competition on school improvement and effectiveness (Gibbons & Silva, 2006).

In contrast to these a priori approaches the present study deals with the question of how it is possible to structure a largescale schooling system by examining the relationships between schools. It aims at revealing spatial networks of schools within which students are being distributed (so-called schooling markets).

By contrast, stochastic network approaches for the detection of groups offer an economic way of attributing schools to similar groups according to their relationship among each other. The advantages of this method lie first of all in the definition of groups based on an endogenous attribute of empirical data, and secondly, in the latent way of modeling which renders measurement errors irrelevant. The stochastic networks in this article were modeled with the R-Package, latentnet'. T

he network of relationships between the schools in Hamburg is based on flows of students moving from primary to secondary schools on the territory of the federal state of Hamburg previous to the start of school year 2014/15. Applying this stochastic network approach and using network data of students moving from primary to secondary schools, it will be demonstrated that it is possible to detect regional and, in a subsequent step of analysis, small-scale local schooling markets. After having detected schooling markets further analyses are possible, such as:

- Measuring the competition between schools on local markets based on indicators
- Description of social segregation among students
- Exploration of individual functional mechanisms of those regional and local schooling markets

#### **PAPER 4 ABSTRACT**

Analyzing Improvement Processes in the Context of School Inspection, Tobias Feldhoff Pietsch and Sebastian Wurster

School inspections have become an important instrument in managing education and were implemented for two reasons: to improve and to control school quality. Several international literature reviews conclude that empirical findings do not provide a clear answer to the question whether inspections have a positive impact on school quality improvement (de Wolf and Janssens, 2007; Klerks, 2013; Nelson & Ehren, 2014). In Germany for example a quasi-experimental longitudinal study shows that school quality was highly stable, irrespective of the introduction of school inspections (Gärtner, Wurster & Pant, 2014). The inconsistent picture of the impact of school inspections is illustrated by Wurster and Gärtner (2014). Schools differ in their handling and perception of school inspections and five types of schools can be described, which range from active schools with a high activity level to inactive schools. To this day, little attention has been paid to within-school processes in handling the inspection. Studies show, for example, that the feedback from the inspectorate for many schools is not obvious and an active re-contextualisation process is required, in which the results of the school inspection must be connected with the own perception of school quality and the school environment.

The capacity of schools regarding aspects of organizational learning and innovation capacity seems to play a key role for this process (theoretically see: Ehren and Visscher, 2006; empirically: Klerks, 2013; Nelson & Ehren, 2014). To reach a better understanding of the (re)action and coping processes in schools after the inspection, we need differentiated theoretical models to describe and analyze those processes. Feldhoff et al. (2014) and Pietsch, Feldhoff & Petersen (2015) showed the potential profit of the "schools' capacity of organizational learning" model by describing and analyzing the reaction and coping processes in schools after the inspection. The model is based on organizational theories and findings on the research on organizational learning in schools. It is a further development by Feldhoff (2011), which is based on Marks and Louis (1999) as well as Marks et al. (2000). The model consists of seven different dimensions:

- Organizational structure
- Shared commitment and collaborative activity
- Knowledge and skills
- Leadership and management
- Feedback and accountability
- Exchange with school environment
- Teacher empowerment

Pietsch et al. (2015) showed also that it is not enough to consider the amount of actions in different fields that schools have implemented after the inspection. We need studies which take a closer look to the specific process and their interactions during the whole inspection process till the next inspection. In this paper we want to present a multi-step mixed-method design with different methods to take the complexity of those processes appropriately into account (Feldhoff, Radisch & Bischof, in press). The design is based on the model of the "capacity of organizational learning" and is inspired by the mixed method design by Sammons et al. (2014).

## **SE Symposium**

Title: Self-evaluation in leading system and school improvement

Topic: Self-evaluation: schools and systems improvement

Abstract ID: 3146

Session: Parallel Session 4

Session Date and Time: 8 January 2016 11.00-12.30

Location:

Author/Speaker: Lyn Sharratt

OISE/UT Company/Organisation:

Co-Authors: Sue Walsh and Greg Whitby

Presenting Author: Lyn Sharratt

## Overview of symposium

This symposium relating to the Conference sub-theme: Self-Evaluation: Schools and System Improvement will provide a data-informed statement of impact to support how self-evaluation at the system, school, classroom and student levels which has been demonstrated to be effective in other jurisdictions, has combined to deliver trending improvement in student achievement for an Australian school district of 45,000 students. Presenters will discuss relevant research and how the district's use of the resulting combination of intentional approaches have created an increased student achievement level initially in Years 3, 5 and 9. The scholarly significance of this symposium is that it integrates the Ontario, Canada, research within successful school districts and the actions undertaken within this district in Australia. This research demonstrates that three specific self-evaluation tools result in improved system and classroom practices which in turn result in increased student achievement, changed classroom practice, increased classroom teacher collaboration, and an increased willingness among leaders and school teams to share best practices across this district. This symposium will highlight the thinking of highly successful practitioners, who work together and take action in Australia and in Canada. It will feature interactions between the researcher and the school district senior executives, and offer opportunities for participant involvement in self-evaluation as their three research papers are discussed.

The three integrated papers present a unique look at a remarkable work in progress: the focus on improvement in a teaching and learning in classrooms across the system. The strategies as mentioned clearly amplify the impressive outcomes achieved in the original research (Sharratt & Fullan, 2009, 2012) and simultaneously offer a view of various differences due to societal culture, leadership skills, expectations of parents, the sense of urgency felt and created by teachers, school and system leaders, and the perceptions of political policy makers.

### PAPER 1

A Comprehensive Self Evaluation Tool for Assessing Systems and School Improvement in Australia, Lyn Sharratt

### Reference:

Sharratt, L., & Fullan, M. (2009). Realization: The change Imperative for district-wide reform. Thousand Oaks, CA: Corwin

#### PAPER 2

Self-Evaluation Using a Case Management Approach to Whole System Improvement, Sue Walsh

#### Reference:

Sharratt, L., & Planche, B. (2016). *Empowering excellence: Leading collaborative learning.* Thousand Oaks, CA: Corwin (in press)

#### PAPER 3

Self-Evaluation and Collaboration Using Learning Walks and Talks to Observe Systems and Take Action, Greg Whitby

### References:

Sharratt, L., & Fullan, M. (2012). Putting FACES on the data: What great leaders do! Thousand Oaks, CA: Corwin.

Sharratt, L., & Harild, G. (2014). Good to great to innovate: Recalculating the route K-12+. Thousand Oaks, CA: Corwin

## **PTM Paper session**

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.00-12.30

Location: Rockall

Chair: Stephen McKinney

### PAPER 1 ABSTRACT

Teacher Agency and Education Policy Development, Paul Campbell, St. Paul's School, Barcelona.

Traditionally, research in the area of policy development and systemic improvement in education has predominantly looked at how well equipped teachers are to enact policy and how the institutional or systemic context is prepared for or coping with such a change (Bell & Stevenson, 2006; Boyer, Cook & Steinberg, 2010; Mourshed et al, 2010; Oancea & Orchard, 2012). The work of Priestly, Biesta & Robinson (2011) marks an important shift in the educational research field with their research related to the positioning of teachers when it comes to change processes. However, there is still a gap in the research field looking at how teachers are involved in the process of policy development and the implications this has. This study therefore aims to build a research informed understanding of how teachers exercise agency in the process of education policy development and to establish an empirical conceptualization of the role of teachers in the process of education policy development in Scotland. This study adopted an interpretavist approach. Using the themes arising in the review of the literature and adopting qualitative methods, interviews were devised and conducted with teachers from across Scotland and analyzed using a general inductive approach.

The data showed that teachers primarily believed their role was to implement policy with little involvement, if any, in any other part of the policy development process. The teacher participants believed that there were significant barriers currently to teachers' involvement in the policy development process. These barriers were believed to be down to the discretion of leaders in school and those leading the policy development process to offer teachers the opportunity, or not, to be involved. Participants also felt that the process of engaging in the policy development process was not clear to teachers and limited engagement. Overall, teachers believed that they should have a greater role in policy development, and to achieve that, there had to be better mechanisms in place nationally to involve them and greater value placed on the contributions they have to make.

It is clear from the research that teachers actually play a small role in the overall process of policy development, mainly in the implementation stage. Many teachers desire a greater role in the process and this is seen to contribute to the successful implementation and outcomes of a policy due to the experience, expertise and investment teachers have to offer. Arguably, there needs to be a wider analysis of the process of how policy is developed, implemented and evaluated in education systems. Frequently there can be a mismatch between the purpose of engagement mechanisms and the practicalities of these. Further research into what practical means could be utilised to foster a greater role for teachers in the policy development process and the impact this has for their professional identity and the outcomes of policy development is necessary.

#### PAPER 2 ABSTRACT

Translations of policy and shifting demands of teacher professionalism: from CPD to professional learning, Cate Watson and Maureen Michael, University of Stirling.

This paper concerns policy implementation and examines the processes of translation through which policy may be enacted at local level. In particular, it focuses on education policy and constructions of teacher professionalism, drawing on a framework of critical logics - social, political and fantasmatic - which examine different dimensions of social reality. Social logics describe practices, and particularly the 'rules' which govern practices, in a given social domain; political logics are diachronic, enabling an examination of the ways in which practices are contested and/or change over time; fantasmatic logics concern ideologies and the interpellation of subjects into discourses. The linguistic focus of this approach is supplemented by a sociomaterial analysis which examines the materialities inherent in these processes. The paper takes as its case a political moment in Scotland in which the discursive context for teacher professional development is undergoing a shift from CPD (continuing professional development) to professional learning. Here we analyse the language and material practices of those charged with organizing teacher professional development in four local authorities in Scotland. This case is used to explore linguistic and material enactments of policy as a series of translations in which practices emerge and unfold in unpredictable ways.

### PAPER 3 ABSTRACT

A critical review of the final report of the Advisory Group on Tackling Sectarianism in Scotland (2015), Stephen McKinney, University of Glasgow

The final report of the Advisory Group on Tackling Sectarianism in Scotland was published in April 2015 after the publication of the interim report in 2013 (Scottish Government, 2013, 2015) The report covered many key aspects of the debates surrounding sectarianism in Scotland, including some reference to education including denominational (Catholic) schools. This paper will initially provide a brief and critical introduction to the background to this document and the key points presented in this document. The paper will progress to an examination and analysis of the statements related to education and denominational schools.

The paper will examine three key ideas contained in the Morrow report: (1) that the status of denominational schooling can be perceived by some to be sectarian in and of itself; (2) that the topic of sectarianism should be addressed in schools and (3) that suitable resources be produced for use in schools including a Horrible Histories type resource.

This paper will draw on the wider literature and research on Catholic schools in Scotland and sectarianism (Finn, 2000; Gallagher, 2013) and will argue: (1) these perceptions should be robustly challenged on the basis of the extant research (McAspurren, 2005; Scottish Government Social Research, 2013) (2) the report should have demonstrated a greater awareness of current practice in schools and provided a stronger educational rationale for inclusion of this topic in school curricula and (3) the report should have a more nuanced understanding of how 'controversial' topics should be taught in schools.

## **LDP Symposium**

Title: Principals leading innovation for improvements in reading

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 2897

Session: Parallel Session 4

Session Date and Time: Friday 8 January 2016 11.00-12.30

Location: Malin

Author/Speaker: Tony Townsend

Company/Organisation: University of Tasmania/Griffith University

Co-Authors: Neil Dempster, Greer Johnson, Anne Bayetto and Susan Lovett

Presenting Author: Tony Townsend

## Overview of symposium

The purpose of this symposium is to examine the leadership action taken by school principals to achieve improvements in students' reading after attending the Principals as Literacy Leaders series of professional development activities. The original pilot program was managed by the Australian Primary Principals Association (APPA) and funded by the Australian Government in 2010-11 under its 'Closing the Gap' initiatives in Literacy and Numeracy. Subsequent extensions funded by Ministries of Education, brought research involvement to five of the six Australian States and the Northern Territory.

The PALL project required principals to attend five professional learning modules with a focus on the leadership of literacy (specifically reading) and to carry out in-between module activities to implement evidence-based leadership using international literacy research findings in practical ways in their own schools. The five modules were:

Module 1: Leading learning-what does it take?

Module 2: What leaders need to know about learning to read

Module 3: Leading literacy data gathering and analysis

Module 4: Designing, implementing and monitoring literacy interventions

Module 5: Intervention evaluation and future planning

The modules (from Dempster et al., 2012, pp. 6-8) were conducted at five 1-day professional development sessions that included follow-up activities for principals to undertake back in their schools with the support of experienced principals acting as mentors. The sessions were conducted across the school year and final reports were completed early in the following year. In order to lead the improvement of literacy in general, and reading in particular, two questions underpinned PALL projects:

- · What capabilities do principals need in literacy?
- · What capabilities do principals need in leadership?

The key purposes of the research therefore, were to ascertain the effects of involvement in the project:

- · on principals' personal leadership and literacy capabilities particularly in reading; and
- · on their use of these capabilities in their schools for teachers and students and for their education system

The presenters will draw on six research studies which accompanied the Principals as Literacy leaders (PALL) Pilot Project, and its successors, in Australia over the period 2010 - 2015.

### PAPER 1 ABSTRACT

Leadership with a Purpose: Nine case studies of schools in Tasmania and Victoria where the principal had undertaken the Principals as Literacy Leaders (PALL) program, Anne Bayetto and Tony Townsend

This Australian research project involved case study research during 2014 in five Tasmanian and four Victorian schools where their principals had completed the five leadership professional development modules of the Principals as Literacy Leaders (PALL) program during 2013. The purpose of the case study research was to gather data about the effects of the PALL program on principals' leadership and the impact of interventions in reading on teaching, student learning and achievement during 2014. The research questions sought to establish how the leadership actions of the principals affected teachers and their teaching, students and their learning, and student achievement. The study was implemented using action research methods. Commencing in Term 1, site visits, each of half a day, were conducted at either three (Victoria) or four (Tasmania) points over the year. The data gathering at these visits involved interviews with the principal or members of the leadership team, a focus group discussion with teachers involved in implementing a reading intervention activity, a student learning experience survey, and collection of student reading progress data based on the reading intervention. In some schools interviews with parents provided additional data. Schools also provided the interview team with copies of student work, newsletters and other documentation to show what they were doing to improve students' reading.

Results of the data collected were considered using a series of principles upon which PALL had been developed:

- · The importance of establishing a moral purpose related to student improvements in reading
- The importance of principals understanding how to support and lead their schools in the discipline of reading
- The need to establish processes of intervention to address deficiencies in student reading
- The need for the task of leadership of the reading effort to be spread widely beyond the principal
- The importance of providing support structures for both principals and teachers to support them in improving their practice
- The importance of engaging with parent and the wider community if improvements in reading are to be maximised

The findings of the two studies indicated that the PALL program had impacted positively on principals and that the organising mechanism for improving reading skills (The Big 6) provided a very helpful framework for principals to lead their teachers in ways that improved teacher practice, student engagement and student learning. Although it was too early to collect specific standardised test data that would indicate the extent of improvements in reading achievement, early collections of school-based data showed that teachers were becoming more skilled in data collection and analysis and using data to make decisions about their practice and that students were more engaged, had developed new strategies that would assist them in improving their reading and that these efforts had actually made a difference in student achievement.

### PAPER 2 ABSTRACT

Leading Reading in a Remote Indigenous School, Susan Lovett

The research program in this paper describes 18 months of intensive activity with school principals and Indigenous Leadership Partners to assist them in learning how to direct their efforts with teachers, parents and others to improve reading. The program was supported by six Leadership Mentors. These mentors were principals with knowledge and practical involvement with the types of schools and communities participating in the PALLIC project. Their main role was to help each of the schools complete the modules' follow up tasks. The general research aim of PALLIC was to document the impact and effects of each school's leadership team's actions in implementing the required follow up reading improvement tasks. Data sources included the principals' personal leadership profiles, surveys for Principals, Teachers, Leadership Mentors and Indigenous Leadership Partners and case studies from 7 schools (involving site visits by 2 researchers accompanied by the Leadership Mentors) and an analysis of reading action plan reports from each school.

I draw upon data from one of these case study schools to highlight the impact and effects of attempts to implement leadership for reading 'both ways'. I interrogate what it means for a school to engage in 'both ways' leadership and create a new intercultural space where both cultures (home and school) are linked, listening and learning from each other. The rationale for 'both ways' leadership is that leadership for student achievement in schools with high Indigenous enrolments must connect with and include parents and community members in decisions about their children's learning. This is not only about informing parents about what they can do to help their children but rather recognising that teachers and parents have wisdom and knowledge they can share with one another for the benefit of student learning.

Though the challenges are many, findings from the PALLIC project show that principals, Indigenous Leadership Partners and members of Indigenous communities are keen to know and do more about supporting their children to read. Findings highlighted the importance of:

- a family-friendly environment and trusting relationships;
- leadership being wider than the school principal;
- shared leadership opportunities signalling that Indigenous people's expertise mattered to the school;
- the principal and the Indigenous Leadership Partners being active learners alongside the teachers with the same driver to raise community support for children's learning;
- school attendance and strategies to get children to school such as rewards for attendance, loud music to signal the start of school, a morning bus to collect students, breakfast clubs and aligning the opening hours of the local shop with the school's opening time so that children had the opportunity to arrive fed and ready for the school day and the community sending children back to school if they were found away from school;
- school-wide program documentation as an anchor for a school with a constant staff turnover;
- a school reading plan with clear standards and targets for children's achievement;
- cultural traditions planned with community members being an integral feature of the school's program;
- speaking the language of the community; and
- public recognition of children's successes

### **PAPER 3 ABSTRACT**

Family and Community Involvement in Leading Reading, Greer Johnson and Tony Townsend

The Australian report by Emerson, Fear, Fox and Sanders (2012), Parental engagement in learning and schooling: lessons from the research, for the Australian Research Alliance for Children & Youth (ARACY), confirms that parental engagement in learning improves academic achievement, wellbeing and productivity. Similarly, findings from a systematic evaluation of successful interventions for home-school partnerships internationally (Bull, Brooking & Campbell, 2008) found that children's learning opportunities are increased significantly when parents are engaged in a joint commitment to education based on a shared understanding between families and schools of the purpose of the partnership and their respective roles, and where parents are positive about the perceived benefits of the partnership for learning.

The findings from the six research studies emanating from the Principals as Literacy leaders (PALL) Pilot Project, and its successors in Australia over the period 2010 - 2015 show that family engagement in children's learning continues to be an issue that is unresolved. It is clear that the nature of the modern family, in many cases with both parents working, sometimes long hours, and with other families not having enough resources at home to make ends meet, makes parent engagement a complex issue. If we are unable to attract more than a small percentage of parents to the school, perhaps we need to think of other ways of communicating ideas to them and encouraging them to be involved with their child in reading at home. The implication of this is that both school leaders and teachers need to have targeted professional development on strategies that enable a full range of family engagement activities to be established (some of which might not actually be at the school or involve reading, at least initially) that will enable families to support their children in the longer term to improve their reading capabilities. Such professional learning would also enable school practitioners to develop strategies to enable them to reach out to those families that are most difficult to engage (such as those from educationally or socially impoverished backgrounds or those beyond the early years of primary school).

Following the presentation of some of the positive findings from the PALL studies as well as the negatives relating to continuing difficulties, this paper will provide a positive snapshot of an Australian school where the PALL-trained principal has found a sustainable way to reach out to families in a low SES community. The key to the success is using the school's resources to create a learning hub where parents' agricultural and culinary strengths are integral to building a school-familycommunity learning culture. The culture has ultimately extended parents' engagement in supporting children learning to read in particular and their literacy learning in general.

### **PAPER 4 ABSTRACT**

Major Messages about Leadership from the PALL Project Research, Neil Dempster

The final Symposium paper briefly describes the six studies which comprised the body of research accompanying the PALL projects in Australia from 2010 to 2015 before concentrating on the main findings overall.

Studies 1 to 4 involved the use of mixed methods combining quantitative survey data with qualitative data gathered in interviews with principals and teachers addressing the research questions listed above. Studies 5 and 6 relied on interviews with principals and teachers involved in implementing reading interventions, with these data complemented by a limited amount of student survey data. All studies included student achievement data in discussions of subsequent reading improvement.

For the purposes of this proposal, some examples of the main findings validated across the six studies follow:

As a result of their participation in the project, school leaders placed an increased emphasis on:

- the development of a shared moral purpose with reading as a pre-eminent improvement priority for the school and for their teachers:
- leading and participating in professional learning activities related to reading;
- the use of professional dialogue with teachers about reading and in particular, in the analysis and use of reading achievement data, and in the design and delivery of reading interventions; and
- the alignment of resources to facilitate the teaching and learning of reading.

Specifically, evidence of impact included:

- the establishment of clear reading plans in almost every participating school;
- · the development of whole-school professional learning about effective reading practices;
- the adoption of whole-school literacy blocks; screening processes for intervention placements; the development of systematic and explicit teaching practices and interventions using a coordinated multilevel approach to oral language in the early years; and
- observable improvements in student achievement and attitudes to reading.

Across all six studies, there was a comparatively low level of leadership action on the building of connections with parents and the wider school community. This is well illustrated in the finding from low SES school communities that a quarter of the principals reported continuing difficulty in connecting with parents and the wider community to support reading while three-quarters were silent on this issue. Parent engagement with reading support in remote Indigenous communities was yet more difficult again than these figures indicate.

The practical application of leadership knowledge coupled with knowledge of reading yielded several consistent outcomes:

improved confidence in the principals themselves that led to their active involvement and connection with their teachers in professional learning and to their credibility in influencing changes to school-wide systems and processes for the learning and teaching of reading.

The data on the actions of the Leadership Mentors showed that the role was significant in supporting principals to implement their between-module tasks and to facilitating improvements in the teaching and learning of reading.

On the evidence produced during the PALL Project, working with and through principals is a cost-effective way to enhance teachers' professional competence directly and, in so doing, to share the leadership of helpful changes in teaching and learning, all of which ultimately enhance children's abilities in the vital skill of reading.

# **Parallel Session 5**

Friday 8 January 2016

14.00-15.30

## **Country Showcase**

Title: Creating space for agency: The impact of school reform dynamics on Austria's leaders,

teachers, learners and stakeholders

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.30-15.30

Location: Argyll Suite 1

Creating space for agency: The impact of school reform dynamics on Austria's leaders, teachers, learners and stakeholders

## **PC Innovate! Session**

Title: Transforming teaching by building an R&D system

Topic: Partnerships and collaborations: Schools, agencies, government, research

3015 Abstract ID:

Parallel Session 5 Session:

Session Date and Time: Friday 8 January 2016 14.30-15.00

Location: Argyll Suite 2

Author/Speaker: Tyler S. Thigpen

Company/Organisation: Transforming Teaching at Harvard University

Presenting Author: Tyler S. Thigpen

### Abstract

Research confirms what parents have long known: the quality of a student's teacher is, more than any other schoolbased factor, the most important force in shaping his or her educational outcomes. In the United States, as in many other countries, there is tremendous variability in the quality of teaching from classroom to classroom—one recent video study of thousands of American classrooms estimated that roughly 3 in 5 were competently managed, but that only 1 in 5 could be characterized as featuring the kind of ambitious instruction needed for 21st century life. Many qualitative studies confirm this analysis: classroom reports consistently show a pattern of low level instruction, with a significant minority of teachers mounting a much more ambitious and engaging instructional program.

Why is this? We argue that the problem lies not in individual teachers but in the absence of a system that reliably builds and grows teacher expertise. It is remarkable that given the importance of teachers and teaching to a nation's collective life, that in many countries there is not a reliable and integrated set of mechanisms—a system—that ensures the quality teaching that should be a birthright of every child.

One of the main barriers that have stood in the way of the United States building a system for quality teaching is the absence of an R and D system. We are missing a system to produce, vet, disseminate, and get into use knowledge about quality teaching. Plainly put, there is no one responsible for producing actionable, practical knowledge about teaching. Researchers write mainly for other researchers; some teachers have lots of knowledge but have few incentives or support for sharing it. There are also not good mechanisms for vetting or evaluating whether knowledge from research or out of practice is of quality and use to practicing teachers. Nor are there intermediaries that share what knowledge there is with teachers in a user-friendly and accessible format. In short, there is not really an "R and D" system to speak of in education in the way that there is in other fields. While there is exciting work being done in the United States on this front, still one major task for groups working on the problem of quality teaching is to build an "R and D" system in education.

This ICSEI Innovate! session will engage participants in an abbreviated design thinking process in order to draw on the expertise in the room and iterate possible solutions for building an R & D system through innovative partnerships.

The session will make use of the following format:

- 1. Introduction to the problem and context, including how some organizations in the U.S. and U.K. have formed partnerships to work on this problem - 7 minutes
- 2. Break into groups and iterate many ideas of possible solutions for this problem 7-8 minutes
- 3. In groups, narrow ideas and refine one idea 3 minutes
- 4. Groups share ideas 10 minutes
- 5. Conclusion 2 minutes

# TE Innovate! Session

Title: Teachers' professional development in a school-to-school network

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3078

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 15.00-15.30

Location: Argyll Suite 2

Author/Speaker: Naomi Mertens

Company/Organisation: Independent Consultant at MyLearningCommunity, the Netherlands

Truus Van Pinxteren Co-Authors:

Presenting Author: Naomi Mertens

## Abstract

Since theoretic studies have shown extensively that networked learning is contributing to the professional development of teachers, (Lieberman & Wood, 2002; Stoll, Bolam, Mcmahon, Wallace, & Thomas, 2006), and that the role of leadership in facilitating that process is a key factor (Earl & Katz, 2007; Harris, 2010), we have taken up several initiatives for professional learning in professional learning communities (Stoll&Louis, 2007). One of these is the 'Agora Learning Community', a community of learners in which teachers and other staff members in 25 primary schools in the Zaandam-area of the Netherlands develop themselves and one another. In this session we like to share our successes and our struggles with other network-facilitators, teachers and school leaders and others in the field of networked learning.

The session will be practice based and aimed at an open dialogue: At first, we will present what the Agora Learning Community looks like at this moment and will we give a short insight in our successes and failures. Thereafter, we will engage with participants in a dilemma based dialogue, for which we will hand out "key decisions-cards". The dilemmas on the cards will have to be answered by participants, leading to different solutions for the questions we will ask. We will have people walk to different sides of the room for the choices they make.

The main questions in the dialogue will be:

- How will we organise the self-organisation of the teachers? (We make teachers organise themselves for their professional development/ We organise professional development courses and sessions for our teachers)
- How much steering is needed in order to achieve a maximum participation rate and success? (We send out questionaires and invitations to all teachers and make sure they set times and dates for their PD/ We set times and dates for meetings and let teachers take upon the responsibility to get together with their learning groups)
- How do we get as many talented teachers aboard as we can, without losing them for the school? (We invite talented teachers to present their work to others in other schools/ We keep our most talented teachers in the schools, because that's where they are needed most)
- Participants will have the opportunity to share their thoughts about their network learning and school-to-school professional development. Further dialogue will be organised in the connected network meetings of the 3P network.

# TE Innovate! Session

Title: Implementing, evaluating, and scaling teachers' professional learning: Examining priority

problems of practice for school and system improvement

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3034

Parallel Session 5 Session:

Friday 8 January 2016 14.30-15.00 Session Date and Time:

Location: Argyll Suite 3

Author/Speaker: Carol Campbell

Company/Organisation: Ontario Institute for Studies in Education, University of Toronto

Co-Authors: Frederick Brown

**Brenton Faubert** 

Pamela Osmond-Johnson

Carol Campbell, Presenting Author:

## Abstract

This Innovate! session focuses on the ICSEI conference strand for teacher effectiveness, teacher quality and professional learning, defined as including a focus on "the current emphasis on professional learning as a major strategy in realising change and improvement".

There is a growing body of evidence about the features of effective professional learning (e.g. CUREE, 2012; Darling-Hammond et al., 2009; Timperley, 2008) and the development of standards and frameworks for the design, implementation, and evaluation of quality professional learning. For example, Learning Forward's Standards of Professional Learning include categories concerning: Learning Communities, Leadership, Resources, Data, Learning Designs, Implementation, and Outcomes (Learning Forward, n.d.). Unfortunately, the prioritization of emphasis on teacher quality as "the solution" to educational improvement has come with two major problems of policy and practice for the ICSEI community that will be explored in this session.

The first problem of practice is clear evidence that – although there is research on the design of professional learning – ful implementation of research-informed professional learning in practice remains scarce. Too few teachers continue to experience the professional learning that helps them improve substantively and show lasting effects on their students. Even when we can point to "pockets of excellence", efforts to scale such practices can be woefully inadequate. In this session, we pose the question: What are innovative and proven approaches applied to the problem of implementing and scaling effective professional learning practices?

The second problem of practice is that with the valorization of professional learning, so too has come its criticism and, indeed, attack in terms of demonstrable impact on outcomes and for delivering return on investment. Better measures of student achievement and teacher effectiveness are placing pressure for professional development to demonstrate related evidence of its impact. Unfortunately measures can be inadequate to document the impact that critics and supporters both demand. We pose the question: What are emerging answers to the question of researching and assessing the impact of professional learning in current national and international contexts?

Facilitators will provide a brief overview of the status of teachers' professional learning from a current international review of research linked to the two key problems of practice questions. Participants will then select one of the problems of practice questions to engage with in small group facilitated discussion for 15 minutes. A problem of practice protocol will be used to structure and scaffold discussions around participants' contexts, experiences with professional learning linked to the problem of practice question, solutions tried, problems encountered, and potential promising approaches for professional learning research, policy and practice in school effectiveness and improvement to share and/or develop. Each group will have an opportunity to share their proposed promising approaches with the whole session participants and to stimulate future collaboration and sharing among the ICSEI community. Social media will be used to continue the dialogue beyond the specific session.

# TE Innovate! Session

Title: Transfer of learning: Making an impact from formal professional learning to everyday

classroom practice

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3383

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 15.00-15.30

Location: Argyll Suite 3

Author/Speaker: Wes Hahn

Company/Organisation: District School Board of Niagara

Co-Authors: Usha James and John Dickson

Presenting Author: Wes Hahn

## Abstract

The District School Board of Niagara has embarked on a strategic challenge to improve instruction in the classroom. In response to this challenge we have shifted our organizational thinking and system structure. Our focus is emphasizing the development of administrators' instructional leadership skills needed to improve instruction in the classroom. Recently, our administrator focus has shifted to mathematics instruction; focusing on improving mathematics for teaching knowledge, to better support teachers in implementing effective mathematics instruction. Although we had many systems in place to support principal learning, it became clear that the core ability principals' were struggling with was how to do the everyday work of supporting and improving teacher practice between more formal learning opportunities.

Attempts to support principal and teacher learning (e.g., principals' courses, professional learning opportunities, network learning communities, participation as lead learner in CIL Groups, NLCs) produced profound and meaningful conversations about teacher practice; noticed by superintendents and principals. Principals and the superintendent reported that they were not seeing the transfer of that learning into practice. They noticed strategies learned in formally structured learning opportunities were implemented in very limited or superficial ways and broader pedagogical approaches hadn't been embedded into daily practice.

Our Observations caused us to wonder: "What are the barriers to transferring teacher learning?" "What might principals do to overcome barriers" and "How could principals learn to identify barriers and choose effective and appropriate actions to support teachers, within their context?" As we shared our experiences and learning with other jurisdictions, we have become convinced that this is the challenge faced by school leaders around the world! We hypothesized that if we clearly identified the understanding and abilities administrators need to facilitate transfer of teacher learning, then we could be more responsive to the principal needs and develop targeted professional learning for principals.

From our work to solve this challenge, we developed a conceptual framework which is a practical thinking strategy for administrators seeking to improve their impact on instruction in schools. This is an innovative approach in supporting principal thinking. The collaborative and inclusive nature of the process of developing, testing, and refining the framework has also been a powerful learning. Promising practices emerged as a result of responsive actions.

We will share the Transfer of Learning Framework; engage participants in thinking how to apply and adapt the framework and development process to their context. We will also discuss principals' experiences, practical implementation strategies, specific examples of how the framework enriched principal learning and improved teacher practice, in the area of improving mathematics instruction.

# LDP Roundtable discussion

Title: Educational accountability: International perspectives on challenges and possibilities for

school leadership

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3272

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Castle Suite 1

Author/Speaker: Jacob Easley

Company/Organisation: Eastern Connecticut State University

Co-Authors: Pierre Tulowitzki

> Simon Clarke **Neil Dempster** Stephan Huber Jeroen Imants Jan Robertson Mary Hill

Mohammed Elmeski Bettina-Maria Gördel

Yvonne Zwart Peter Breur Jorunn Møller Selin Kilic

Presenting Author: Pierre Tulowitzki

## Abstract

Around the globe research (Rush, 2008; Litz, 2011) has noted the changing landscape in which school leaders must operate due largely to the advent of globalization. According to Easley & Tulowitzki (2013), "one readily observable impact of globalization on the profession has been the act of policy copying, adopting, or borrowing" (p. 3). In particular, the convergence of accountability policy across public authorities around the globe impacts the practices of school leaders.

This round-table connects to issues of leadership development and practice to build sustained improvement. It will draw on collaborative research from around the globe. In a joint effort, 12 country teams explored issues associated with accountability policies, their implementation, and the roles and possibilities for/of school leaders around four central questions:

- 1. What is the policy that informs school accountability in your country?
- 2. What happens in the practice of testing, accountability, and assessment, and how does it relate to accountability policy?
- 3. What does the research in your country tell us about the role of school leaders on accountability and assessment?
- 4. What unique research approach/design is taken to investigate questions 1-3?

A fifth and final question, "What can we learn from an analysis of these questions to inform new possibilities for school leadership for educational effectiveness and improvement?" rounded out the teams' research to draw out implications for policy and practice. The round-table discussion will focus on these implications, linking issues of leadership and accountability policies with the ultimate goal to improve the conditions for learning.

## **Conceptual Underpinnings and Design**

The outlined design allowed for a methodologically flexible approach (Rosenberg & Yates, 2007) - the multi-case study. This approach is appropriate given the complex and highly contextualized nature of the phenomena (Stake, 1995; Stake 2000; & Yin, 2003), engendered by the guiding questions. Moreover, the guiding questions offer a structure for a purposeful dialogue among authors and participants. Simultaneously, the questions recognize agency among school leaders. It is the contention that school leaders "construct" their accountability environment (cp. Firestone & Shipps, 2005; Shipps & White, 2009), negotiating their practice within the context(s) of policy mandates.

## **Findings and Next Steps**

While systems differ in complexity and with regard to their emphasis, tensions and contradictions in balancing top-down accountability and school leadership and management at the local level can be found in many cases. In addition, there are indications of a troublesome relationship between a focus on accountability and improving learning and teaching. Finally, based on the findings, several ideas for school leadership were developed like taking back the (accountability-)narrative, getting fluent in data and becoming more context-sensitive.

Research findings as well as these ideas will be explored collaboratively with participants in order to expand perspectives across the country contexts of the presenters as well as those of the presenters.

# TE Roundtable discussion

Title: Collegial learning within teacher groups for effective teaching and learning

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3081

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Castle Suite 2

Author/Speaker: Marie Sjöblom

Company/Organisation: Department of Employment, Secondary and Adult Education

Co-Authors: Eva Bringeus

> Jonas Dahl Jens Ideland Anders Karlsson

Marie Sjöblom Presenting Author:

## Abstract

In Malmö, the third-largest city in Sweden, ideas about using cooperation within teacher groups for creating effective learning and teaching are currently being developed. The main idea is to create an organization in which all 800 teachers in the 11 public upper secondary schools can work with professional collegial learning at least one hour a week and together develop their teaching to create effective learning opportunities for all students.

The focus of the collegial discussions is required to be different in the different schools depending on the needs of the teachers and students (Timperley, 2011). Focus of the collegial discussions can be subject didactics, language development and/or how formative assessment can be implemented in relationship to different school subjects. Some schools have already started.

How can the collegial learning groups be organized? In Malmö there are 80 "lead teachers" (Skolverket, 2014), who besides teaching work with school development for 20% of their time. There are also five lecturers (the authors of this round table proposal), who work with school development towards all public upper secondary schools for 50% of their time and teach for the rest. The five lecturers have licentiate degrees (half PhDs) and work with the following five focus areas: collegial learning, language development, mathematics development, method and ICT-development and the link between upper secondary schools and teacher education.

To use lead teachers and lecturers to organize (together with the principals) the work with collegial learning, can result in both possibilities and difficulties. The lead teachers and lecturers are close to the teachers and know what challenges are most important in their particular schools, but to be able to make changes, they must be granted mandate and support from principals and colleagues. Also, there is a need to give the lead teachers process management training.

The following questions are suggested as starting points for the round table discussion:

- Many persons have time and responsibility for school development in Malmö: principles, lecturers, lead teachers, other school development units. How can their work be coordinated? How can the results from the collegial learning discussions be shared between schools?
- How do you find the most important subjects to be discussed within the collegial learning groups? Who gets to decide what is most important?

- One challenge is to make all teachers want to participate in the collegial discussions. How can this challenge be met? What other challenges can be expected?
- How can you "measure" the results of the collegial discussions, for instance in relation to students' achievements?

We also welcome all participants in the round table discussion to give more examples of how you can work with collegial learning and cooperation in teacher groups for creating effective learning.

# **TE Symposium**

Title: Teacher professionalism: contexts and priorities

Topic: Teacher Effectiveness, Teacher Quality and Professional Learning

Abstract ID: 2950

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Castle Suite 3

Author/Speaker: Raphael Wilkins

Company/Organisation: The College of Teachers UK

Co-Authors: Chris Brown, David Godfrey, Annette Smith, Irina Abuladze, Augustine Tawiah

Presenting Author: Chris Brown

## Overview of symposium

Drawing on developments in the UK and in contrasting contexts, the symposium will explore how contexts and priorities affect the choice of approaches to key dimensions of teacher professionalisation, including standards and recognitions; research-informed practice; pedagogies of professional learning; and infrastructures for implementation. The symposium participants are as follows.

The Chair and Discussant have been centrally involved, with other partners, in designing and campaigning for the creation of the new Chartered College of Teaching, and have a broad knowledge of teacher professionalisation issues worldwide. The first paper (Brown and Godfrey) addresses the central issue of the relationships between research and practice in teaching. The second (Smith) addresses the diverse composition of the profession, specifically regarding subject specialist teaching. These UK-focused papers are followed by two from contrasting contexts: Georgia (Abuladze) and Ghana (Tawiah). Conceptual frameworks and theories are under-developed in relation to teacher professionalisation in its currently emerging forms and policy contexts, both regarding core concepts and cross-system comparative analysis. This symposium forms part of a longer term process of debate and research to add to this field of understanding.

## **PAPER 1 ABSTRACT**

From evidence-based to research informed teacher professionalism, Chris Brown and David Godfrey.

This paper will outline the findings of two extant research projects which advocate and actively engage in approaches to shift educational discourse surrounding research use in practice from an expectation of teacher practice being evidence based, to one where teachers engage in research informed teacher professionalism.

The first half of the session will be used to argue for the need to view teacher professionalism as allowing for a high degree of autonomy and judgement. A dominant discourse exists in England around the relationship between evidence and practice that still prescribes a technical-rational view of professionalism. This sees evidence as producing truth and the professional as a technician whose job is to unquestioningly implement approaches based on 'what works'. Teacher's practice is, and should be, however, informed by different types of overlapping knowledge, professional expertise and judgement, management and pupil data and research evidence. These should all take into account classroom context and the wider needs of learners. Indeed, the term 'evidence' itself can be problematic, as evidence can be produced to support almost any proposed course of action in education. As such, evidence should 'inform' rather than dictate practice, with a better conceptual term being 'research-informed practice' as this also allows for the inclusion of theory, education as a process not simply one of outcomes and enables teachers to find a voice and base their actions on values. In support of this argument, evidence will be outlined from case studies of English secondary schools to show how the right organisational, leadership and professional environment can help promote such research informed practice within the context of a schools eco-system.

Second, to highlight effective ways to achieve research-informed practice, we will report on a two-year knowledge mobilisation project, testing an innovative approach to increasing research use amongst primary school teachers at scale. The project, involving primary schools in England, is a randomised contrail trial: of the 114 schools involved, we are working with 58, grouped into 14 Research Learning Communities (RLCs). RLCs meet four times a year for whole-day workshops, supported by research facilitators. Each school engaged in RLC activity provides both a senior leader and an informal 'opinion-leader' (with the latter identified via social network analysis). Workshops focus on specific issues and introduce research evidence that investigates 'what works' in relation to those issues. In between workshops, practitioners engage in peer-to-peer support with a much greater number of colleagues. An independent evaluation of the approach is assessing its effectiveness in terms of increasing research use amongst teachers within the schools involved. Through its use of learning activity, approaches designed to build practitioner capacity and expertise and a distributed approach to leadership (in terms of its participants), it is envisaged that the RLC project will provide an optimal template for embedding research-informed practice across the school system generally.

## PAPER 2 ABSTRACT

Chartered subject teacher statuses within generic teacher professionalization, Annette Smith

This paper reports an analysis of the interfaces between the generic professionalisation of teaching, led by the new Chartered College of Teaching UK, and existing chartered subject teacher statuses. It is based on documentary research and interviews with representatives of bodies providing these statuses. This is insider practitioner research undertaken from the author's perspective both as Chair of the Council for Subject Associations, and as the former Chief Executive Officer of one of the subject associations which awards a chartered status. The analysis will explore policy choices for further strengthening support and recognition for subject expertise within teacher professionalisation.

The bodies within the scope of the research include the Association for Science Education, the Royal Society of Biology, the Royal Society of Chemistry, the Science Council, the Institute of Mathematics and its Applications, the Mathematical Association, the Historical Association, the Geographical Association and the Royal Geographical Society. The criteria and processes for subject teacher recognition schemes provided by these bodies will be mapped, and their operation researched through interviews, covering practicalities of operation, support for applicants, numbers, costs, monitoring, and the electronic systems used for the process and for the keeping of CPD records.

The research also covers subject-based quality marks awarded to departments or schools, including the Primary Science Quality Mark, the Geography Marks (Primary and Secondary), the History Mark and the ArtsMark. This information will be used to explore issues for future development, having regard to the wishes of current scheme providers, and the intention of the founding proposers of the new Chartered College that its approach to generic teacher professionalization must work well for subject specialists and subject associations. Options for exploration include licensing agreements to offer a generic chartered teacher status as an additional recognition to chartered subject specialist teacher status, and the extension of equivalent opportunities to subjects and other forms of teacher specialisation not currently served.

The long-established role of the subject associations provides a perspective on the changing meanings attached to the term 'professional' in relation to teaching over the last few decades, and leading into the current debate. 65,000 teachers are currently full members of subject associations, and hence are identifying personally with such key professional concepts as self-motivated development, and recognition by expert peers.

The subject associations form part of the distinctive context of the UK, where the historic role of chartered bodies, learned societies and professional institutes has few direct comparisons with other countries' current approaches to teacher professionalisation. The paper will, nevertheless, identify points of relationship to subject-specific strands within global developments, such as prioritisations of STEM subject expertise by international organisations, and language development skills by various governments. Thus the paper will offer the combined benefits of new knowledge of practical relevance to decision-makers, with stimuli for wider debate.

#### PAPER 3 ABSTRACT

Progress towards teacher professionalisation in Georgia: contexts and infrastructures, Irina Abuladze

This paper will report, from an insider practitioner perspective, the early stages of a substantial national project to professionalise all aspects of the school teaching workforce in Georgia. The purpose of this study is to explore how the chosen strategies connect, on the one hand, with the distinctive historical, geographical and cultural circumstances of Georgia's school system, whilst on the other hand connecting also with globally-emerging good practice and influential models developed in different contexts. The study will, therefore, apply change management theories to the unfolding developments in Georgia, and will seek to develop a conceptual framework for international comparative analysis specifically concerning teacher professionalisation. The paper will report progress towards teacher professionalisation in Georgia, in particular identifying issues of context that have influenced the priorities for action, and the choice of structures and processes which will be used for implementation, and will open up discussion on approaches to comparative analysis across systems at different stages of economic development.

The paper will highlight key contextual points. These include the country's size: population 3.7 million, having declined since independence; and cadre of 60,000 teachers of whom 12,000 are of pension age. Historical milestones include the Rose revolution of 2003 and attempts to reform education between 2004-2014. Currently, able candidates cannot be attracted into teaching because of low pay and because of excessive stability. Significant deficiencies of the current teacher workforce include poor standards of pre-service training, of current practice, and of professional development.

Following much consideration of international models, a programme of legislation was introduced in February 2015 providing 'root and branch' reforms of teachers' career start, professional development and career advancement. These include new requirements for pre-service teacher training, and a series of career steps marked by internal and external assessment, by which teachers may progress from Practitioner Teacher, to Senior Teacher, to Leading Teacher, to Mentor. There are provisions for how the existing teacher workforce will be recalibrated to these standards. The legislation includes new remuneration scales and the first entry of teachers qualified under the new arrangements will have twice the salary of current teachers. It is intended to reduce the current workforce by 30% over the next four years, as a result of their failing to meet the new standards.

The paper will outline the data generation strategies accompanying this large-scale reform. These will capture aspects of the baseline position including founding aspirations and other early perceptions of the reform from different viewpoints; some structured strands of formative evaluation; and periodic analyses of the factors helping and inhibiting the progress of change using selected models of change.

The comparative analysis will begin with the ways and extent to which those leading this initiative in Georgia perceive themselves to have been influenced by developments in other countries, and/or international agencies such as World Bank/ UNESCO; the process of adaptation, and developments they perceive as being distinctly Georgian.

## **PAPER 4 ABSTRACT**

Progress towards teacher licensing in Ghana: contexts and infrastructures, Augustine Tawiah

This paper will report progress toward teacher licensing in Ghana, in particular identifying issues of context that have influenced the priorities for action, and the choice of structures and processes which will be used for implementation. This exploration will contribute to comparative analysis across systems at different stages of economic development.

Ghana has, since independence from Britain in 1957, made significant strides in providing universal basic education to all children. Currently, the level of children's enrolment in K-9 schools is higher than ever before. Teachers, who are key to these major developments in education, have been subject to shortfalls in both quantity and quality, thereby compelling policy makers to open more colleges, both public and private. Furthermore, while pre-service teacher education has existed as departments in six universities and also in 43 independent institutions, there was no uniform standard for entry and

progression as a teacher. The National Teaching Council (NTC) was initiated in 2008 under Act 778 to register and license teachers both for private and public schools. The process has faced significant challenges toward the desired goal of producing quality teachers under measurable uniform standards. Foremost, a small but influential number of people wanted NTC to play an advisory role only and not function as a regulatory body. The processes to implement the law have involved consultations and change management in all 10 regions and among 216 district directors of education. A new teacher policy has been developed to support implementation.

The focus for licensing as a means of quality assurance has become clear and popular among the three teacher unions and directors of education. The implementers have engaged directors and unions in active dialogue in designing the structure and new competencies at the point of registration, one-year induction, and for full licensure. Besides, while availability of funds for professional development has been a major challenge, a new strategic plan with specific measurable targets has been approved for funding by USAID. Piloting of the new system is under way in five districts and national rollout is planned for December 2015.

Overall, Ghana's potential for producing quality teachers has been boosted by her involvement in the International Forum for Teacher Regulatory Authorities to produce teachers who are comparable to other countries. In addition, the current efforts of the NTC serve as a critical development for improving current teachers and developing new teachers for the task of producing desired outcomes for quality education in Ghana. The input of development partners from UK, USA, Japan, Israel, Singapore and the World Bank has been critical in the transformation of teacher quality.

# **PC Symposium**

Title: Professionalising the interface between schools and cultural education

Topic: Partnerships and collaborations: Schools, agencies, government, research

Abstract ID: 3374

Session: Parallel Session 5

Friday 8 January 2016 14.00-15.30 Session Date and Time:

Staffa Location:

Chair: Christian Kammler

Company/Organisation: Philipps-Univerität Marburg, WBM KuBiS

Co-Authors: Armin Lohmann

Presenting Author: Christian Kammler

## Overview of symposium

The postgraduate course "Cultural Education in Schools" at the Philipps University, Marburg (Germany) offers a new format for teacher training, school development and networking. The importance of cultural education in schooling has become increasingly important since the onbreak of the new millennium. It is evident that cultural education is not merely an optional extra within the educational process, but an essential element in helping children and adolescents to acquire universal values and learn social participation.[1] It is to be noted that cultural education also includes the fostering of intercultural awareness, but focuses primarily on the artistic and the aesthetic, which are promoted not only through engaging in various artistic fields (e.g. dance, drama, creative writing) but also by providing interaction with artists of all disciplines and exposure to various aesthetic research fields, like for example public spaces, cultural institutions or artists' studios.

Cultural education fosters an approach that is not necessarily conducive with traditional education and can often pose many different challenges for schools. If cultural education is to succeed, a professionalization of the interaction between those working in both fields is highly important.[2] It is essential that the different rationale of the participants, the fields of action and the institutions involved should all be taken into consideration, so that a mutually appreciative and synergistically cooperative creative field[3] can emerge.

To this purpose the Philips University in Marburg established a post-graduate course in 2014 that seeks to effect a professionalization of participators on the joint interface between schools and cultural education and is a forerunner in its field. Along with the high-quality "Master of Arts" degree, the course offers school teachers, school directors and so-called external partners the opportunity to learn from and with one another.

The scientific and theoretic structure of the course consists of:

- personal aesthetic experience in a biographical context (Module 1),
- an excursion into a new aesthetic field, working with artists (Module 2),
- work on the interface: from institutional structures, public relations, grant applications to establishing networks and "System Leadership" (Module 3),
- systematic approach to school development (Module 4),
- the development of individual projects (Module 5)
- scientific analysis within the framework of a master thesis (Module 6).

Part 1: A presentation of the course - content, structure, proposed strategic aims for school development. Cooperative network with the ALTANA Cultural Foundation.

Part 2: The implementation of curriculum content in the context of school development and institutional adaption as viewed from a student perspective.

- KulturSchule Richtsberg School Marburg (Germany)
- Cooperation from the perspective of an external partner

Part 3: Open discussion with workshop participants - "Cultural education as a driving factor in school development".

# **RCEL Paper Session**

Session: Parallel Session 5

Friday 8 January 2016 14.00-15.30 Session Date and Time:

Location: Shuna

Chair: Jule Hildmann

## PAPER 1 (2878) ABSTRACT

Teachers' Backward-Mapping of Patterns in High Stakes Maths Tests, Melanie Ehran, Nick Wollaston, Jeffery Goodwin, Paul Newton and Tamara Bibby

External examinations have grown as instruments of control over educational systems in the past decade. A number of studies show how high stakes tests predictably emphasize some state standards while consistently excluding others, enabling teachers to teach to the test and inflate test scores. These studies suggest that teachers are familiar with patterns in the test and adopt their teaching in similar ways. As of yet there is little empirical evidence to support such a claim.

This study analysed the patterns teachers describe in a high stakes test in England (Key Stage 2 Mathematics test) and whether these patterns match the description of tested content by the test developer and a panel of content experts.

In a first step we mapped test items from four years of key stage 2 math tests items (paper A and B, administered between 2010 and 2013) by a content expert and the testing agency, following Holcombe's taxonomy of score inflation (Holcombe, 2011). This mapping exercise shows which national curriculum standards, substandards and cognitive domains were tested over the last three years, the specific items formats used to test these standards and domains and the number of marks given for correct answers on each of the test items.

In the second step we interviewed 30 year 6 teachers from the greater London area; 14 teachers are from primary schools that failed to meet the floor standards on the key stage 2 test in the previous year, while 16 teachers are from schools performing above the floor standards. Teachers were first asked to describe clusters of similar items on previous key stage 2 tests, to name each cluster, to explain their clustering decisions and how these decisions relate to their instruction and students' performance. We also provided teachers with a copy of the 2013 test and asked them to classify each item as random, high weight and/or frequently tested.

Our results indicate that there is some overlap in how teachers describe clusters of similar items, particularly in their description of clusters of two step money word problems, questions around matching decimals and fractions, and ordering mixed fractions, decimals and percentages. These clusters are similar for teachers in schools performing below and above the floor standards and specific descriptions of the clusters include both references to substantive features of the tested content (highlighting the specific skills students are tested on), as well as non-substantive features (visually similar aspects of test items). Some teachers also reflect on cognitive weaknesses, particularly when teachers in schools which serve students from deprived areas talk about word problems. Surprisingly the patterns teachers' describe only partially overlap the patterns in the testing framework, suggesting that teachers and test developers have different lenses in their interpretation of tests and tested content.

## PAPER 2 (2893) ABSTRACT

A Qualitative Study on Success and Failure in Educational Careers, Sabine Gerhartz-Reiter

Equity in the educational system is a common goal, however, it seems hardly achievable. Opportunities, especially the chances of successful educational careers, vary according to factors linked to e.g. pupils' socioeconomic background (cf. OECD 2013;OECD 2014; Statistik Austria 2014). Generally speaking, the chances of educational success are higher for pupils whose parents are well-educated and have high-status jobs. The chances of unsuccessful educational careers are especially high for pupils from lower-educated, poor backgrounds. In Austria, intergenerational social mobility is so rare that the national education report speaks of "inheritage" of educational status (cf. Lassnigg & Vogtenhuber 2009).

Despite some popular explanatory models (like Bourdieu & Passerons (1971) theory of social reproduction, Boudons (1974) rational choice theory or DiMaggios (1982) theory of status culture participation) and many results concerning factors of potential influence on educational careers from quantitative research, there are a lot of open questions concerning why some educational careers succeed while others do not. Why do so many pupils – also children of well-educated parents - leave school early? Why (and how) do some pupils achieve educational upward movement despite having to face lots of hindering factors?

This contribution presents findings of a qualitative study which deals with the question how differing success in the educational system can be explained. It focuses on two special types of educational careers – educational upward movement and early school leaving - in order to find out more about supporting and hindering factors, about the interplay of factors from different areas (e.g. educational system, individual schools, teachers, parents, pupil) and about potential patterns of influence which lead to (un)successful educational careers.

In the study presented 22 biographically oriented narrative interviews (Schütze 1983) with young adults (early school leavers and people with educational upward mobility) were conducted (sampling: Theoretical Sampling, cf. Glaser & Strauss 1967) in the province of Tyrol (Austria) in 2014. Ten of the interviews were analysed and interpreted in detail by applying Bohnsack's Documentary Method (2003). This method aims at the reconstruction of implicit knowledge which forms the basis of everyday practice and helps to give "an orientation to habitualized actions independent of individual intentions and motives" (Bohnsack et al. 2010, p. 20). Moreover, with its focus on comparative analysis and on collective orientations it helps to find out more about individual and collective ways of dealing with factors of influence as well as about structural aspects determining the course of educational careers.

Apart from a systematization of common factors of influence, the main finding of the study is the identification and reconstruction of patterns of orientation in formal educational careers. These patterns of orientation account for the varying relevance of different factors of influence for different people and serve as explanatory models for successful and less successful educational careers. As a conclusion, patterns of pupils' orientation should be considered in initiatives for the support of educational careers. This would enable (e.g. teachers and schools) to focus on the respective relevant aspects for individual pupils and thereby help to deepen the impact of supporting programmes.

## PAPER 3 (2879) ABSTRACT

Strategies Teachers Use to Prepare Students for High Stakes Testing in England, Melanie Ehran, Nick Wollaston, Tamara Bibb and Paul Newton

Several authors have summarized the changes teachers make in instructional practices in response to high stakes testing (Stecher, 2002; Pedulla, 2003; Koretz, 2003, Fuhrman, 2003), such as teaching tested subjects in ways that resemble test materials and teaching students about incidental aspects of the test. Here we will follow Koretz, McCaffrey and Hamilton's (2001, p. 6) distinction between substantive and non-substantive coaching to describe teachers' instructional strategies to prepare students for high stakes tests. Non-substantive coaching refers to general coaching strategies of test preparation that focus instruction on elements of the test that are largely or entirely unrelated to the definition of the domain the test is intended to represent, such as structure, format and scoring rubric of test items (Koretz, McCaffrey & Hamilton, 2001, p. 21).

Substantive coaching is "an emphasis on the narrow, substantive aspects of a test that capitalizes on a particular style or emphasis of test items. The aspects of the test may have been emphasized either intentionally or unintentionally by the test designers. For example, in one study of the author's, a teacher noted that the state's test always used regular polygons in test items and suggested that teachers should focus solely on those and ignore irregular polygons. The intended inferences, however, were about polygons, not specifically regular polygons." (Koretz, 2005, p. 14). Teachers notice certain patterns in tested content and use subject-specific coaching strategies to prepare students to focus on that content (Looney, 2009).

We implemented a vignette study to analyse teachers' instructional strategies to respond to choices in test design. We interviewed 30 Year 6 teachers from schools (across Greater London and Kent) performing above and below the floor standards and with students from a range of backgrounds, including both advantaged and disadvantaged.

During the interviews, teachers were provided with copies of items from the 2014 test and were asked to form clusters of the items based on their characteristics, the difficulties their students face in answering (clusters of) items and how they would prepare students for them (e.g. the strategies they would use to prepare students to correctly answer items in each cluster, the specific time frame within which these strategies would be used, whether their strategy use might differ in the absence of testing and how school level arrangements, such as buy-in of external coaching services, affect their instruction). We analysed the extent to which responses are similar across teachers in schools performing below and above the floor standards and whether these responses are examples of substantive and/or non substantive coaching.

Findings from the interviews show a range of examples of substantive coaching which are common for teachers, performing both below and above the floor standards. An example includes test preparation strategies which are informed by (multistep) word problems and items requiring students to explain their answer and problem solving strategy. Teachers for example have students practice in using specific mathematics vocabulary and guide them in the steps they need to take in explaining their answer.

# RCEL Symposium Presented by the European Association for Research on Learning and Instruction

Title: Processes and effects of transitions in different educational contexts across the lifespan

Topic: Researching the Conditions for Effective Learning

Abstract ID: 3392

Session: Parallel Session 5

Friday 8 January 2016 14.00-15.30 Session Date and Time:

Location: Jura

Author/Speaker: Katja Scharenberg

Company/Organisation: University of Education Weingarten

Co-Authors: Maria Evangelou

> Pamela Sammons Brenda Taggart Kathy Sylva **Edward Melhuish** Iram Siraj

> Katja Scharenberg

Melania Rudin Barbara Müller Thomas Meyer

Sandra Hupka-Brunner Katharina Maaq Merki

Presenting Author: Katja Scharenberg

## Overview of symposium

Reynolds & Teddlie (2000) called in their agenda for school effectiveness research for longitudinal studies analysing the effects of different educational contexts on transitions and outcomes. However, even to date, there is little research on long-term effects across different phases of schooling (Creemers, Kyriakides & Sammons, 2010). The aim of this invited symposium is to emphasise the importance of such studies by presenting findings of four large projects from four different countries. They empirically investigate long-term effects of educational transitions and trajectories on achievement and motivational outcomes and comprise the time span from primary over secondary to post-compulsory education and adulthood.

The first paper from Vanwynsberghe, Vanlaar, van Damme and Gielen draws on data from the SiBO-study in Belgium (Flanders) which surveyed 6,000 pupils from 200 schools from Kindergarten to the age of 17. It focuses on long-term effects of primary schools on mathematics achievement, non-cognitive outcomes and educational trajectories (grade retention, attended track, educational programme) at the end of secondary school.

The second contribution of Evangelou, Sammons, Taggart, Sylva, Melhuish and Siraj tries to identify fostering and hindering conditions of successful transitions from primary to secondary schools using a mixed-method design. The study is part of the Effective Pre-school Primary and Secondary Education (EPPSE 3-16) project which surveyed students in England from age 3 to 16. The authors present analyses for a sample of more than 500 students and their parents providing valuable insight into the process of transition from primary to secondary school.

The third paper of Scharenberg, Rudin, Müller, Meyer and Hupka-Brunner uses data of the Swiss panel survey Transitions from Education to Employment (TREE). The base sample consists of 6,343 students who participated in the PISA 2000 survey. This sample has been followed up by nine points of measurement covering the development from 15 to 30 years of age. The paper examines the effects of PISA reading literacy skills and attended school track at the end of lower secondary school on the transition to post-compulsory education and educational attainment in young adulthood.

In her paper, Maag Merki presents results of the German LifE-study, which tries to identify context and development factors in adolescence as predictors of productive life-courses. The analyses focus on long-term effects of academic performance, school achievement willingness and school climate in adolescence on job achievement willingness in adulthood at the age of 45. The results show that a positive school climate has a favourable long-term effect on adults who were low-performing students.

## **PAPER 1 ABSTRACT**

Long-Term Effects of Primary Schools on Attained Position and Mathematics Achievement 10 Years After Starting Grade, Griet Vanwynsberghe, Gudrun Vanlaar, Jan Van Damme, Sarah Gielen

Educational effectiveness research has demonstrated that some schools are more effective than others (Scheerens & Bosker, 1997). Unfortunately, little research has addressed school effectiveness in the long run (Creemers, Kyriakides & Sammons, 2010). Teddlie and Reynolds (2000) refer to long-term school effects, or the continuity of school effects, as the effects on students from one phase of schooling to another. Research on the continuity of school effects is not only found to be scarce, but also inconsistent. Goldstein and Sammons (1997) found in their reanalysis of Sammons et al. (1995) an effect of primary schools on the achievement at age 16. However, their sample was limited to 758 students and their finding was not confirmed by Pustjens et al. (2007) who found only small, quickly decreasing, long-term effects of primary schools and classes. However, Luyten and Sammons (2010) addressed the need for research of long-term school effects, in order to identify the influence of primary schools on school trajectories in secondary schools, besides the impact primary schools already have on educational choice at the start of secondary school. In this paper, we examine the long-term effects of schools for primary education in two ways: first, by looking at the educational position attained by students at the end of secondary school; and secondly, by examining students' average mathematics achievement at the end of secondary education. The paper focuses on the following research questions: Do the attained positions 10 years after starting grade 1 depend on the primary school attended? Do the mathematics achievement scores 10 years after starting grade 1 depend on the primary school attended?

The study uses data from the longitudinal SiBO-project (Dutch acronym for School Trajectories in Primary Education), which was designed to describe and explain differences in children's school trajectories throughout primary education. A cohort of 6000 Flemish pupils from 200 schools was intensively followed from Kindergarten (age 5-6) until grade 7, the first grade of secondary school (age 12-13). Afterwards, information about the students' educational attainment was obtained annually. In 2014, at the age of 17, 65% of the cohort participated in a follow-up mathematics test and a student questionnaire. The mathematics test consisted partially of PISA-items or similar items. Cross-classified multilevel models are used since students are nested in one primary and one secondary school.

Preliminary analyses indicate that in the empty multilevel model of the mathematics achievement, the variance situated at the primary school level was significant. The variance at primary school level in the empty model of attained position was not significant. When student background characteristics were added, no significant long-term effects of primary schools 10 years after starting grade 1 were found, neither on attained position nor on mathematics achievement.

## PAPER 2 ABSTRACT

What Makes a Successful Transition from Primary to Secondary School? Evidence from the Eppse Study, Maria Evangelou, Pamela Sammons, Brenda Taggart, Kathy Sylva, Edward Melhuish, Iram Siraj

The Effective Pre-school Primary and Secondary Education (EPPSE 3-16) project is a major longitudinal study investigating the influence of pre-school, primary and secondary schooling on children's cognitive and social/ behavioural development in England with a sample of 3172 children. The current study focused on the processes and practices involved in transition between primary and secondary schools, pupil and parent experiences, as well as child and family background characteristics which were associated with more positive transitions. This project aimed to provide evidence of practices that could help to enhance the continuity between primary and secondary school and identify ways to help schools, teachers and parents to support children across the transition period and to provide better provision to those most vulnerable.

The sample was more than 500 children and families. It examined the experiences and perceptions of both pupils and their parents during the transition process and described the specific practices associated with positive and negative transitions (as reported by pupils and parents). The influence of child and family background characteristics such as socio-economic status (SES) and gender on the transition experience were also examined. By adopting a mixed methods approach, the study investigated the issues related to transition for four distinctive groups: Local Authorities (LAs), children, parents and schools. Officers in six LAs were asked about the way transition was dealt within their Authority. Children in their first term at secondary school completed a questionnaire on their attitudes to, and experiences of transition, and the study also sought their parents' opinions in order to illustrate the whole family's experience. From the wider EPPSE sample, 1190 questionnaires were sent out to parents and children, with a response rate of 46% (children) and 48% (parents).

The study identified a range of practices employed by schools to help support children's transitions. These included: the use of 'bridging materials' such as identical series of text books in both primary and secondary schools, the sharing of information between schools, visits to schools by prospective teachers, children and their parents, distribution of booklets about school rules, talks at the schools, 'taster' days, and other joint social events between schools. Most of the children in the study had a positive transition experience. Eighty four per cent said they felt prepared on entry to secondary school. A noteworthy minority, 16%, did not feel prepared when they changed schools.

Analysis of the children's questionnaire revealed five aspects of a successful transition: developing new friendships and improving their self esteem and confidence, experiencing curriculum continuity, showing an increasing interest in school and school work, having settled so well in school life that they caused no concerns to their parents, and getting used to their new routines and school organisation with great ease. Low SES and prior experiences with bullying were found to have an association with less positive transitions for children.

## **PAPER 3 ABSTRACT**

Long-Term Effects of Pisa Reading Literacy and Tracking on Educational Attainment in Young Adulthood, Katja Scharenberg Melania Rudin, Barbara Müller, Thomas Meyer, Sandra Hupka-Brunner

At the end of compulsory school, students should be "skilled for life" (OECD, 2013) with basic competencies allowing a successful entry into adult life. In this regard, PISA assesses students' reading literacy which is considered as a tool for independent knowledge acquisition, effective participation in social and economic resources and life-long continuation of skills development in adulthood (OECD, 2001). The achieved skills level at the end of compulsory school can therefore also be understood as the output of the education system. In contrast, long-term effects and returns (outcomes) can be measured e.g. by educational attainment in adulthood (Ditton, 2000).

The completion of an upper secondary certifying education and training programme is an essential requirement for the successful transition from school to work and a long-term labour market integration (Frey et al., 2012). A lack of upper secondary graduation, vice versa, clearly limits young adults' labour market options (Keller & Moser, 2013). The graduation rate at upper secondary level is therefore also an indicator of the effectiveness of the education system in meeting the skills demands of the labour market (FSO & CORECHED, 2004).

Our research addresses three research questions: Do PISA reading literacy and attended school track – both indicators of school achievement - have an impact on young adults' entry into upper secondary education? Do school-related indicators of achievement show stronger long-term effects on educational attainment than indicators of students' sociocultural origin? Are the effects comparable for different kinds of educational attainment?

Analyses draw on data of the "Transitions from Education to Employment" panel survey, which is the first longitudinal study in Switzerland to examine young people's transition from school to work. The sample comprises 6,343 school leavers aged 15 who participated in PISA 2000 and have been followed up in nine survey panels until 2014. Multinomial logistic regression analyses (accounting for sample attrition) control for students' sociocultural origin, achievement indicators (e.g. school track, PISA reading literacy) and socio-geographical characteristics in Switzerland.

The results (Scharenberg et al., 2015) emphasise that – over and above students' sociocultural background – PISA reading literacy, grades, the attended school track and educational status after the end of compulsory school influence the likelihood of entering upper secondary education. We also find long-term effects on educational attainment ten years after leaving compulsory education. Students with medium or high PISA reading literacy scores have a higher chance of achieving a university degree than their low-ability peers. Furthermore, not having attended a certifying education or training programme within the first two years after leaving compulsory school is a risk factor. Poor grades in the language of instruction also increase the risk of ending up without a post-compulsory certificate. The attended school track has long-term effects on all levels of educational attainment. Respondents who attended lower tracks have a considerably lower likelihood of graduating from university education than those from other tracks. They have, however, a higher risk of remaining without any certification at all.

## **PAPER 4 ABSTRACT**

The Impact of School Climate in Secondary Schools on the Development of Willingness to Achieve, Katharina Maag Merki

Achievement willingness (AW) is defined as a competence to be persistent, ambitious and hardworking. It is influenced by a complex interaction between individual and context characteristics (Fend, 1997, Reyes et al., 2012). Empirical results confirm that students are more likely to be engaged in the learning process when they perceive a positive school climate (SC) (e.g., Hoy et al., 1998). However, there is a lack of studies which analyze the interrelationship of SC, AW and student achievement from a long-term perspective (e.g. Thapa et al., 2013). Against this background, we investigated the following questions: 1. Do level and change of AW in secondary schools predict AW in adulthood? 2. Do level and change of SC predict AW in adulthood? 3. Is there a moderator effect in terms of academic performance level in adolescence?

Firstly, we expect a positive relationship between academic performance, AW and SC. Secondly, the weaker the decrease of SC during secondary school, the more pronounced AW will be in adulthood. Thirdly, due to the protective function of SC, we expect a moderation effect: The effect of SC on AW in adulthood is assumed to be stronger for low achieving students than for high achieving students (e.g. Vanlaar et al., 2015).

## Methodology

Data was taken from the LifE-study in Germany: 1979-1983 (5 surveys, age of 12-16; ca. N=2000), 2012 (1 survey, age of 45; N=1359; response rate: 85%) (Fend et al., 1976).

School AW (SAW) (1980-1983): 3 items indicating how ambitious, hard-working, and persistent students perceived themselves;  $\alpha$ =.69 to  $\alpha$ =.77.

Job AW in adulthood (JAW) (2012): comparable to SAW, adapted according to the job requirements; a =.76.

School climate (SC) (1980-1983): 4 scales: e.g., support by teachers, cohesion in class; Second order factor: α=.70 to  $\alpha = .74$ .

Academic performance: sum score of grades.

Analyses strategies (N=1359): Latent growth curve analyses; multi-group comparisons by a median split (50.4% high performers; 49.6% low performers), controlled for individual factors.

## **Findings**

RQ1: The analyses revealed a significant long-term effect of the initial level of SAW on JAW 30 years later (β=.201\*\*\*), but not of the change in SAW on JAW (Chi2/df=1.6; RMSEA=.022, CFI=.964, TLI=.955).

RQ2: No long-term effects of the level and change of SC on JAW in adulthood were found.

RQ3: Differential effects were identified: Only in the group of low performers in school, the change in school climate is positively related to JAW in adulthood ( $\beta$ =.37\*). The stabler the SC remains during secondary school, the higher is the level of JAW 30 years later.

## Theoretical and educational significance of the research

The results confirmed our hypotheses partially. Particularly, the dynamic perspective of SC during adolescence is important for JAW of low performing students. Accordingly, continuity of a positive school climate might act as protection factor. Additionally, educational effectiveness theories have to strongly emphasize the dynamics and processes of school factors on student learning in the long run.

# **SE Paper Session**

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Barra

Chair: Val Corry

## **PAPER 1 ABSTRACT**

Are school self-evaluation instruments capturing what they are intended to? A study on the cognitive validity of its results, Jerich Faddar, Jan Vanhoof and Sven De Maeyer

## Problem statement

School self-evaluation (SSE) is commonly thought of as a powerful tool in order to improve schools' functioning and effectiveness (Kyriakides, Campbell, & Christofidou, 2002; Van Petegem, 2005). It has become a topic of growing interest in academia and is implemented in many educational systems (McNamara, O'Hara, Lisi, & Davidsdottir, 2011; Vanhoof, 2007). The procedure of SSE is often characterized by administering questionnaires with stakeholders (e.g. teachers) about schoollevel features to create a picture of the school as a basis for evaluation (MacBeath, Schratz, Meuret, & Jakobsen, 2000; McNamara & O'Hara, 2005). Despite its common use, it can be argued that there are several drawbacks with regard to this method in terms of possible biases and distortions (Groves et al., 2009).

While administering SSE-questionnaires, a vital role is granted to respondents and how they process items in order to obtain valid results (Bateson, 1984). The degree to which respondents process the items consistently with the intentions of the instrument developers is referred to as cognitive validity (Karabenick et al., 2007). Three critical stages are determinant for assessing the cognitive validity of item answers: how respondents interpret items, whether they are coherently elaborating on this interpretation and whether they select an answering option congruent with their elaboration (Karabenick et al., 2007).

In the context of SSE-instruments it can be argued that cognitive validity is threatened by a high complexity due to abstract and difficult educational concepts (Koskey, Karabenick, Woolley, Bonney, & Dever, 2010), and multi-level thinking where respondents, in contrast to traditional self-report, report on their school as a whole and not exclusively on themselves (Bliese, 2000; Kozlowski & Klein, 2000). In this connection, this study aims to investigate the following research questions:

## To what extent

- 1. ...are respondents interpreting the items as intended by the instrument developers;
- 2. ... are respondents coherently retrieving information from their memory; and
- 3. ...are congruent answering options chosen?

## Methodology

While administering an exemplary SSE-questionnaire with 20 staff members from 4 schools, cognitive interviews are performed in order to map out respondents' cognitive processes (Willis, 2005). The interviews are coded and analysed by means of pre-developed cognitive validity criteria for each critical answering process stage. This resulted in 1 200 units of analysis on which descriptive statistics are executed.

## Findings and conclusion

First results show that cognitive validity is indeed threatened. It appears that respondents frequently struggle with the interpretation of items. Furthermore, once respondents fail to grasp the intended meaning of an item, they stick to their own interpretation and get off the item's subject during the elaboration stage. Responding congruently with the preceding elaboration seems to be less problematic. These findings suggest that SSE-questionnaires are more appropriate in a school developmental perspective (Vanhoof & Petegem, 2007) and that results should be interpreted with some reserve. Insights in cognitive validity are also relevant to other research domains since similar approaches of data-collection are used (e.g. school effectiveness research collecting teachers' information on school features, in order to link it with student performance (Scheerens, 2000)).

## PAPER 2 ABSTRACT

Systemic use of value-added and item response models for accountability, Daniel Muijs and Saad Chahine

#### Introduction

By leveraging data, we can potentially enhance learning for children and improve schools. To do this effectively and fairly requires that we can rely on the quality of the data produced, which has led an increasing number of education systems to resort to the use of sophisticated value added models and Item Response Theory modelling. We conducted a systematic literature review of the use of VA and IRT models in education systems internationally, and looked in-depth at five case studies of the use of VA and IRT models at the system level, to answer the following questions:

- 1. How are VA and IRT models used in international education systems, both in terms of accountability and school improvement?
- 2. To what extent do such systems use the models in a technically valid and reliable way?
- 3. What are the consequences of the use of these models in these systems?

## Methods

A number of key steps were followed in conducting the systematic literature review:

- Step 1. Defining the research questions and the inclusion criteria for selecting papers. Quality criteria were used to select suitable sources for the review. These focussed on the quality of information provided and their usefulness for the purposes of this review.
- Step 2. Searching the population of articles. We performed a search using key databases such as Psyclit, ERIC, and Informaworld using a range of relevant search terms.
- Step 3. Selecting articles for inclusion. This process was based on the inclusion criteria mentioned above. We employed a scoring system for each criterion.
- Step 4. Look for any risk of potential bias in the articles selected, this both with respect to methodology and omission of confounding factors and unintended consequences.
- Step 5. Interpret findings, taking into account the importance of context and the practical implications of the findings. In this step we selected the five most interesting and relevant cases of value-added analysis, and IRT, based on three criteria: maximum variation to include as diverse a range of cases as possible, quality of evidence as determined through the procedures above and transferability to other contexts.

#### Results

We studied five cases where use was made of value added models and/or IRT. The SIMCE system in Chile, the CITO pupil following system in the Netherlands, the English secondary education value added systems, the Tennessee Value Added Assessment System and the very recently developed New York City system.

This review demonstrated both the relevance and usefulness of sophisticated value-added and technical methodologies to develop systems that can be used for accountability, school improvement and pupil tracking, and the need for circumspection, care and intelligence in the way systems are used.

Choices need to be made on such matters as what model to use, what data to use and what to test. If models are to be used developmentally, there is a need to carefully construct reportage to schools and teachers to be useful and comprehensible, and to provide professional development to allow them to use the information effectively.

## PAPER 3 (3432) ABSTRACT

School effects on pupil attitudes to learning and schools: Value- added and regression discontinuity estimates, Thomas Perrv

There is a body of research literature which has examined school effects on academic outcomes. Research concerning the effect of schools on attitudinal outcomes, however, is comparatively rare. Existing studies in this area have suggested that school effects on non-academic outcomes are relatively small. Nevertheless, there have been calls for more research in this area and there are several recent examples of educational effectiveness research (EER) studies investigating school effects on non-cognitive outcomes and finding appreciable effects. This study feeds into this growing area of interest by investigating the effect of schools on pupils' attitudes to learning and school. The study makes use of recent methodological developments in EER by employing a regression discontinuity design in addition to multilevel value-added designs to estimate schools' influence on a range of attitudinal outcomes. Data were collected for over 7300 secondaryaged pupils in 24 schools in the West Midlands over the course of two years. Pupils completed a survey consisting of over 50 attitude statements and several open-response items spanning a range of aspects of learning and school.

The primary purpose of this paper is to present quantitative estimates of school effects on a wide range of attitudes, all of would could reasonably be considered amenable to school influence. Regression discontinuity estimates suggest that there are small negative school effects on attitudes, over and above a general decline in attitudes over the course of secondary education. Small school effects were found in value-added estimates despite the vast majority of the variance lying within schools. Differences between schools were not always consistent across outcome areas. These results suggest that school effects are not sufficiently large or consistent enough to draw strong general conclusions about overall school effectiveness. Nevertheless, results were indicative of differences between schools in some areas. Even schools with the most positive attitudes had numerous pupils reporting highly negative attitudes on items which were within schools' power to address and open response data revealed specific problems and difficulties being faced by certain pupils.

It is concluded that making use of a short attitude survey such as the instrument used in this research is good practice for schools. Where it is possible to foster a climate in which pupils can give confidential/anonymous feedback and air their concerns, schools will be in a position to consider attitudinal outcomes as part of their self-evaluation and practice.

# PTM Roundtable discussion

Title: Growing and leading from the "Middle": Explorations around the OECD

innovative learning environments project

Topic: Policy Translations and Mistranslations

Abstract ID: 3265

Parallel Session 5 Session:

Friday 8 January 2016 14.00-15.30 Session Date and Time:

Location: Rockall

Author/Speaker: David Istance

Company/Organisation: **OECD** 

Co-Authors: Judy Halbert

> Andy Hargreaves Linda Kaser Anthony Mackay

David Istance Presenting Author:

## Abstract

A global policy question - how well do education systems develop knowledge, skills and capacities? - and the longstanding educational question of how to create more holistic, equitable learning opportunities may seem quite distinct, as if interrogations from different constituencies. Yet, the responses to them often come together in arguing the need for innovation in the fundamentals of schools and systems. Collaborative definitions of professionalism exercised in innovative learning environments also address another policy perennial: how to enhance the attractiveness of teaching for high quality recruits and already-practising educators?

The OECD's Innovative Learning Environments (ILE) project has been responding to these questions for nearly a decade. This work has sought to help shape the terms of policy debate while offering analytical tools and frameworks for those in leadership positions in education, rather than proposing policy solutions, still less blue-print practices. By working with and through innovators in different parts of the world, it has sought to ground policy rhetoric about a network-based, collaborative system in actual practice and to explore ways to make it a wider reality.

After a series of publications, OECD will have just published the main report on the final Implementation and Change ILE strand: Schooling Redesigned: Towards Innovative Learning Systems (November 2015).

This latest OECD/ILE report draws on a set of strategies and initiatives that were submitted by around 25 different systems, networks and organisations; it discusses the conditions for growing and sustaining powerful innovative learning at scale.

The report especially emphasises the need for a dense, dynamic "meso" level across districts, networks, chains, and communities of practice, whether formed spontaneously or through official policy networking initiatives, bringing in diverse partners. The significance and different forms of the "middle" are proposed for a Roundtable ICSEI session. The session will also address the policy translation issue, drawing in international, national, provincial and community examples.

# **PC Symposium**

Title: Working together for deep learning and system change:

Cross institution pre-service and in-service collaborative inquiry

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 2924

Parallel Session 5 Session:

Friday 8 January 2016 14.00-15.30 Session Date and Time:

Location: Malin

Author/Speaker: Kathy Sanford

Company/Organisation: University of Victoria

Co-Authors: Paige Fisher

Leyton Schnellert

Presenting Author: Kathy Sanford

## Summary

This symposium will present three perspectives of a research/implementation partnership project between BC Universities, Ministry of Education and selected local School Districts aimed at enhancing 1) collaborative professional learning opportunities among preservice teachers, experienced teachers and teacher educators; 2) experiential exploration, implementation and documentation of BC's new curriculum initiatives and competency profiles by preservice and inservice teachers (with evidence-based feedback/recommendations to the ministry); and 3) teacher education methodology that aligns with 21st century learning/teaching practice. The networked, cross-institution learning community has developed inquiry hubs where the following shared research question is explored: What are the impacts on educator professional learning (i.e., inservice, preservice, teacher education) and on students' engagement when educators across sectors work collaboratively within and across learning contexts to explore possibilities for implementing new curriculum?

## **Theoretical Framework**

20th century models of education, drawing on 'expert' knowledge disseminated from teacher to student, are no longer appropriate or meaningful in today's world. The curriculum change in BC offers alternative perspectives on learning, teaching, and knowing. However, it is often challenging to support teachers to change their practice, particularly when the goal is preparing students to achieve well on tests. Research and practice indicate that when collaborative educator professional learning is used to support student engagement and achievement, all partners benefit, i.e., student learning deepens, achievement results increase, curricular and timetable barriers dissolve, and educators become engaged in reflective praxis that ultimately translate to richer, more meaningful learning experiences for students. There is need for locally generated action research to examine and support cross-institutional learning partnerships, identifying approaches that are enabling and the barriers to change. Involving educational partners in meaningful collaborative action has the potential to mobilize opportunities to create and sustain professional learning communities. Drawing on theories of complexity and catalytic affiliation (Hopper, Sanford, & Starr, in press; Sanford & McGregor, 2013) we recognize the significance of context in deep understanding of educational change. Drawing on network approaches to professional learning, this qualitative cross-institutional case study involves: 1) a cross-institution committee, with representatives from the Ministry of Education and each of the three inquiry sites, to share and support ongoing research and learning; 2) local teams of preservice and inservice teachers, university instructors who engage in ongoing dialogue and sharing, across disciplines, across schools, co-constructing inquiry-oriented, deep learning rooted in community and 'big ideas' identified in the draft curriculum; 3) focus on aligning assessment with curriculum/pedagogical shifts; and 4) sharing examples of innovation in relation to BC's new curriculum.

#### Methods

The data used for this study includes transcripts of steering committee meetings, local meetings, interviews with participants (preservice, inservice, teacher educators), and artifacts shared by participants. This data is analyzed within and across sites, with the intent of sharing in multi-modal formats for multiple audiences.

#### Conclusion

This cross-institutional collaborative research and learning partnership has recognized the values, experiences and research-informed learning in one location, identifying the value of partnerships and collaboration within and across educational institutions and has the potential to generate increased networked involvement across the province.

# **TE Paper Session**

Session: Parallel Session 5

Date and Time: Friday 8 January 2016 14.00-15.30

Location: Hebrides

Ken Muir Chair:

## PAPER 1 ABSTRACT

IJburg College Amsterdam: Teacher assessment, teacher quality and teacher development in a professional learning community, Pieternel De Bie, Freek Wevers and Lou Brouwers

Situated on one of 6 artificial islands built in the IJ Lake in Amsterdam East, IJburg College Amsterdam is a growing public secondary school, offering education to about 1450 students from various ethnic backgrounds. This paper describes how an innovative secondary school successfully ensures teacher effectiveness, teacher quality and professional learning. The main objective of IJburg College is that all students learn as much as possible, about themselves and the world around them, and that every student leaves school with the highest possible individual qualification. This ambitious mission requires high quality education. We put this into practice by working project-based (thematically), with a strong adult-world connection. This means that teachers from various subjects are expected to work together intensively to create coherence in the curriculum and to be available every day in order to make this cooperation possible (inflexible work hours). And as we do not work with school books, all of our teachers are designers, creating project-based, digital class materials.

These work standards subsequently attract ambitious, inspiring, pro-active, motivated and enthusiastic educators. How can we make sure that they remain effective and able to offer quality education as we continue to expand? In this, prioritizing professional development is crucial. IJburg College aims to be a 'school that learns' in order to "serve students who will come of age in a postindustrial and increasingly connected world" (Senge et al, 2012, p. 9). This is a school where "everyone, young and old, [will] continuously develop and grow in each other's company" (Senge et al, 2012, p. 4). Our teacher evaluation system is therefore designed to help teachers improve, instead of focusing solely on measurement of competence (Marzano, 2012). IJburg College staff policy was designed to allow teachers to be learning professionals. We recognize the expertise of our teachers, the importance of their well-being, security and development, and our teachers see themselves as lifelong learners, actively seeking professional development (Hord & Hirsch, 2009). In addition, we foster teacher stewardship, "holding a commitment to the entire community of the school, not just "my classroom" (Senge et al, 2012, p. 17).

According to Marilyn Cochran-Smith (2006b), "in order to stay in teaching, today's (and tomorrow's) teachers need: [...] opportunities to work with other educators in professional learning communities rather than in isolation [...]" (p. 20). This idea of a learning community is an essential part of our professional culture. Teachers at IJburg College are actively engaged in school processes; our professional culture is participatory and when managers are absent, self-governance is evident in all teams (Hord & Hirsch, 2009). Relatively few of our teachers leave. Instead, as a growing school, we have high numbers of new teachers every year. We have found that in a learning community culture, new teachers are more easily supported and integrated. However, integrating around 40 new teachers each year puts a strain on overall team development. In the final 'lessons learned' session we put forward best practices for other new, innovative schools.

## PAPER 2 (3117) ABSTRACT

Learning to learn - Teacher effectiveness and professional learning, Andrej Koren and Mateja Brejc

Changes in educational settings based on changes in society, economy, focus on achievements' measurement, development and use of ICT etc. Effect different understanding of learning and learning environment along with a new role of teachers and students. Given the framework learning to learn competence is one of key competencies of lifelong learning and/or learning in 21st century. In order to develop the competence everybody in educational process need to know and have it. Meaning also or especially teachers as lifelong learners that also need to have a shared focus and collaboration in each school.

This paper presents teacher training for learning to learn. In order to find out how training effects teachers' work and school as organisation following questions with regards to training effectiveness were researched:

- What is the level of teacher satisfaction with the training?
- How much knowledge have teachers gained during the training?
- What are the changes in teaching practice?
- How did training affect changes at organizational level?

A mixed methods approach has been applied using questionnaire for training participants (837 respondents, 14, 8% of population) and interviews with teachers and school leaders in three schools. The analysis of results imply a high level of satisfaction with the training, certain gain in knowledge and skills as well as different forms of using them in teaching practice. The lowest impact is seen at organizational level.

After short presentation of main conclusion of the research, different understanding of learning to learn competence amongst teachers will be discussed as well as their perceptions on what encourages and interferes it's implementation in schools. In the conclusions questions will be raised on strategies needed to improve learn to learn at school level and in teaching practice.

## PAPER 3 (2889) ABSTRACT

The effect of students' behaviour on their reading performance and the influence of teacher skills, Saskia Brokamp, Thoni Houtveen and Wim Van D Grift

## Aim of the study

In Dutch educational practice, behaviour problems are increasing. Research indicates that behaviour problems have a negative effect on students' academic skills like reading (McGee et al., 2002). In this study we investigate whether behaviour problems indeed have an influence on the reading performance and what teacher behaviour can influence both the reading performance and behaviour of the students.

## **Theoretical framework**

It has been observed, in both research and practice, that behaviour problems and reading problems often occur simultaneously. Behaviour problems seem to have a negative effect on the reading performance of students (McGee et al., 2002).

The common feeling is that reading problems could be prevented, because they are the result of problems in instruction quality (National Reading Panel, 2000). Research delivers firm knowledge bases about what could be done to improve instruction quality:

- · Focus on the core concepts;
- Use a multiple tiered instruction model;
- Keep track of the pupils' progress;
- · Foster reading motivation in pupils;
- In students with sufficient decoding and word reading skills, silent reading improves fluency more than reading aloud (Haager, Klinger & Vaughn, 2007).

It is not known, however, whether teachers can have an (indirect) effect on the reading performance of the students, by influencing their behaviour. The current study aims at answering this question.

## Methodology

In this study 1221 grade 3 students and 89 teachers were involved. Teachers were observed during a silent reading lesson to investigate their instruction quality. They also filled out a questionnaire about early identification of and intervention for pupils at risk.

The students' behaviour during reading lessons was measured with a teacher rating scale measuring acting out behaviour, attention problems and emotional stability. The students' reading performance at the beginning and end of grade 3 was measured with a standardized reading test. Non-verbal IQ was measured with the SONr-test (Snijders, Tellegen & Laros, 1988) and gender, age and socioeconomic status with some simple questions.

#### Results

Multi-level analysis shows that the differences in reading results at the end of grade 3 can be explained by premeasurement of the reading level, students' attention during reading, the time teachers spend on modelling literate behaviour and book introduction and by monitoring the type of books students read. Both acting out behaviour and emotional stability didn't contribute significantly.

When students' attention was used as the dependent variable, coaching the reading process by the teacher and the amount of time teachers spent on reviewing with the students at the end of the lesson had significant β-coefficients.

## **Conclusions**

The student's attention during reading contributes significantly to their reading performance. Teachers can have a direct influence on their students' reading performance by the time they spend on modelling literate behaviour and book introduction and by monitoring the type of books the students read. Moreover, teachers can have an indirect influence on their students' reading performance by influencing the students' attention by coaching the reading process and by the amount of time they spent on reviewing with the students at the end of the lesson.

## PAPER 4 (3096) ABSTRACT

School D - Still going strong 12 years after implementing the respect program, Elsa Westergård and Pal Roland

## Introduction

There are a myriad of examples of how challenging continuation of school development programs can be (Datnow & Stringfield, 2000; Ertesvåg, Roland, Vaaland, Størksen, & Veland, 2009; Fullan, 2007). Successful continuation is dependent on several interchangeable factors; the school as an organization, the leaders, the teachers and external factors such as parents and the community, and finally the implementation quality of the program (Domitrovich et al., 2008; Domitrovich, Moore, & Greenberg, 2012; Greenberg, Domitrovich, Graczyk, & Zins, 2005).

The present paper builds on previous research on conditions for successful continuation of the Respect program (Ertesvåg et al., 2009). Four schools were part of this research and only one school, school D, successfully continued the work 2 ½ years after the program period. However, it was too early to conclude that this success would continue in the future. Thus, we conducted another research based on the work of school D, 12 years after. (Kelly & Perkins, 2012a)

## Research questions

To what extent has the school managed to continue working with the principles and content of the Respect program? Which conditions are conducive to the schools continuation of Respect 12 years after implementation?

## Theory

As the quality of the continuation relates to the quality of the implementation, the present study draws on the research and theoretical knowledge of the core components of the implementation and continuation process as i.e. Blasé et al. (2012), Greenberg et al. (2005), Fixsen et al (2005), Meyers et al. (2012) sees it.

#### Method

Two focus group interviews, with a semi structured approach were conducted after the formal program period (1, 5 year), and two and a half years later (Ertesvåg et al., 2009). The third interview, which this paper is based on, was conducted after 12 years from the start of the program. The focus group existed of six participants, three with experience from implementing the Respect program, and three with experience only from the last 3 – 5 years of continuation. One of the informants was from the leadership, and had followed the whole process from the start as an assistant headmaster. With this combination, we had a possibility to capture different perspectives from experienced informants, and relative new teachers.

The topics in the interview guide were related to the importance of the initiating process, competence building activities after the program period, leadership, turnover, school culture with focus on collective orientation, parent - school collaboration, and implementation time.

## Outcome

The present research revealed that school D continued the good work from the very start. The teachers, the school culture seemed to be open for change. Teachers self- efficacy seemed to be high and they had developed a collective and collaborative culture in school. The school leaders saw the benefits of competence building activities, developed in school among teachers, integrating new core components of the Respect program. Thus, this enhanced an important ownership for the Respect values among teachers. The parents were pointed out as one important stakeholder for successful continuation of the Respect program.

# **LDP Symposium**

Title: From 'best practice to next practice': School leaders enact policies for improvement

Topic: Leadership Development and Practice to Build Sustained Improvement

Abstract ID: 3187

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Orkney

Michael Schratz Author/Speaker:

Company/Organisation: University of Innsbruck

Co-Authors: Niels Anderegg

> Markus Ammann Livia Rößler

Malte Gregorzewski Michael Schratz

Michael Schratz Presenting Author:

## Overview of symposium

Policies for school reforms in German-speaking countries build on offering schools more autonomy at various levels and of differing degrees. This decentralisation process puts school principals into a stronger leadership position, as they need to become key actors in school improvement. Although all Austrian provinces have introduced school management training programmes to qualify future or acting principals, school leaders have difficulty in putting their vision into practice within the framework of a traditionally hierarchical policy culture (Schratz 2012). Because of the tension between taking up stronger leadership and having little freedom in decision-making, they often feel themselves put in a sandwich position between central policies and local practice. Ministries and educational agencies are usually interested in how their policies are implemented in everyday practice, and therefore evaluate the implementation of such policies. However, "less attention has been paid to understanding and documenting the ways in which schools actually deal with multiple, and sometimes opaque and contradictory policy demands, and the diverse ways that they creatively work to fabricate and forge practices out of policy texts and policy ideas in the light of their situated realities - a process of re-contextualisation that produces some degree of heterogeneity in practice." (Ball et al. 2010, 142) This symposium brings together researchers from Austria, Germany and Switzerland who have taken a closer look at the diverse ways of how principals struggle with the diverse and often contradicting policy demands and find suitable ways for enacting policies for improvement. They have experienced that leadership work in schools is not always rational and often chaotic, disrupted and "continually responding to the needs of the moment" (Mintzberg 1975, 51). This symposium explores how principals succeed in achieving innovation through a new understanding of leadership by not only trying to improve from "good" to "best practice" (within a given mind sets) but aiming at the future as it emerges ("next practice" by transforming mind sets). Taking the roles of "system thinkers in action" (Fullan 2005) these school leaders interact with larger parts of the system both horizontally and vertically in order to bring about transformation.

## PAPER 1 ABSTRACT

Enacting policies in every day school life - Anecdotes of recalled experiences, Niels Anderegg and Markus Ammann

Principals as leaders have high influence in enacting policies in schools (e.g. Ball et.al. 2012). They are confronted with different challenges: Principals are faced with expected and unexpected legal, institutional and cultural interventions coming from macro- and microsystems. In facing these challenges they need to act in various roles, e.g. as catalysts, initiators, implementers, enablers, promotors, preventers and so on. The research question in this paper focuses on the experiences of principals gained in enacting policies in daily school life. As a consequence, those experiences have high potential for understanding enacting processes from a leadership perspective.

As a framework for discussing the phenomena of enacting policies we use Giddens' structuration theory (1984/1999). In daily life structures – and therefore among others different policies - will be produced and reproduced by principals, teachers and pupils as different stakeholders through their actions over time. Giddens (1999, 25 f.) calls this the "duality of structure", where structural properties of social systems - like a school - are medium and outcome of the actions of the different agents in a system. In this context we are talking about individual behaviour (practice) on the micro level, which could also be seen as micro-political activities. Those micro-political activities are the result of the enacting-processes, where the individual school principals produce and reproduce policies in following their own interests and the interest of the school.

This paper presents the findings from a joint project on recalled experiences of principals from Austria and Germany. Focusing on the mesosystem of the school as organization we present selected anecdotes gained from semi-structured conversations with 24 principals in Austria and 5 with principals of The German School Award winning schools. Anecdotes in our sense are dense narratives of remarkable stories told to the author in recalled experience in mathesis memorata including concrete details of incidents with specific impact that happened to a person (Schratz et al. 2015).

#### **PAPER 2 ABSTRACT**

Developmental portraits as decision-making tools in leadership development, Livia Rößler

The Austrian school system has historically been a two-tier model, which verifiably generated educational injustice and lead to a high level of educational inheritance. The lack of educational mobility and equity due to structural barriers, a high degree of parent choice and selective deep structures in Austria's public school system has been well established (OECD 2014; Böheim-Galehr & Engleitner 2014; Bruneforth et al. 2012). Both, national and regional governments have started counteracting this educational inheritance by experimenting with systemic approaches including system leadership. As a result, a new understanding of school leadership is emerging, which will form the focus of this paper.

To pilot a more comprehensive lower secondary school system, a model region was launched by the provincial government of Tyrol in autumn 2014, which focuses on the development of the mid-level school leadership (provincial district level) with both strong awareness of the contextualisation of the different schools, their history, identity and culture and the local context in which the individual school is embedded and the transformational nature of the process.

In order to make effective and sustainable leadership decisions for positive school and regional development, fundamental principles and a solid knowledge base have to be established. Such principles should include awareness of contextual variables (Ball et al. 2012) that shape the teaching environment. Leaders should be aware of the school's traditions and identity: parents and students attracted to the school, the resources (staffing, buildings, budget, technology and infrastructure) and the professional culture (values, teacher commitments etc.).

This paper presents how "developmental portraits" that illustrate the school context can be used as a decision-making tool for school leaders. Developmental portraits offer on the one hand a close-grained view of a school micro-level as well as the leadership structures and dynamics at play in the given school culture. On the other hand it highlights opportunities for networking and knowledge sharing as well as collaboration on a regional level.

The development portraits weave together two strands: the internal view, portrayed by the school actors themselves under the leadership of the principal, and the external view, based on data from fieldwork in the schools conducted by researchers and/or consultants. The fieldwork includes interviews with students, teachers, parents and school principals; group discussions; visits to classrooms and photo evaluations done by students. Vignette methodology (Schratz et al. 2014) is used to capture lived experiences of the interviewees, helping to form a school portrait with dynamic elements that show how individuals experience transition. The portrait as a comprehensive strategy represents a status quo analysis of each school that offers insights for new suitable approaches for effective and sustainable school improvement (Benk 2010). Furthermore the resulting data form the basis for individual workshops with school principals and their teams conducted by the researchers and/or consultants. The goal of the workshop is to make use of the developmental portraits as a decisionmaking tool for leadership.

## **PAPER 3 ABSTRACT**

How school leaders practice leadership for learning in excellent schools distinguished with the German School Award, Malte Gregorzewski and Michael Schratz

This paper offers the opportunity to gain insights into the German School Award, a system-wide school improvement program launched by the Robert Bosch Foundation and the Heidehof Foundation in 2006 to highlight inspiring models of schooling. More than 1.200 schools of all types from all over Germany have so far participated, with more than 50 award winners fuelling a nation-wide movement for "more successful schools!"

The German School Award has become a strong and respected voice in the education landscape of Germany. Its main goal is to support school improvement and a culture of learning based on six quality criteria: academic achievement, dealing with plurality, quality of teaching, responsibility, school culture, and school as a learning institution (Schratz et al. 2014). They have been recognized as high-impact, professional standards of learning and teaching – across all German states and various school types. To ensure sustainability and knowledge transfer into the wider system, in addition to the award an Academy was founded and sets out to become the most significant independent agency for school improvement in

Effective and lasting educational reform remains a challenge that is often answered best locally, at each individual school and by the leaders that spearhead change. Success stories of student learning and high quality teaching are sometimes found in unlikely places, and it takes some effort to draw attention to the innovative answers which are to be found where teaching and learning takes place. Findings from the work of successful principals will be presented which can help to understand what turns a "good" school into an "excellent" one.

# **RCEL Paper Session**

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Science Centre Tower Base North 1

Chair: Stephen McKinney

## PAPER 1 ABSTRACT

How U.S. urban high school students acquire noncognitive factors associated with academic success, Peter Demerath and Sara Kemper

#### **Research Area**

Noncognitive factors or "character skills" have increasingly been acknowledged as an important approach to reducing race/ ethnicity-based gaps in academic achievement - specifically through the development of academic mindsets. The purpose of this research was to develop informative cases and ultimately a grounded model of how disadvantaged students acquire noncognitive academic skills during the course of their high school careers.

## **Theoretical Underpinnings**

The study is informed by perspectives from anthropology, psychology, social psychology, and youth development - especially studies of "developmental assets." These noncognitive skills are closely aligned with specific forms of psychological capital that the lead author identified in his recent ethnographic research in a suburban U.S. setting.

While much of the most recent research on noncognitive factors has been either experimental or interventionist in nature, this project sought to identify them in situ using ethnographic methods. This is consistent with Fred Erickson's call for "scaling down" educational research in order to capture innovation as it unfolds on the ground over time.

## **Research Methods**

A total of 24 interviews were conducted with a diverse group of seniors from the classes of 2014 and 2015 at a large public urban high school. Students were asked in the interviews to identify staff members in the school who assisted them in acquiring specific skills. These staff members were observed in the course of their professional activities in the school and then interviewed.

## **Findings**

The analysis of these processes has produced a model of how students acquire these noncognitive factors. The cornerstone of the model is a key strength of this school's culture: strong shared beliefs in student capabilities; also known as a "growth" mindset. Focal teachers reported that their efforts to foster student success generally began with trying to establish effective relationships. Students reported that these efforts made an impact in their sense of belonging in the school and in their classrooms.

In addition to establishing this sense of secure belonging, students also sought to discover their own abilities and interests or "sparks." The sense of belonging in school and experiencing "sparks" of interest and ability in various activities, seem to create conditions for students to begin to acquire the "gateway" or pivotal noncognitive factor: future orientation. Importantly, the most successful students in the school seemed to be able to imagine particular kinds of value for themselves in their desired futures - especially market value. This vision of a successful future self, then, seemed to provide critical motivation for students to acquire other important character skills, including the belief that hard work and effort pay off, self-control, and confidence.

#### **Conclusions**

The paper contributes to scholarly understandings of how individual students develop these critical character skills within the context of school. In addition, the paper's model identifies specific beliefs, practices, policies, and intervention points that similar schools and districts may consider adopting.

## **PAPER 2 ABSTRACT**

Quality of extracurricular learning in all-day schools in Germany – Impacts on achievements of primary students from diverse backgrounds, Heinz Guenter Holtappels, Karen Lossen, Wolfram Rollet

Over one century the German school system was essentially a half-day school system. But in the last 12 years a great implementation program started and the quota of all-day-schools in Germany has tripled. This program had especially the following aims: 1) School improvement with regard to enrich the learning culture, 2) reducing diversity and unequal educational chances of students. To fulfill these goals, schools have to create additional learning arrangements like complementary subject-specific courses, exercise courses, support for learning, remedial teaching, projects and organized leisure time.

The paper draw focus on the quality of extracurricular learning arrangements and on impacts on the development of student' achievement in primary schools. Beyond this the analyses will check, whether the gap of different educational chances of students from diverse social background can be reduced. The paper is linked to conference strands: teacher effectiveness and conditions for effective learning.

Our analyses are embedded in the nationwide "Study on development of all-day schools" (StEG; Fischer et al., 2011). The center of our actual investigation is the development of primary school students' competencies over two school years in two subject-specific domains: reading and natural sciences. The theoretical framework is related to CIPO school quality model with regard to the approach of Scheerens (1990), adapted to the all-day school context through a special model (Holtappels 2009). The following research questions are leading our analyses:

- 1. Which extracurricular learning arrangements are provided by schools and which level of quality assessed by students can be reported?
- 2. Can we find impacts of the student participation in all-day school program and especially in extracurricular subjectspecific learning activities on achievement development in science? Does the quality of extracurricular elements matter?
- 3. How far do students from disadvantaged social backgrounds benefit from participating in extracurricular subjectspecific activities?

The research is embedded in the German 'Study on Development of All-day schools' (StEG). The study design includes data based on standardized questionnaires of teachers (n=667) and additional educational staff (n=672), parents (n=1.718) and students (n = 2.065) over three measure points and panel data concerning student learning and students' test competencies in reading literacy and science from year 3 to 4. Valid and reliable scales for measuring learning environment (teaching quality and extracurricular learning arrangements) were composed. Our data analyses comprise mean comparison tests, correlations, path analysis and multi-level analysis.

The empirical results show that not all schools provide domain-specific learning opportunities and not all students attend in that learning arrangements. Concerning participating in extracurricular activities we can find effects on students' output, but small effects on development of student achievement. Relationships between the quality of additional learning arrangements and students' learning is lower than expected; beyond this the influence of teaching quality in lessons will be checked. Several differential effects with regard to diverse social background (SES and migration status) will be reported. Conclusion: All-day schools should work more goal-oriented and focused on educational success for students, especially for disadvantaged pupils. Quality assurance und school development strategies are required.

## PAPER 3 (3344) ABSTRACT

Mapping backwards from developmental national leadership in the Philippines to school effectiveness, Michele Schweisfurth and Oscar Valiente

This paper reports a national case study of The Philippines which examines the relationship between education and political development by exploring the educational experiences, institutions and networks of reform leaders. The starting point is the assumption that the effectiveness of schools will determine national development trajectories in a range of ways, including nurturing the skills, knowledge and attitudes required for national leadership, including in challenging contexts.

The study was funded by the aid branch of the Australian Department of Foreign Affairs and Trade, through the Developmental Leadership Program. The study explores the importance of particular institutions, networks and educational experiences to individuals, and how, through the agency of these individuals and networks, education may impact on national movements and development. The analysis is set within two political reforms which promote equity and good governance, and one social movement working in poorer communities. The empirical work includes interviews with key individuals involved in those reforms, and so their perspectives on how education shaped their personal development and helped them to develop influential networks are central to the research.

The Philippines is a complex case, sometimes characterised as an 'oligarchic democracy'. The highly stratified education system, which intersects with religion, socio-economic status and political affiliation, has a role in reproducing economic, political and dynastic elites while also having the potential to develop people who might disrupt these cycles. Among the key themes being explored are the impact of pedagogy, the curriculum, institutional selectivity, school ethos, values and the hidden curriculum, mobility, and extracurricular activities. The underlying question is how individuals' educational development and the various forms of capital accrued during study are translated - or not - into national development. A key finding is the need to see education, its effectiveness and its improvement 'in the round', given the strong emphasis that these leaders placed on extra-curricular activities, student activism, and the building of bonding and bridging capital (Putnam 2000), over and above formal teaching and learning processes.

# **PC Symposium**

Title: Over the rainbow: Sustainable improvements in the London Borough of Hackney since 2012

Topic: Partnerships and Collaborations: Schools, Agencies, Government, Research

Abstract ID: 3219

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Science Centre Tower Base North 2

Author/Speaker: Alan Boyle

Company/Organisation: Leannta Education Associates

Co-Authors: Angela Scattergood

> Siân Davies Jane Keeley

Presenting Author: Alan Boyle

## Overview of symposium

Stephen Byers, England's schools minister, declared that Hackney was the worst local authority in England in 2002. It was also the most deprived, on all indicators. By 2012 Hackney was over the rainbow. Schools were flying high in the performance tables and parents were fighting over admissions. Like Dorothy in The Wizard of Oz, Hackney's children, young people and schools had achieved their dreams. Hackney's journey along its educational equivalent to the Yellow-Brick Road has been well documented. A revolution in a decade transformed education in the borough. The Learning Trust (TLT), a private non-profit company with a ten-year contract to improve education in Hackney, was responsible for this astonishing system-wide uplift. TLT attracted global awareness for creating an exciting and inspiring place to work and learn (Boyle & Humphreys 2012; Fullan 2013; Fullan & Boyle 2014; Hargeaves, Boyle & Harris 2014).

However the euphoria was tempered by uncertainty as the contract ended; TLT was terminated and responsibility for schools returned to Hackney Council. What lay ahead for education in Hackney beyond the Yellow-Brick Road? Would Hackney Council honour its legacy, support schools and maintain their high-performance? Was it conceivable that the system could sustain further improvements and surpass itself?

This symposium examines education in Hackney from 2012 - 2015. Three papers will cover early years, primary and secondary education and answer the following three questions:

- 1. Have the improvements in Hackney's education system from 2002 2012 been sustained?
- 2. What contributions, if any, did Hackney Learning Trust make to these improvements?
- 3. 3. What opportunities exist for further growth from 2015 onwards?

Participants will be encouraged to seek clarification, comment and discuss whether the ideas and strategies used in Hackney are transferable to other systems.

## PAPER 1 ABSTRACT

Sustained improvement in Hackney early years, 2012-2015, Angela Scattergood

In this paper we present evidence of sustained improvement across early years' education in Hackney through the continued development of Children's Centres as well as provision in schools. Clear improvements are visible in two main aspects: first the educational achievement of children under 5 and secondly the integrated early help for families in terms of health, family support and access to training and employment. Baseline measures of young children's development put Hackney 5 percentage points above the national average in 2015 and the gap between children from low-income homes and the rest was reduced. That's impressive when you consider that much of that test is language based and high proportions of children in Hackney are at the early stages of learning any language, let alone English. In 2008, about 38% of Hackney's early years settings were rated by Ofsted as Good, or better; in 2015 it is 82%.

The government recently issued guidance to local authorities about a joint health and educational review of all children aged 27months. Hackney has been doing that since 2009 as a flagship authority. The strength of the integrated development assessment at age 2 is that fewer children arrive in Reception class with unidentified and often complex needs such as autism. Earlier identification ensures appropriate support so that children's transition to school is much smoother and they make immediate progress. It doesn't all fall apart after two terms when children used to be excluded because their unruly behaviour came out of the blue. Hackney is determined to stop this scenario which is terrible for the children and terrible for the teachers involve. The uptake of the 27-month integrated developmental review has risen from 57% to 92%.

Hackney continues to invest in early years as a long-term strategy to support students' achievements. This is a major factor in the sustained high performance in National tests at ages 11 and 16. For example, Hackney Council provides additional funding to subsidise childcare on condition that recipients engage with Hackney Learning Trust (HLT) professional learning networks. These networks bring together childcare and early year's providers across the sector with health visitors, speech and language therapists, family support and other external agencies. These partnerships provide strength to the quality of their work.

Looking ahead there is potential for further improvement to make Hackney the highest- performing education authority in the country by continuing to develop the relationship between education, early years and public health, where Hackney is already among the front-runners. HLT's relationship with schools and early years' settings, as the mediating layer, will be even more crucial in tackling one of England's biggest challenges which is developing a more holistic approach to ensuring children's and family well-being by joining up support for their health and educational needs, especially on a preventative basis.

## PAPER 2 ABSTRACT

Sustained improvement in Hackney primary education, 2012-2015, Siân Davies

In this paper we will explain how Hackney Learning Trust (HLT) sustained improvements in primary education both in terms of national test scores and in terms of quality of teaching - the number of good and outstanding schools continued to increase. With it some of HLT's benchmarks were raised causing early intervention and support in schools that wouldn't have been supported before.

Evidence from the School Improvement Partner (SIP) programme indicates how standards have continued to improve. Where there has been a slip then HLT has been able to intervene quickly and support the school. The relationships between HLT and the schools are very good. These improvements are more impressive within the context of the role of local authorities being reduced and re-aligned under the coalition government's austerity measures. Hackney has worked out a way of enabling the Council to feel an ownership of its schools and provide a democratic accountability for what's going on. At the same time HLT provides a mediating layer between the government and the schools.

But beneath the surface there were some inevitable differences after 2012. We provide a brief outline of how HLT, as a delegated department, operates within Hackney Council's corporate organisation in order to understand the key processes that contribute to this high performance. The ability to act responsibly, quickly, take risks, make professional decisions without political considerations which allowed The Learning Trust to operate so successfully was transferred to HLT. Staff are more responsible because they can't blame anybody else. Rather than working across multiple service teams, as in a typical Council structure, HLT operates as a single service team. The Director of Education can deploy the IT, the human resources, the legal and the finance sections of HLT to serve its educational aims, rather than negotiate with all those separate Council departments on a year-to-year basis.

Rather than a 'school-led' system where schools are leading the accountability, Hackney has developed a concept of a 'school-fed' system which is more powerful. Hackney still holds the accountability for schools at HLT. We will show examples of brokered partnerships from formal Federations of schools at one end of a spectrum to informal, shortterm support at the other and a variety of models in between. HLT works with schools to try to find a solution. Because HLT holds the intelligence across the system they are in a better position to intervene if necessary, recommend, broker or commission support. It's strong intelligence because of detailed monitoring across the system. While many local authorities are reducing school support services, we show how HLT is increasing its traded services through a highly effective commercial strategy with the ability to draw on financial reserves in order to invest in new services.

## PAPER 3 ABSTRACT

Sustained improvement in Hackney secondary education, 2012-2015, Jane Keeley

Improvements in schools have continued in line with expectations since the end of The Learning Trust (TLT) contract and this justifies the decision to create Hackney Learning Trust (HLT) as an autonomous division within the Council. Hackney had five secondary schools in the top 1% of value-added scores in 2014. This is clear evidence that improvements are sustained.

While comparing the performance data we should also consider both intrinsic and extrinsic differences between the TLT and HLT eras. The second phase of TLT's work was a push to make all teaching good or better. HLT began its work with a 'Good to Great' strategy, a clear aspiration to avoid complacency. We know from Jim Collins' work that 'Good' is often the enemy to 'Great' as people and systems settle in a comfort zone without the same urgency to improve that they had when things were awful. At the same time there were significant funding cuts as the schools were handed back to the Council.

The most important thing is that HLT is able to continue with a single focus on education. Senior leaders are not drawn off onto wider corporate issues. The delegated authority model is designed to protect them from that. We will give examples that reveal the underlying principle across all secondary schools is the same - a collective responsibility for all students in Hackney.

The concept of collaboration and working in partnership with schools already existed in 2012. Over the last couple of years that sense of partnership is growing in secondary schools. It takes forms that are always exploring new ideas and pushing against boundaries that exist elsewhere. For example, HLT brokered support from one of the secondary Academies to develop leadership capacity in a community primary school. HLT develops positive relationships through effective partnerships with community schools, Academies and more recently Free Schools. These are especially crucial for those children whose learning needs are not met in mainstream schools.

As schools become more successful, the next level of improvement is to avoid staying in the comfort zone and coasting. It will be important for HLT to continue challenging schools, even those with high aspirations. Looking ahead, the inter-agency working for young people and families would benefit from more capacity. It needs to be better understood, faster, more far-reaching with stronger collaboration and partnership. Sometimes the vulnerable young people who need extra help from social care, mental health or youth-offending services would benefit from earlier interventions. There are opportunities to improve services for young people who can't cope in mainstream schools. It's in a state of flux at the moment but it should lead to improvement. There are significant benefits for young people across Hackney in having specialist staff in a purposebuilt provision.

# **SE Paper Session**

Session: Parallel Session 5

Friday 8 January 2016 14.00-15.30 Session Date and Time:

Location: Science Centre Clyde 1

Chair: Alan Armstrong

## PAPER 1 ABSTRACT

Practitioners' data use and the influence of school culture, Denise Demski

Grounding actions and decisions in evidence is considered to be a prerequisite for an efficient and effective performance on the part of practitioners and an increase in students' achievement (Honig & Coburn, 2008). Data can be obtained either internally or externally and can take into account different levels of the school system. Nevertheless, research on practitioners' data use has mainly focused on single instruments, such as national testing, exit exams, or school inspections. So far, little is known about what sources of information are particularly used by practitioners, which is especially true for the German context. Furthermore, there is a lack of evidence on factors that enhance or impede the use of data in schools.

The study at hand aimed at examining how much importance practitioners attach to particular types of evidence. Moreover, it focused on the influence of school culture on data-driven school improvement. For measuring school culture, the Competing Values Framework (Quinn & Rohrbaugh, 1983) was used. According to this framework, organizations are confronted with contradictory demands they have to face. In this theoretical approach, four different cultural types are distinguished when characterizing organizations: the family-like clan culture, the innovative adhocracy culture, the competitive market culture and the hierarchy culture.

The study made use of a quantitative as well as a qualitative approach. Standardized questionnaires were applied to measure the usage of 13 different information sources for school improvement by teachers (N=1,230) and principals (N=297) in 153 German schools. Moreover, semi-structured face-to-face interviews (N=35) were conducted in seven schools to further understand the motivations and obstacles for data use. The selected schools either showed an intense (N=4) or a minor use of evidence (N=3) in the questionnaire study. These interviews were transcribed and analyzed by means of qualitative content analysis (Mayring, 2007).

Results from the standardized questionnaires showed that teachers and principals alike used internal sources of information such as student feedback and sitting in on each other's classes most frequently, whereas results from international or nation-wide student assessment played only a minor role for school improvement. The latter was also true for findings from school inspections, so it can be concluded that key policy instruments of a standards-based reform are not used by practitioners to the whished-for extent, so as to their effectiveness might be questioned. The interviews revealed that most practitioners had difficulties in recontextualizing external data to utilize it for their own practice; they also questioned the usefulness of external data.

On the school level, there were significant positive correlations between the "clan" and the use of external (r = .20, p<.01) and internal data (r = .41, p<.01) as well as between the "adhocracy" and the use of internal information sources (r = .30). In contrast, there was a significant negative correlation between the "market" and the use of such internally obtained data (r = -.39, p<.01). The "hierarchy" showed negative correlations both with the use of pedagogical journals (r = -.19, p<.01) as well as with internal data (r = -.37, p<.01).

#### PAPER 2 (3072) ABSTRACT

Accountability or improvement: Relationships between the use of achievement and non-cognitive outcomes in China, Jie

Student achievement data are often used by different stakeholders and for different purposes. This study explored the relationships between the use of student achievement data and students' cognitive and non-cognitive outcomes using the data of China (Shanghai) PISA 2012, which measured 15-year-old students and secondary school administrators.

Based on literatures and the related items in PISA 2012 school questionnaire, the study categorized uses of student achievement data into two factors that were using for external accountability and using for improvement. The confirmatory factor analysis (CFA) with the school sample was conducted to confirm the two-factor model (N=155). Then, the multilevel analysis with 155 schools and 3442 students was conducted to analyze the relationships of the use of achievement data with students' cognitive outcomes (math, reading and science) and non-cognitive outcomes (sense of belonging to school, attitude to school). The results showed that the use of achievement data could explain 23% variance in math among schools even when school social economic status and school type were controlled. Using student achievement data for external accountability had significantly positive contributions to students' performances in math (y=20.7305, p<0.05) and science (y=17.7583, p<0.05). No significant relations were found between using achievement data for improvement and students' performances in all the 3 subjects. It also indicated that using achievement data for external accountability made a negative contribution to students' attitudes to school (γ=-0.0644), and using achievement data for improvement negatively related with students' sense of belonging to school ( $\gamma$ =-0.0648).

These results suggested that different uses of student achievement data could have different effects on students' development. External accountability on the basis of student achievements could have unexpected effects on students' non-cognitive outcomes, although it might be a way to improve students' cognitive performances. It also argued that student achievement data could not be the only basis for school improvement.

#### PAPER 3 ABSTRACT

What impact does the first year at school have on later success? Peter Tymms

The aim of this paper is to explore the long term impact of education in the first year at school on children's academic progress up to the age of 16.

The data came from a self-evaluation system called PIPS, which schools paid to use (Tymms and Coe 2003). The information was intended for use by teachers during those children's first year of school but matching to later data provides valuable information about long term outcomes. The baseline data were collected in 2000/01 on over 36,000 children in about 3,000 classes in 2,000 schools in England. They were re-assessed at the end of the first school year, aged 5. The majority started school in September but some started in January or April. These data were matched to statutory assessments at the age of 7 and 11, and to the final leaving certificate at the end of compulsory education, the General Certificate of Secondary Education (GCSE) at age 16.

Conceptually, the paper takes a psychological and sociological perspective (Merrell and Tymms 2011) when looking at the student level data and an educational effectiveness perspective when looking at the class and school level data (Tymms et al 2014).

At the pupil level, we found direct correlations between the baseline cognitive assessments administered at the start of school and the end of the first school year of around 0.7. Correlations between the baseline cognitive measures and attainment at age 7 of were about 0.6, to age 11 about 0.6, and to GCSE around 0.5. The predictions were enhanced a little by including additional measures of sex, deprivation, ethnicity, special needs, and age.

The data were analysed at the pupil, class and school levels using multilevel models. Over the first year at school, the class to which the pupil belonged was associated with around 40% of the variance of academic progress; this is a large figure. At age 7, we find 15-16% of the variance associated with school membership, at age 11 the proportion is 18-20% and at GCSE about 19-20%. We then examined the relationship between the progress made during the first year at school and the effect of this upon attainment at later ages. We found that children who were in a more effective, as defined in terms of progress, first year of school, made more progress than expected by age 7. This effect of this early gain was still observable at age 11 and age 16. The paper explores this further by asking what difference it makes to be in an effective school setting during each phase of education. We also try to identify key characteristics of the effective groups to which children belong.

The paper concludes that individual characteristics measured at the age of 4 are substantive predictors of academic success but that they are not deterministic. It also concludes that an effective first year at school has a long term impact which can be built on by further positive schooling.

## TE Symposium

Title: Vocational relevance of common core subjects in vocational education programmes in upper

secondary Sschool (FYR). A national programme whose goal is to increase learning outcomes

and completion rates in upper secondary education.

Topic: Teacher Effectiveness, Teacher Quality and Professional Learning

Abstract ID: 3020

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Science Centre Clyde 2

Author/Speaker: Lone Lønne Christiansen

Co-Authors: Anne Sigrid Haugset

Elisabet Simahaug Halvorsen

Mette Sunde Kleive

Terese Kristin Aarsund Myklebust

Siw Helene Rydfjord

Lone Lønne Christiansen Presenting Author:

### Overview of symposium

Unlike the specific vocational subjects, common core subjects are theoretical subjects, which are studied by all pupils in upper secondary school, such as Norwegian, English, Mathematics and science. It is a statutory requirement that common core subjects must be adapted to the various education programmes. The national education authorities have initiated this national programme because teaching in common core subjects has become increasingly academic during the last twenty years. The national programme FYR is meant to help ensure vocational relevance in common core subjects in all schools offering vocational education programmes. This will contribute towards improving the quality of the teaching and the pupils' learning outcomes, and in that way increase completion rates in upper secondary education.

The theme is related to Strand 1, teacher effectiveness, teacher quality and professional learning and is an example of how Norwegian national school authorities work in order to develop learning schools with a focus on culture and organization development and competence development for teachers.

Questions that will be addressed in the symposium are:

- What does research have to say regarding vocational relevance?
- How can national authorities contribute towards change in classroom practice?
- How can one go about developing a school's culture and teachers' practice with a view to increasing the vocational relevance of the teaching?
- What consequences will this have for the administration of the school and its region?
- How can teacher training help change teaching practice?
- How do teachers and pupils work with a view to changing teaching practice?

In this symposium we shall present research on vocational relevance by Anne Sigrid Haugset, a researcher from Trøndelag Research and Development Institute, the national programme FYR, by Lone Lønne Christiansen, senior adviser at the Norwegian Directorate of Education, in addition to practical example presented by the head teacher, a pupil and a teacher from Borgund upper secondary school.

#### PAPER 1 ABSTRACT

Presentation of the Norwegian context and the goals of FYR, Lone Lønne Christiansen

The Norwegian upper secondary education system is composed of schools offering general studies programmes and those offering vocational education programmes. As a rule, the vocational education programmes comprise two years at school and a two-year apprenticeship in a workplace, after which pupils have their trade certification or journeyman's certificate. In Norwegian upper secondary education, the average dropout rate is 30%, but in the vocational education programmes it is 40%.

The Norwegian government has prioritized vocational relevance as a means of increasing completion rates and improving the quality of the teaching in vocational programmes. FYR is one of the measures undertaken to achieve this goal. The programme FYR is also a response to research-based knowledge about conditions for learning (Dumont, H. et al 2010).

FYR comprises all the upper secondary schools with vocational education programmes in Norway and is limited to a period of three years. We know that development process of this type are difficult and require engagement and leadership on all levels over a period of time. FYR is a three-year programme contributing towards a lasting quality development in an area where all school owners and schools have a statutory obligation.

Most upper secondary schools in Norway offer both general studies and vocational education programmes. They are called combined schools, where teachers of common core subjects (Norwegian, English, Mathematics, Science and others) teach both general and vocational education programmes. In many of these schools, there are two quite different cultures among the teachers. Teachers of general subjects and teachers of vocational subjects will often have different approaches and attitudes towards the subjects, the pupils and the concept of learning. Traditionally, the curricula in the vocational education programmes have focused on the profession. However, after the major education reform of 1994, it has been an explicit condition that pupils taking a vocational education programme should also be qualified for higher education in college or university. One side effect of this has been that common core subjects have become too academic in many of the vocational programmes. Many - both pupils and teachers - have complained that the vocational programmes have become too theoretical. The government's aim to improve completion rates in upper secondary education has led to an increased focus on making the common core subjects relevant and more work-related.

In the Norwegian school system, the head teacher has not traditionally had a role as pedagogical leader. The teachers' classroom practice has been largely screened from view and influence from outside. Thus most teachers do not collaborate with colleagues in planning lessons, different cultures and practices have been able to live independently of each other and competence development for individual teachers does not usually result in changes in the school's collective practice. "An important task for the administration, in co-operation with union representatives, is to provide time and space for development work... In order to avoid new knowledge being limited to individual teachers, the school must establish structures and plans to disseminate, nurture and use this new knowledge." (Roald et al 2012)

#### **PAPER 2 ABSTRACT**

What does research have to say regarding vocational relevance in common core subjects? Anne Sigrid Haugset

One of the main approaches in FYR is a focus on organization and administration. Changing cultures or encouraging two cultures to work closely together towards common goals is a difficult task, which requires more than training the individual teachers. It demands systematic work over a period of time and that changes are stipulated at school, regional and national levels. For this reason, FYR has a national administration, local project leaders at county level, and FYR-coordinators as local experts in the four common core subjects Norwegian, English, Mathematics and Science. The development work is conducted both at schools, and in the form of training courses and opportunities to share experiences nationally and in local networks.

The aim is to combine competence and knowledge in networks across schools. Another aim is that individual schools should move towards a common culture via collaboration and collective reflection around the day-to-day teaching practice (Nonaka & Takeuchi 1995 in Roald, K. et al 2012). According to Wells, organizational learning takes place "...as a learning cycle, a continuous process in which cultural resources are recreated, modified and developed through collective understanding and knowledge acquisition." (Wells 1999 in Roald, K. et al 2012). As a collaborative programme, FYR is based on this type of thinking. It is a question of collective collaborative capacity (Fullan 2010) and nurturing and developing a sustainable culture of co-operation in schools.

The FYR framework says this about the development of the school's culture for vocational relevance in common core subjects: If schools are to develop a culture for work-focus and co-operation between common core subject teachers and programme subject teachers, there must be a change in the organization of the day-to-day schooling. The school's administration is responsible for this change. In other words, the school's administration must ensure that a new practice is established. (The Norwegian Directorate for Education and Training 2014)

This applies not only to the structure of the school day and week, but also the exploitation of teachers' time, time for competence development, and time to extend new, good practice and eliminate practice that is no longer valid. The school administration and all teaching staff must collectively develop a professional community by among other things sharing and working together on lesson plans and strengthening a shared understanding and knowledge of vocational relevance. It is the day-to-day, enduring common practice that will cultivate a new, shared culture for co-operation and vocational relevance in the individual school and classroom.

In practice, the individual school and administration must execute this development work, but help is available in the form of collaborative work and lectures at national in-service training sessions. These are also to be followed up at county level in the form of meetings, professional support and sharing experiences locally and in networks.

#### **PAPER 3 ABSTRACT**

FYR in Theory, Lone Lønne Christiansen

The concept vocational relevance of common core subjects may be open to several interpretations, but the most common one is the adjustments teachers themselves can make in the classroom: choosing tasks, ideas and examples from the profession in question to show pupils situations in which the common core subject will be relevant to their chosen work. It is less common to integrate common core subject teaching in the vocational teaching (programme subjects), by aligning plans, sharing rooms or organizing and evaluating projects together. This type of integration makes greater demands on the common core teacher, both as regards insight into the vocational subject and time for planning with the programme subject teacher.

There is empirical evidence that a focus on work is effective if it makes the common core subject relevant for pupils. When pupils feel that the subject is important, useful and interesting, they have higher expectations that they will master it. This increases their inner motivation and the belief that they will complete their education. Observation in the classroom has shown that the teacher's personal and pedagogical abilities influence how pupils experience attempts to increase vocational relevance. A good classroom teacher is able to create relevance, but not a teacher whose contact with the pupils is poor.

At schools with a large percentage of vocational pupils and many weak pupils, and in areas with many employees in the private sector, the administration will have the strongest focus on vocational relevance. When the administration cultivates vocational relevance, this increases the throughput in traditional, well-established trades and occupations such as electrical engineering, technical and industrial production and building and construction. These are subjects where the pupils generally become apprentices after two years in school, which indicates that the work focus gives relevance in the pupils' interest for the profession.

Common core subject teachers who took part in the research believe that the curriculum and the examination are the most important obstacles when it comes to vocational relevance. The teachers have a strong belief in the positive effects of vocational relevance, especially for pupils who are struggling with theoretical subjects. They do, however, feel that vocational relevance is at odds with the curricula and preparation for the examination. A third of teachers believe that a focus on work makes it more difficult for certain. We interpret this to mean that teachers find it difficult to balance the various goals set by the education system: to produce a skilled workforce, to help as many as possible to complete their education despite a weak starting point and give all pupils the opportunity to achieve their university and college admissions certification without undue loss of time. Moreover, large groups of teachers feel that they lack insight into the content and methods of the vocational subjects.

Research indicates that making common core subjects vocationally relevant is effective as long as the pupils are interested in the profession and the teacher has good classroom management and strong interpersonal skills.

#### **PAPER 4 ABSTRACT**

FYR in Practice, Elisabet Simahaug Halvorsen, Mette Sunde Kleive, Terese Kristin Aarsund Myklebust, and Siw Helene Rydfjord

The FYR programme stipulates up to three national three-day training sessions for teachers of common core subjects and programme subjects in the autumn of 2014, 2015 and 2016. It is a pre-condition that groups of teachers from every school should attend, and that school administrators join their teaching staff on the final day. The theme for these sessions is the teachers' work with vocational relevance in common core subjects and the schools' work in establishing sustainable cultures for work-focus, relevance and coherence.

The national in-service training will help develop competence and further the implementation of the schools' work with FYR. This is followed up by the counties' quality work. In addition, there will be opportunities for the exchange of experiences on local training and follow-up days (a fourth training day) approximately six months after the training session when concrete results of the work with the FYR programme are to be reported.

The Danish systems theorist, Lars Qvortrup, builds on Bateson's theory of organizational learning. His reasoning implies "... little will be gained as a result of in-service training in which the personnel have a purely receptive function." (Qvortrup 2001 in Roald, K. et al 2012) While Peter Senge states that: "team learning takes place when groups use reflection to find new knowledge and new courses of action that the individuals would not have been able to achieve on their own" (Senge 1990 in Roald, K. et al 2012)

This is the reason why schools are required to send groups of teachers to the training sessions who represent both the common core subjects and the programme subjects. A significant part of the in-service training involves team learning. Teachers work in groups to develop good teaching plans, and teachers and administrators from the same school work together forming their school's plan for improving collaboration, work-focus and relevance in the teaching.

Using team learning during the national training sessions is a decisive factor for schools' learning as an organization, and is also meant to be an exemplary activity which will inspire to continuous collaboration. Here, teachers will be obliged to discuss and reveal their mental models. We often hear good examples of how teachers from the two different cultures "discover" each other's competences and for that reason alone make progress in their development work. Together they create teaching with more work-focus and a common goal, resulting in increased relevance and coherence in the education programme.

The training session lectures for teachers are directly linked to understanding the curriculum and how the teaching can be made more vocationally relevant. It is also a goal that both administrators and teachers should gain insight into the school organization and its constituent parts. The aim is a systemic development strategy and its implementation.

When administrators participate together with their teaching staff on the third day, the theme is organizational learning and how the individual schools will tackle their challenges in practice, and how they can work systematically to develop sustainable cultures for collaboration on vocational relevance.

## **PC Symposium**

Title: The social side of the effectiveness and improvement equation

Topic: Partnerships and Collaborations: Schools, Agencies, Government, Research

Abstract ID: 3299

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Science Centre Auditorium

Author/Speaker: Alan J. Daly

Company/Organisation: University of California, San Diego

Co-Authors: Yi-Hwa Liou, Chris Chapman, Hannah Chestnutt, Niamh Friel, Stuart Hall, Kevin Lowden

Presenting Author: Alan J. Daly

#### Abstract

Efforts at improving educational effectiveness and improvement typically focuses on the formal technical approaches to improvement, and while these more human capital elements are critical, they often background the relational linkages through which change flows. Effectiveness in a social network paradigm does not result solely through blueprints, but through the interaction of participants as these improvement processes emerge and are maintained through interpersonal relationships. It is the interdependence of relations that may ultimately moderate, influence, and even determine the direction, speed, and depth of an effectiveness and improvement effort. The balance of the social network scholarship suggests the importance of better understanding the interconnected networks of relations that may facilitate or inhibit the exchange of resources related to organizational change at all levels of the educational endeavor. This symposium provides theoretical, methodological, and empirical studies foregrounding the examination of relationships within, among, and between educational actors as they work to bring about change in different contexts and at different educational levels.

#### Overview of symposium

Efforts at improving public educational systems in support of better achievement and contributing to the larger public good are commonplace across the globe. Typically these important organizational change efforts are typically enacted using a variety of formal structures, processes, and accountability levers to improve performance. However, while these more formal, technical approaches at improving education are important and have been well documented, what appears to be less prominent in the change equation is attention to the relational linkages between actors through which reform flows.

Social resources such as knowledge, information, and expertise are exchanged through informal networks of relations between actors in a system. Effectiveness and improvement, therefore, does not result solely through technical plans and blueprints, but through the interaction of participants as these change processes emerge and are maintained through interpersonal relationships. It is the interdependence of relational ties that may ultimately moderate, influence, and even determine the direction, speed, and depth of an improvement effort. Therefore, the objective of this symposium is to share and discuss empirical studies that examine how the quality of relationships between and among actors in a social network is important in understanding how the flow of resources within a system may support or constrain efforts at educational change.

#### **Empirical Grounding**

Networks are typically identified by the content that is exchanged between actors or flows through the social ties; those linkages form a structure of relationships and can facilitate or inhibit access to social capital (Lin, 2001; Scott, 2000; Wasserman & Faust, 1998). In many cases, the underlying social structure determine the type, access, and flow of resources to actors in the network leading some scholars to suggest that the old adage 'It is not what you know, but who you know', is more accurately, 'Who you know defines what you know' (Cross, Baker & Parker, 2003). The balance of scholarship suggests the necessity to better understand of the interconnected networks of relations that may facilitate or inhibit the exchange of resources related to organizational change.

Recent social network inquiries in the field of education have covered a wide range of topics including: school, teacher and policy networks (Coburn & Russell, 2008; Frank, Zhao, & Borman, 2004; Penuel, Frank, Krause, 2007; Spillane, 2006; 2008); support teacher professional development networks (Baker-Doyle, 2008); networks in reform (Daly & Finnigan, 2010; Weinbaum & Cole, 2008); innovation and trust networks (Atteberry & Bryk, 2009; Moolenaar, Daly & Sleegers, in press); and leadership networks (Daly & Finnigan, 2012). The balance of this work suggests the dynamic interplay between formal and informal structures in the change process. In addition, this work provides unique insight into how social ties may support or constrain efforts at change in a variety of contexts at different levels in the educational system.

#### **Content and Overview**

This interactive symposium provides theoretical, methodological, and empirical studies foregrounding the examination of relationships within, among, and between educational actors as they work to become more effective and contribute to improvement efforts. This collective effort suggest the importance of attending to the dynamic nature of formal and informal structures in organizational change as well as the importance of both human and social capital elements in developing and enacting reform policy. Attendees of the session will be provided with a diverse set of studies and panel discussion grounded in social network theory that thoughtfully examines and explores social networks in educational change from a number of vantage points and perspectives. The session will begin with an investigation of networks in general and leadership networks in particular, this work will be followed by a paper on innovation and improvement in schools, followed by a third paper on the roles teachers may occupy within key resource-sharing networks that facilitate improvement within their school. The set of four papers will close with a careful consideration of the promises and pitfalls in social network studies in these different settings.

#### PAPER 1 ABSTRACT

Foregrounding the role of relationships in reform: A social network perspective on leadership and change, Alan J. Daly and Yi-Hwa Liou

Educational leaders play an important role in initiating and maintaining change, and understanding leadership practice is imperative if educational reform is to be realized (Weinbaum, Weiss, & Beaver, 2012). There is an increasing call for a more collaborative approach to education, leadership, and governance by way of maximizing the use of local knowledge and expertise embedded within local school districts (Anthes, 2002; Liou, 2015; Organisation for Economic Co-operation and Development [OECD], 2013). As such, the extent to which educators in general and leaders in particular are socially connected is critical to a more collaboration-oriented practice, as these linkages may serve as conduits for transmitting the resources and information necessary for successful change. In this paper, we respond to the important relational aspect of educational leadership as a lever for change by suggesting that social network theory and analysis provides a useful theoretical and analytic framework.

Until recently, both inside and outside education, social network analysis has been most commonly identified as a theoretical and methodological approach for graphing and measuring relational ties (e.g., formation, consequences, processes, and dynamics). In educational leadership, a growing number of studies have begun to apply social network concept and analysis to the work of leadership and school or district level reform (e.g., Daly, Liou, Tran, Cornelissen, & Park, 2014; Finnigan & Daly, 2012; Moolenaar & Sleegers, 2015; Spillane & Kim, 2012). As a result, networks are being more often referred to as a key feature to the educational reform landscape particularly at the leadership level. Building on this work we will argue that there is an evolving form of instructional leadership, one grounded explicitly in the role of interaction and interdependence, which can be theorized and assessed through drawing on social network theory and method. Therefore,

in foregrounding new forms of instructional leadership based in relational capacities, we take a social network theory approach and discuss the promise of drawing on social network theory and analysis in the study of educational leadership. We punctuate our paper with empirical examples to ground our work and offer potential insights into the way in which relationships are consequential for important outcomes. In this work we will: (1) provide some theoretical grounding on social network theory, review of the promises of network analysis in for leadership studies in particular, and (3) offer possible directions for future studies.

This paper provides background on social networks and builds on recent scholarship using social network analysis in educational leadership. In the work we suggest that social network theory and methods provides unique and important analytic purchase in the study of educational research and practice and as such sets up the other three papers.

#### PAPER 2 ABSTRACT

Mapping and understanding interactions: What can social network analysis tell us about intra and inter-school improvement? Chris Chapman, Hannah Chestnutt, Chris Downey, Niamh Friel, Stuart Hall and Kevin Lowden

The educational effectiveness and improvement literature reminds us that improvement is a relatively straight forward technical process but it is an extremely socially complex enterprise involving the generation of positive and sustainable relationships to support complex and often contradictory interactions (cf. Chapman et al., 2016). The literature also indicates there is growing evidence from a range of school-based networks to suggest that collaborative approaches can stimulate innovative strategies for improving outcomes for students (Chapman and Muijs, 2014; Ainscow 2012; Hadfield and Chapman, 2009).

Some of the most recent improvement efforts have also concerned themselves with moving knowledge and practice around to 'spread' and 'move to scale' such improvements; this has challenged some of our assumptions about the change process and requires us to better understand how relationships manifest themselves, change and develop over time across boundaries both within and between institutions. Thus, it is becoming increasingly important to research improvement and innovation from the perspective of change embedded in interactions, rather than as change embedded in individual action and at more than one time point.

It is within this context that Social Network Analysis has become an important analytical tool within social science research and is becoming increasingly popular technique to study social interactions and the flow of knowledge and practice in educational settings (Daly, 2010). Social Network Analysis has been used to map interactions, to provide a snapshot of the situation at a single point in time but also to capture trends and shifts in interactions over time.

This paper draws on data from three cases from two projects within a programme of research focusing on understanding and supporting the development of more equitable education systems. The three cases all use Social Network Analysis as part of their approach to better understand how staff interactions move ideas and practice around within intra-school and inter-school networks. They are guided by common key questions relating to whom staff discussed key ideas and practices for improving learning and teaching within their network.

The first and second cases focus on intra-school networks within secondary schools located within a challenging urban environment that performs beyond expectations in improving the outcomes for their students. In contrast the third case from the second study draws on data from an inter-school network involving an externally supported school improvement network involving two primary schools using lesson study to improve mathematics learning and teaching in a Primary 6 cohort of children from lower socio-economic settings.

The three examples highlight variation in network density and patterns of interaction. These patterns illuminate some key knowledge brokers, but also some isolated individuals that appear on the fringes within and between the schools. This paper also draws on additional qualitative data to offer insights and explanations for the variations in interaction within these examples. In conclusion the paper offers a number of propositions and questions for further research to deepen our understanding of school improvement as a complex social process.

#### PAPER 3 ABSTRACT

Utilising social network approaches to determine the roles of teachers within key resource-sharing networks in schools, Chris Downey

This paper discusses how social network analysis (SNA) might be used to identify teachers who occupy key positions within informal resource-sharing networks in their school. For the purpose of illustrating the utility of SNA in researching resource and knowledge exchange two case study schools were selected from the researcher's network of contacts, using a purposive approach to include a primary and a secondary phase school with outstanding track records of school improvement, indicated by outcomes in national school inspections.

Data were collected via the following methods:

i) a cross-sectional survey was conducted to elicit teachers' interactions with colleagues working within the same school. These professional interactions within the school were related to two aspects of shared practice, namely the development of learning and teaching strategies and the use of data to evaluate student progress. Network questions were posed in such a way that they might elicit both resource-sharing and knowledge-exchange networks in each area. Data were also collected on a range of demographic factors: gender and years of teaching experience, as well as on teachers roles within the formal and explicit organisational structures of each school.

ii) semi-structured interviews were conducted with a purposive sample of teachers identified through the social network analysis as being central actors within each network. This was based on measures of network centrality, such as degree centrality and betweenness centrality (Freeman, 1979), which relate to potentially different network roles such as resource sources/seekers and brokers. These interviews provided richer insights into the role such actors play in facilitating resource and knowledge exchange in the areas of data use and teaching development. Data were analysed using content analysis to identify common themes raised by the central actors in the networks.

Social network analysis (SNA) of the survey data from the case study schools revealed that resource-sharing networks related to learning and teaching correspond strongly with formal organisational structures in each school (year-group in the primary school and teacher subject specialism in the secondary school), while the resource-sharing networks facilitating exchange of student data indicated a greater degree of interaction between teachers across these formal organisational

Knowledge-sharing networks associated with developing the quality of learning and teaching in each school were the most distributed in nature. Teachers allocated a formal responsibility to promote the quality of learning and teaching are those who play the most central roles in the network. By contrast the knowledge-sharing networks related to supporting the evaluation of student progress data were highly centralised, with only 2-3 teachers acting as sources of knowledge (indicated by in-degree). The most central actors in the learning and teaching networks are not the same as those teachers occupying the central positions in the data use networks. Interviews with teachers occupying these central positions in the networks suggest that knowledge-sharing about is highly centralised despite the intentions of the key actors, and that the task of disseminating and developing knowledge which facilitates data sense-making remains challenging, despite the case study schools also being examples of high performing schools.

### **PAPER 4 ABSTRACT**

Methodological and practical tensions: Exploring the social side of educational change, Hannah Chestnutt

The application of a social network approach to the exploration of relationships between educational actors engaged in school-based collaboration provides opportunities for a unique perspective of informal networks; however, these processes present tensions and dilemmas. This paper draws on research from my doctoral work to investigate the various issues that I have encountered while studying relational linkages in externally supported school improvement networks.

In school improvement networks the flow of ideas and information between teachers is dependent upon the ties and positions of the actors involved. Embedded within these relations and social structures are resources, knowledge and expertise applicable to each context. Access to social capital by the actors is influenced by the type, quantity and position of social ties maintained in the schools and local authorities.

Social network inquiries situated in these contexts face a variety of tensions. Common challenges of using this approach in educational settings are the ethical issues of exploring interpersonal relationships and the practical challenges of obtaining a high response rate. All social network studies face the challenge of achieving the necessary high response rate (Wasserman and Faust 1994). Hand in hand with this challenge is the pursuit of each network member's trust and participation. This challenge is augmented by the fact that a researcher cannot offer anonymity at each stage of the process due to the requirement that they name themselves and colleagues with whom they interact. The sensitive nature of the relationship questions asked and the potential mapping or sharing of the findings introduce situations in which individuals and educational communities can become vulnerable to negative exposure.

Other dilemmas are more specific to individual research contexts such as maintaining continuity between a theoretical framework and the chosen methodology. For example, the pursuit of educational change and improvement is underpinned by theoretical issues of educational equity and social justice. Central to issues of equity and social justice is the valuing of the individual and each individual's capabilities and functionings. Within this framework each individual has the freedom to choose the extent to which they value particular ties and particular network positions. The choice of a methodology which is able to accommodate theories of equity demands consideration of multiple ways of measuring and defining social capital. The values of the individual can be considered by making use of both qualitative and quantitative data applicable to the

These theoretical, methodological, and practical issues which are involved in using a social network approach present a number of challenges, but the promises far out way the challenges. Achieving an understanding of relational linkages and the processes of change promises a greater understanding of the improvement processes of public education systems.

# TE Symposium

Title: Awareness of different modes of practice reflection - An 'interinstitutional' research project

Topic: Teacher Effectiveness, Teacher Quality and Professional Learning

Abstract ID: 3000

Session: Parallel Session 5

Session Date and Time: Friday 8 January 2016 14.00-15.30

Location: Science Centre Board Room

Author/Speaker: Julia Kohler

Company/Organisation: University of Innsbruck

University of Vienna

University College Of Teacher Education Wien/Krems University College of Teacher Education Zurich

Co-Authors: Eveline Christof, Julia Kohler, Katharina Rosenberger, Corinne Wyss

Presenting Author: Julia Kohler

### Overview of symposium

In teacher education practise reflection is a current topic of quality and professional learning. Mostly oral or written forms are implemented. But up to now there is not much knowledge about the effective learning of reflection respectively the possibilities for students to handle with different types of reflection.

In this researching forum subareas of an Austrian/Swiss researching project, which researches the possibilities how teacher students reflect their teaching, get introduced. Different modes and practise reflections are focussed: written, oral and dramatic forms will be researched in this project. It is a matter of a theoretical and qualitative-empirical approach, which follows a reconstructive researching approach. The present conclusion of the project team should be discussed with the audience.

Following comprehensive questions are the topic:

- 1. How do teacher students reflect their own teaching experiences within an institutional frame?
- 2. What appears in the reflection about practical experiences?
- 3. What kind of possibilities and limitations features the different modes of reflection (written, oral, dramatic)

#### **PAPER 1 ABSTRACT**

Professional learning through reflective peer discussion, Corinne Wyss

The reflection in the teaching profession has in recent decades become more important (e.g. Williams & Grudnoff, 2011; Ducharme & Ducharme, 1996). In particular, teacher training has increasingly dealt with this issue. There were different ideas and concepts developed to implement reflection into the training of student teachers. In addition to written reflection also oral reflection is realised in different areas. Popular is the reflection of lessons as part of the practical training, where student teachers debrief their own teaching with experienced or mentor teachers. In addition, reflective conversations are increasingly hold in theoretical training. Quite often video recordings of teaching are used for this purpose and are watched and reflected together as part of a training course (e.g. Krammer, 2014). The potential of teaching video is in particular that theoretical aspects can be situated, own previous knowledge and personal experience can be activated, a common language can be established and the theory can be better integrated into practice (Kleinknecht & Schneider, 2013). As a very beneficial way of reflection the collective reflection with peers is regarded, at which the exchange among each other appears to be particularly important for the professional development of teachers (Kaasila & Lauriala, 2010). There already exist relatively comprehensive findings about working with instructional videos and collegial teaching reflection. However, previous studies about collective reflection only rarely deal with the nature and quality of reflection or quality criteria of the conversation.

In a course at the Zurich University of Teacher Education, the reflective peer discussions of 19 students about their own videotaped lessons were audiotaped and transcribed. For the analysis of the data a coding system was developed and the data was analysed using a software for qualitative data analysis. The following main questions are pursued: How (well) runs the reflective conversation? Does the conversation in tandem has advantages compared to individual reflection? What conclusions can be drawn from the study for teacher education? In the presentation selected issues of the study will be presented giving insight in both the methodological approach as well as first results of the investigation.

#### PAPER 2 ABSTRACT

Becoming a reflective practitioner through writing reflective papers, Katharina Rosenberger

At least since Schön's theory about "reflected practitioners" became widely discussed, the question about implementing this goal through teacher education has arisen. As a result, student teachers are very often asked to write reflective papers about their teaching practice. However, in educational research the aspect of learning through reflective writing largely remains wanting.

The presented project aims to identify strengths but also weaknesses of the ongoing practice in professional learning contexts. The main research questions are:

- About what and how do student teachers write reflective journals?
- 2. How can reflection-on-action be effectively integrated into the studies?

This topic asks for epistemological grounding and a sociological approach. For this reason the research team ties in with John Dewey's (1933) understanding of "reflective thinking" and Donald Schön's (1983, 1990) theory mentioned above. A reference line for describing institutional aspects is Bourdieu's (1990) notion of "habitus". In addition, we draw upon Foucault (1993), who broached the issue of "techniques of self exposure".

Methodologically we follow the documentary method. The sample consisted of reflective papers from student teachers who were rated as little, mediocre and very reflective individuals by their teacher mentors. In addition, interviews with student teachers and mentors about their experiences with the teaching practise were analysed using qualitative content analysis.

The results show weak spots of the used procedures and give ideas for future changes:

- 1. It seems that teacher educators often have insufficiently clear ideas about the focus of reflective papers. This is accompanied by vague concepts of effective reflection-on-action. Therefore there is often a lack of clear guidelines and the produced papers show a wide range of quality and differ a lot in style and content.
- 2. By writing reflective journals student teachers grant insights into their minds and show how they cope with insecurities and ambivalences. This presupposes openness, which not all of the student teachers are willing to engage in.
- 3. Reflective journal writings are not only ends in themselves, but also a stage for self-portrayal. Profiling oneself is often based on strategic moves, which have to be taken into consideration by teacher educators.

From these results we draw the following conclusions, which could make practical contributions to setting up courses and curricula in teacher education:

- 1. There is a need to clarify what reflection-on-action should fulfil, how reflective journal writing should look like and which quality criteria could be applied by teacher educators.
- 2. Although student teachers are expected to show openness and honesty, the intention of self-justification in reflective papers cannot be denied. Solutions for coping with these ambivalences have to be found.
- 3. New ways of reflection-on-action should be tested to offer opportunities for those student teachers who are reluctant writers.

#### PAPER 3 ABSTRACT

Reflecting on pedagogical crisis situations by reconstruction of subjective theories, Eveline Christof

Teacher training institutions developed different ideas and concepts in order to implement some forms of reflection in teacher education (f.e. Rothers 2012, 2011, Wyss 2013).

This contribution shows the implementation of a method which is experimentally applied in the field of teacher education at the University of Innsbruck. to stimulate students' reflective competence. It will focus on the factor of teacher beliefs. Beliefs, attitudes or subjective theories play a key role in teachers' actions and their behaviour in the classroom.

Teacher training at the university is limited by breaking up these strong behaviour-determining elements. This is the background for the unchanged passing of patterns about the structures of school in general and about teaching and learning in particular from one generation of teachers to the next (cf. Richardson 1996). Beliefs serve as overarching frameworks for understanding the environment and engaging with the world. "... beliefs are thought of as psychologically held understandings, premises, or propositions about the world that are felt to be true" and "... are accepted as guides for assessing the future ...". (Richardson 1996, p. 103). Beliefs are a part of teachers' identities, many are implicit, unarticulated, or unconscious.

The objection of the intended reflection process is a reconstruction of subjective theories to help teacher students to make clear the determining influence of their beliefs on the plans of their own actions. Reflecting on their own attitudes and beliefs should help them to see more opportunities to act in a specific pedagogical crisis situation.

One specific method that originates from the field of qualitative educational research – the pedagogical reflective interview (Christof 2009) – is applied in a different setting at the teacher education of the University of Innsbruck to promote teacher students' reflective ability. Teacher students learn to apply this method and also gain experiences as interviewees - they are researchers and respondents in this setting.

In the last two years 59 students have participated in the course and initial results of the implementation of this method will be presented. The expected outcome is the design of a module for teacher education, which helps teacher students to develop reflective competences.

#### **PAPER 4 ABSTRACT**

Opportunities and drawbacks of drama / Theatre pedagogics with teacher students in relation to the ability of reflecting, Julia Kohler

Reflectivity is an important criterion of pedagogical professionalism (eg. Schratz et al 2011; Roters 2012). The ability to reflect in this context means to scrutinize the practical skills within a theoretical framework, to distance oneself (cf. Paseka et al. 2011, p 26f.) and think about possible alternative courses of action. In general, the theoretical framework for the reflection of our own practical experience is given during the studies by the continuous recording of reflection texts, or by guided consultation/discussions with lecturers and fellow students.

Referring to the third research question of the project, the question of the possibilities and limitations of different reflection modes, offering theatrical means, according to the thesis of the author, is another option for reflexive questioning ones own curricular teaching experience. Helsper assumes that teachers or professionals in general need the ability to alienate their own school culture, to an eccentric view of their own professional practice and to be able to transform the same into a reflexive one (cf. Helsper, 2001, p 12).

Theatrical forms include options to develop this "strange" point of view for their own practice, to review attitudes and to process them. "In theater-play, there are a number of experimental techniques with which scenes can be edited [...] and with which structures and processes are made visible" (Wrentschur 2005, p 199). This is about the chance to gain an "as if" experience through role reversal. The related `Differenzerfahrung' (experience difference) describes Hentschel as a "conscious" change of positions "(Hentschel 2009, p 110). Through the playful approach to a plot, possible options or strategies can be simulated for the future. This allows for greater confidence to be obtained in dealing with a variety of effects. "Attitudes and behaviours which are experienced in acting/drama/role play, can in everyday life, in social fields and in a "sense of pragmatic validation" "be put to the test" (Wrentschur 2005, p 201). The inherent emotions and experiences of insecurity of teacher or young professionals are constructively processed and creative strategies may accordingly be developed which will help it to remain permanently and fully operational (see. Paseka 2011 S.157f).

In this paper, practice derived case histories are described and their theatrical adaptation presented.

# **Parallel Session 6**

Saturday 9 January 2016

11.00 - 13.00

# **TE Paper Session**

Topic: Teacher Effectiveness, Teacher Quality and Professional Learning

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Location: Argyll Suite 1

Chair: Dr Beth Dickson

#### **PAPER 1 ABSTRACT**

Investigating literary knowledge and the making of English teachers, Larissa McLean Davies, University of Melbourne.

With the advent of the 21st century there has been renewed interest in the relationship between disciplinary fields and school subjects (Green 2010; Yates 2011; Yates & Collins, 2010; Yates, Collins & O'Connor, 2011). Recently, this concern has been brought to attention in Australia through debates about the development of the Australian Curriculum (Atwey & Sing, 2011; Brennan 2011); concerns about student performance in high stakes national testing and comparative international testing (Thomson 2013), and related concerns about teacher quality (Australian Government Department of Education 2014). Central to these debates are tensions about what constitutes discipline knowledge, about pedagogical content knowledge and about curriculum (Cambourne 2013; Shulman 1986). In light of these tensions, this paper analyses data gathered in the context of a broader project concerned with the relationship between disciplinary knowledge and teachers' pedagogical practices in the teaching of secondary English in Australia. Specifically, this paper reports on a comparative analysis of Australian English curriculum and policy documentation concerning the teaching of literature within the suite of 'English subjects', and interviews conducted with pre-service teachers in two Australian States: Victoria and New South Wales, regarding the nature of the literary knowledge they value and bring to the profession. This document and interview data analyses are considered in the context of debates about the teaching of national and world literatures (Casanova, 2044). Analysis of these data will explore the connections and disjunctions between the utopian vision of disciplinary knowledge articulated in sanctioned curriculum documentation and associated official texts, and the understandings of literary knowledge pre-service teachers bring to the profession. In particular, this paper will explore the ways in which literary sociability (Kirkpatrick and Dixon, 2012; McLean Davies, Doecke and Mead, 2013) encountered through previous experiences as students of literature, mediates teachers' understandings of the teaching of texts in English, and impacts on their articulations of a literary education.

#### **PAPER 2 ABSTRACT**

Teacher and school networking: Challenges and potential for teacher learning in challenging circumstances, Maria A. Flores, University of Minho.

This paper presents data from a wider research project aimed at exploring current opportunities for teacher learning in context. Existing research literature reveals points to teachers' preferences and processes of learning as well as to the contexts in which they occur and the variables influencing them(Lieberman, 1996; Collinson et al., 2009). It suggests that continuing professional development (CPD) of teachers depends upon a wide array of variables that go beyond initial teacher preparation to include a number of planned and non-planned activities in which teachers engage throughout their careers (Huberman, 1993) and a variety of activities and learning experiences (Meirink et al., 2009). Time, support, willingness to learn and relevant opportunities are key elements in promoting CPD of teachers (Day, 2001). It is important to analyse the meaning attached to these kinds of experiences in terms of learning and the contexts in which they take place, particularly in challenging circumstances as it is the case of Portugal. A better understanding of the learning activities teachers are engaged in and their outcomes in terms of cognitive and behavioural outcomes becomes crucial to provide them with relevant opportunities for CPD (Meirink et al., 2009).

Portuguese teachers have been facing challenges and increasing demands over the last few years. These are associated with salary cuts, high rates of unemployment, and policies on teacher evaluation, school governance, school curriculum reorganisation etc. Thus, it is important to get to know how teachers are experiencing conditions for their professional development in such a demanding context.

This paper presents data from a wider research, funded by the National Foundation for Science and Technology (PTDC/ CPE-CED/112164/2009), aimed at investigating teacher learning and development through collaborative projects and through teacher and school networking. The research questions are: What are teachers' motivations to engage in professional learning opportunities? What are the key dimensions of their work that they associate with professional development opportunities? Why do they engage in learning networks and what do they learn from them?

The research project involved three phases of data collection: national survey (n=2702 teachers) on teacher professionalism and wider policy context of teaching; focus group (n=99 teachers). The third phase upon which this paper is based included the development and evaluation of an intervention project in schools and the setting up of networks amongst teachers and schools. The TEL (teachers exercising leadership) network was created in 2012 involving 5 schools and 66 teachers. Data were collected through open-ended questionnaires, artefacts, debates, portfolios, observation and written reflections.

Findings pointed to the importance of learning networks in fostering teacher CPD. Teachers stress the possibility of building professional knowledge together, sharing experiences and ideas and enhancing professional motivation and morale through discussions about the teaching profession and the conditions in which they work. However, structural and cultural aspects emerged namely the professional and school culture, school leadership and the personal and professional values as teachers as key mediating influences on teacher learning and professional development in context. Networking emerged as a key research strategy and a way for teachers to develop professionally and to enhance their morale and resilience to overcome feelings of resignation and individual competitiveness.

#### **PAPER 3 ABSTRACT**

Language and literacy across the secondary curriculum: Investigating effective teacher preparation, Larissa McLean Davies, University of Melbourne.

In the 21st century, literacy Australia and Scotland have policies and curricula which state that secondary school teachers are responsible for literacy and numeracy across the curriculum, and have implemented standardised literacy (and numeracy) tests in the secondary years of schooling. Despite these interventions and policy directions, both countries continue to identify literacy as an area for improvement: Australia scored 514 in PISA 2012 and Scotland scored 506, and both countries have a mean performance of top performers above the OECD average and a mean performance of low achievers below the OECD average.

Alongside this focus on literacy improvement, both countries are concerned with improving the quality of pre-service preparation of teachers, and the effectiveness of teachers (ref). This international research project bring these two concerns together in an investigation of the ways in which pre-service teachers are prepared to to teach literacy across the curriculum in two specific sites in Glasgow and Melbourne. The first part of this paper will offer a comparative analysis of the literacy tests and policy mobilised in both Scotland and Australia in order to critically engage with the ways in which literacy is being presented and assessed in each of these contexts, the presenters will then report on a comparative research project investigating the ways in which pre-service teachers at Universities in Scotland and Australia respond to the policy imperative to improve literacy learning; the extent to which, as subject specialists, they feel prepared to teach literacy in diverse contexts; and the aspects of their pre-service experience that have served as enablers and/or barriers to their development as teachers of literacy. The results of this pilot project have implications for future research into the way pupils literacy development in pre-service teacher preparation courses, and the development of literacy policy in Scotland and Australia.

### **PC Innovate! Session**

Title: Beyond human: Aligning school improvement with global agendas for change

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3074

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -11.30

Location: Argyll Suite 2

Author/Speaker: Paige Fisher

Company/Organisation: Vancouver Island University

Co-Authors: Paul Clarke

Presenting Author: Paul Clarke

Presentation Method: Innovate!

#### **Abstract**

'Ecological restoration is the single most significant shared effort that humanity can undertake at this critical moment.' John D Liu

Worldwide there is now considerable effort and intention to rectify damaged ecosystems seeking to align human action with natural systems thinking as evidenced by international gatherings such as COP21: Sustainable Innovation Forum in Paris, France. However, mainstream education systems have been extremely slow to recognise and attend to this global issue in their practical activity. As yet, there have been very few demonstrable examples of coherent education for sustainability programmes running across entire school systems.

In this innovative session we will report on work to pursue social change and ecological restoration as one interconnected effort forming the basis of a re-imagined school system that designs and develops the ecologically literate mind. Our assertion is that if we are to reconcile the historically created tensions between humanity and nature and make real progress, it will be through the cultural, economic, social and political transformation arising from a new form of schooling, realigning our thinking towards a sustainable civilization deeply embedded within the cosmology of nature.

The project, and this session, invites people to design, develop and sustain an enquiry into ecological literacy. To help to frame this activity we have selected pilot schools on every continent to create a collaborative programme called 'Naturally Smart World.' Through this network we have initiated ecological learning hubs - Earthcare Centres - where students take the experiment further. Anyone can start an Earthcare Centre anywhere and anytime. No big deal, no policy requirements, no major funding requirements, simply the will to work in a new way together consciously attending to the matter of existing within immensities. What we construct together in response are restorative solutions to existing challenges, and a new shared story of progress. We are achieving this by connecting people, places and natural systems together. The work is provocatively un-defined, open-ended and emergent, trusting instead the possibility that comes from letting go and letting come (Scharmer 2011).

We are intent on developing a globally shared arena within which critical investigation, exposition and illustration can play out to elicit deeper levels of understanding and interpretation of the human condition and its place within a wider natural system. It is this relationship which forms our investigative question building upon our earlier enquiry and ICSEI keynote in 2011, asking: How we can live as a part of, not apart from, nature?

This is the purpose of education in a time of ecological change. It begins to presume that we really can learn from immensities and bring this learning into daily life serving to define the next iteration of what we currently call 'school.'

We will engage participants in creative exploratory activities and discussions that are intended to inspire and expand its ambition and reach as we take the forum forward in 2016 and beyond.

## **PC Innovate! Session**

Title: Getting pupils work ready

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3269

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.30 -12.00

Location: Argyll Suite 2

Author/Speaker: Jacqueline Newell

Company/Organisation: Hollybrook Academy

Co-Authors: Victor Cannon

Paul Clarke Presenting Author:

Presentation Method: Innovate!

#### **Abstract**

We are a Glasgow secondary school for young people with additional learning needs. Our pupils have a range of additional needs including learning difficulties; autism; dyslexia; dyspraxia, Prader-Willi, visual and hearing impairments and Down's syndrome.

We currently have 122 pupils, 22 teachers and 9 learning assistants. Our class ratios are one teacher to ten pupils.

Our aims and values in Hollybrook are simple but underpin what we do: trust, honesty, respect, care and hard work.

We have a shared understanding of our core business: we want our pupils to develop the necessary skills, experiences, attributes and qualifications to take them into adulthood. We are acutely aware of the challenges young people with ALNs face in the job market and we want to make sure our pupils are given every opportunity not to be one of the 90% of adults with additional learning needs not in employment. Our curriculum and learning and teaching has to reflect this and when you look at the range in our attainment and wider achievement, it does. We have higher than the city average attendance and for the past three years have had 100% positive destinations.

One way we have achieved this is through our innovative and on-going collaboration with businesses, particularly through our social enterprise Scribbles by Hollybrook. The company, created by and ran by the S3 and S4 business studies pupils has produced, exhibited and sold art in conjunction with IKEA, Echo Chic Boutique and The Unexpected Artist, held an international online auction with McTears the Auctioneers and been recognised by Nicola Sturgeon and HMIE as outstanding practice. The company has also won the prestigious Diana Award and the Social Enterprise in Education Award. Scribbles is currently in the process of finalising partnerships with The Burrell Collection and Virgin Money Lounge, Glasgow. All the while the pupils earned a small salary and donated money to a local children's hospital. To date, they have raised £600.

Through the session we will take the participants through the set-up process, how we promoted it and the impact it has had on pupils as individuals and as a school. We will look at the skills and expertise the pupils have developed and how they can translate to the world of work and the benefits the businesses have seen having worked in partnership with our school.

### TE Innovate! Session

Title: Data-Use in Professional Learning with a Sustainable Learning Mindset

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3030

Parallel Session 6 Session:

Saturday 9 January 2016 12.00 -12.30 Session Date and Time:

Location: Argyll Suite 2

Author/Speaker: Anders Ruud Fosnaes

Company/Organisation: Conexus

Co-Authors: Yngve Lindvig

Presenting Author: Anders Ruud Fosnaes

Presentation Method: Innovate!

### Abstract

Conexus explore how specific forms of data-use and mindsets can strengthen professional learning. Using data to learn and improve is not only a matter of finding an appropriate method for using data, but also about what kind of data users have access to, and the mindset of the users of data. Mindsets are assumptions about ourselves, our capabilities and our brain. Research (eg Dweck et al 2013) shows that the content of our mindsets affects our learning processes significantly. Conexus have found that especially one type of mindset is apt at improving educators learning from different types of data.

Data is only as good as the mindset using it. In our framework we distinguish between two types of mindsets. A fixed or static mindset involves assumptions about intelligence, talent, personality etc. Educators with this mindset often think of these as static things, eg they assume that if you are intelligent or talented this is something you are born with. Thus it does not matter that much if you work hard or smart. One of the major assumptions is that some leaders, teachers or students are simply more talented or smart, and that data simply reflect this. Using data with this mindset is often detrimental to professional learning and improvement processes because one quickly end up jumping to conclusions like "These children come from unfortunate socio-economic backgrounds" when confronted with gloomy data. Teachers with a fixed mindset tend to project this on to their students.

Educators with a sustainable learning mindset approach data differently. Their mindset is characterized by wanting to challenge themselves, high levels of self-efficacy, learning from mistakes and successes, and balance between effort and rest. Leaders and teachers with this mindset tend to use data to inquire into and solve their problems of practice. If confronted with encouraging data sets they inquire into why they have succeeded. This inquiry-driven process contributes to transform tacit knowledge into explicit knowledge. If confronted with discouraging data they inquire into possible mistakes in their practice and try to learn from them.

Conexus have found that educators with a sustainable learning mindset can enhance their professional learning significantly with their use of data. This is one of the reasons why Conexus have developed a digital tool aimed at modifying the mindsets of educators. When leaders and teachers use this tool they reflect more systematically on evidence-based questions related to their mindset and learn more about and how it affects their professional learning. The aim is to develop a sustainable learning mindset in educators by using this tool in specific ways.

The approach for engaging participants in this session is to give them temporary access to the tool so they can test it and give feedback.

## TE Innovate! Session

Title: Reforming conditions and mindsets, for effective learning in real-life numerical word problem

solving

Topic: Researching the conditions for effective learning

Abstract ID: 3114

Parallel Session 6 Session:

Session Date and Time: Saturday 9 January 2016 12.30 -13.00

Location: Argyll Suite 2

Author/Speaker: Christine Rednall

Company/Organisation: University of Glasgow/Midlothian Council

Presenting Author: Christine Rednall

Presentation Method: Innovate!

#### Abstract

The improvement of pupil numeracy performance is undoubtedly one of the biggest issues existing in contemporary global education. Policy drivers, politicians, practitioners, parents and pupils find themselves in the midst of maelstrom of competing aspects of learner needs for deep-level progressive learning, and public demand for accountability through attainment improvement evidenced by statistics.

My research, in a Scottish primary school at Second Level of a Curriculum for Excellence, explores the relationship between pupils' developing confidence tackling real-life numerical word problems and their developing understanding of mathematical vocabulary. This research was developed within the context of the drop in pupil attainment in the 2013 Scottish Survey of Literacy and Numeracy, as well as the analysis of the cohort's most recent numeracy and mathematics standardised assessment scores. It charts the learning journey of pupils, frustrated with solving real-life numerical word problems as they moved towards increasing self-efficacy (Bandura, 1977) and confidence.

This research, situated in the post-positivist/critical theory and practitioner enquiry paradigms, uses mixed methods and ethnographic approaches for data collection, triangulation and analyses. Data collection methods include Likert scale preand post intervention mindset surveys, teacher learning journal, a pupil graphic organiser, group observations as well as pupil and teacher focus group interviews. Triangulation was achieved through the creation of a meta-matrice designed to illuminate parts of the learning journey through multiple view-points (Conner, 2010).

A specifically designed lesson sequence, using growth mindset theories, mathematical graphic organisers, pupil-to-pupil and pupil-teacher collaboration, and explicit mathematical vocabulary instruction, was constructed. Subsequent findings include increases in pupil attainment, pupil meta-cognition of mathematical processes and vocabulary, pupil recognition of the development of growth mindsets (Dweck, 2012), and changes in pedagogy from instructive towards more democratic pupil-to-pupil and pupil-to-teacher collaboration. Furthermore, a special interest teacher group, which designed, implemented and evaluated the experimental intervention underpinned by collaborative practitioner enquiry, (General Teaching Council for Scotland, 2012) was created.

The implications of this research are wide reaching. Firstly, this research evidences that teachers, as collaborative curriculum designers, high-level knowledge workers and adaptive experts, are best placed to reform learning and teaching conditions. Secondly, the explicit teaching and understanding of mindsets was key in enabling pupils to develop high self-expectations. Thirdly, continual, close and targeted scaffolding and feedback was necessary to develop pupil self-efficacy. Finally, a more democratic pedagogy emerged. Pupil-to-pupil teaching increased alongside changes in teaching, which was transformed from direct-instruction to facilitation and feedback. Intertwining these four strands provided necessary change in learning conditions to effect improvements in pupil numeracy understanding and attainment.

In reforming conditions and mindsets for learning, it is anticipated that these changes will stay with this cohort, and continue to have a positive impact on attainment. Moreover, mindset awareness, may permeate their whole curriculum. Crucially, this research may have relatability and relevance to other similar cohorts and educational contexts. This would enable practitioners to use a frame, which can be explicitly contextualised for particular learners or cohorts.

## **PC Workshop Symposium**

Title: Networks as intermediaries of innovation:

Mobilising knowledge to action within the education sector and beyond

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 2998

Parallel Session 6 Session:

Saturday 9 January 2016 11.00-12.3 Session Date and Time:

Location: Argyll Suite 3A

Author/Speaker: Erica van Roosmalen

Company/Organisation: Education Quality and Accountability Office

Co-Authors: Anton Florek

> Naomi Mertens Boudewijn van Velzen

Presenting Author: Erica van Roosmalen

Presentation Method: Symposium

### Overview of symposium

The aim of this 3P Network (Policymakers, Politicians and Practitioners) proposal is to create space for dialogue and exploration around the collaborative efforts between school education systems and other sectors occurring locally and internationally to educate all children to their full potential. To this end, we are inviting the participation of What Works Scotland (WWS) as well as ICSEI members who are engaged in collaborative network endeavours that support the learning and wellbeing of children and youth, especially those facing inequity.

Using the constructs of Intermediaries, Networks and Knowledge to Action, the symposium will highlight the local context and efforts among policymakers, politicians and, practitioners, for supporting student learning and wellbeing in dynamic and innovative ways. The symposium will link theory, research and practice networks as intermediaries of innovation across various educational contexts. The symposium will engage participants, exploring conceptual and theoretical structures, processes and rationales as to how networks operate as intermediaries of innovation across various educational contexts.

This year 3P network will consider local 'On the Ground in Scotland' multi-sector led improvement initiatives which aim to create the optimum conditions for improving the educational and wellbeing outcomes for young people in Scotland. Local educational leaders from WWS will share their successes and challenges in improving the way local areas in Scotland use evidence to make decisions about public service development and reform. WWS is a network intermediary working in partnership with local authorities, universities and community planning partnerships involved in the design and delivery of public service across the sectors.

The WWS presentation will act as a springboard, a stimulus for discussion and reflection to consider a series of critical questions to be addressed throughout the symposium in order for all of us (policy makers, practitioners and researchers) locally, nationally and internationally to achieve more effective, collaborative-based education systems with interconnected networks that intentionally focus on evidence to action in support of the education and social needs of children and youth.

Key research questions that underlie the symposium's contributions are:

- What are the preconditions necessary in order for networks to be able to function as initiators and intermediaries of knowledge and innovation in education to support student achievement, well-being and success?
- How do we increase the visibility and understanding of intermediary roles, encourage and enable leadership development that supports a highly networked educational context?
- Where are the linkages between research, policy and practices and what combinations of intermediary work in different contexts add greatest value in achieving collective impact and social innovation?

The symposium seeks to provide opportunities to learn about ways to create the conditions for effective learning by looking at concrete efforts and issues from the local area, analyzed by experts from all levels (research, practice, policy, leadership). The findings are contrasted with knowledge and experience from the international realm. The format of the symposium will combine a panel discussion with some 'vignettes' and case examples of local efforts and challenges with a facilitated discussion highlighting selected features and issues from the Scottish context.

## **RCEL Paper Session**

Topic: Researching the conditions for effective learning

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Location: Argyll Suite 3

Chair: Jim O'Brien

#### PAPER 1 ABSTRACT

Access versus management and utilisation of reading instruction materials in schools: the Progress in International Reading Literacy Study at Grade 4 in South Africa. Lisa Zimmerman, Sarah Howie, University of South Africa,.

This worldwide learning problem is illustrated in the continued crisis with the development of South African learners' reading literacy and its negative impact on the quality of educational outcomes in the country. The results for the Progress in International Reading Literacy Study (PIRLS) 2006 and 2011 have foregrounded this situation by revealing the extent to which South African Grade 4 learners lag behind in their achievement of the outcomes associated with this international comparative assessment of reading literacy in which many countries and education systems worldwide participate. Given the magnitude of the problem there is a risk in focusing attention and interventions on short-term solutions such as the input indicators linked to resource allocations and output indicators such as achievement to monitor educational quality without attention to process indicators such as the quality of teaching and learning (O'Sullivan, 2006) which would require medium to longer term solutions. The focus needs to be on both understanding and supporting classroom teaching factors as well as the context of teaching and elements such as resource management and use that may hinder or support reading literacy development. In this paper, against the background of reports on reading resource shortages and inadequacies from both of the main studies, we compare the qualities of schools with high levels of reading literacy achievement reflective of good resource management and utilisation strategies against those of low achieving schools with inadequate resources and/or poor strategies. The findings from a secondary analysis using the PIRLS 2006 data together with six purposively selected case studies using PIRLS 2006 international reading benchmarks to depict performance levels confirmed that learners in low-performing schools from the study had inadequate access to reading instruction resources. This appeared partly attributable to inadequate funding and government provisioning. However, ineffective resource management at school level and non-resourcefulness and ineffective utilisation of materials by teachers at classroom level may exacerbate reading resource inadequacies at these low performing schools. The resource management and utilisation strategies of higher performing case study schools were found to be potential models for schools with inadequate strategies. In the higher

performing schools, resource allocation was either not a problem or required careful management or budgeting due to government budget cuts. The highest performing school sampled as a case appeared to be the only one which monitored effectiveness of reading programmes and materials purchased. Specific problem areas in terms of materials allocation at the low-performing case study schools were lack of budget for materials and lack of information or support from management to acquire them. Further to this, it seemed that a lack of creative and resourceful use of materials that were available may also have intensified this in the classroom reading activities of teachers.

#### PAPER 2 ABSTRACT

School composition effects and peer effects on student's progress in English in senior high schools of western China. Lei Zhang, University of Bristol.

Since the goal of popularizing 9-year compulsory education (6-year primary education and 3-year lower secondary education) was accomplished in 2002 the Chinese government has increasingly recognized that the improvement of quality of schools and teachers is essential to sustaining demand for education, especially in disadvantaged areas such as remote areas, minority districts and borderlands. To achieve these goals, there is a desire for new educational effectiveness research to understand school contexts within which learners can thrive.

Therefore this study tries to use secondary data with a three-level hierarchical structure (Student nested within teachers nested within schools) from the Improving Teacher Development and Educational Quality in China (ITDEQC) project to explore the peer effects and school composition effects on student's progress in English for senior high schools in one Local Education Authority (LEA) in western China. Guided by the Educational Production Function (EPF) as a theoretical framework, modified for the Chinese context, purely quantitative method (three-level mixed effects models) are employed to evaluate 1) the influence of school compositions of students from different background on teacher's and school's performances in English of Entrance Examination for Higher Education (EEHE); 2) the influence of peers from different background on student's progress in English from Entrance Examination for Senior High School (EESHS) to EEHE.

The results showed that 1) the disadvantaged students (those who are from a small village, or whose family have no financial ability to pay the extra tuition fee) made more progress than the advantaged students, which argues that rural high school students will achieve more, not less, in terms of progress because of the desire to higher education in spite of big obstacles (e.g. less access to educational information); 2) Even though the students from a village or small town scored on average higher than students from a city, but schools with high proportions of students from villages appeared to perform worse than schools with low proportions of rural residents. One possible explanation is that students from villages work harder than those from cities, but schools with many students from small villages may suffer from a lack of facilities or large school size which may limit students' academic progress particularly in English; 3) Being taught with students from a disadvantaged environment (students with siblings or agricultural citizenship status) is associated with greater progress in English from EESHS to EEHE, whilst being taught with students from families with better financial abilities (students paying extra tuition or only children) is associated with less progress. In contrast to students from disadvantaged environments who are motivated to change their life by entering a good university, students from wealthy families tend to suffer less pressure and are less self-motivated to improve their environment through EEHE. Thus being surrounded by different groups of students would affect individual academic achievement by sharing beliefs, habits and peer pressure.

#### PAPER 3 ABSTRACT

Reading and listening comprehension in socially and ethnically segregated elementary schools: the role of class compositional characteristics. Lisa Dewulf, Johan van Braak, Mieke van Houtte, Ghent University.

Minority students are overrepresented in socially and ethnically segregated elementary schools and are at risk of school failure. Educational - and more specific language - delay is more often observed within this group of students (Sierens et al., 2006), while having a profound knowledge and mastering the language of instruction is a prerequisite for further educational success. Listening comprehension is of major importance for communication, understanding instructions, school and social success (Van Den Branden, 2011). It requires extra attention for minority students. Also reading comprehension is considered as a key factor for further educational success (Sweet & Snow, 2003). Although the importance of language skills and progress is widely accepted, its relationship with class compositional factors remains unclear.

Socio-economic and ethnic compositional school characteristics are regarded as two key determinants of school effectiveness (Dumay & Dupriez, 2008). The interest in the relationship between socio-economic and ethnic composition of schools and pupils' achievement is growing (Agirdag, Van Houtte & Van Avermaet, 2012), yet the determinants of achievement within segregated classes is seldom studied. Since educational effectiveness research emphasizes the dominance of class-level effects (Kyriakides, Campbell, & Gagatsis, 2000), an inquiry into the connection between (a) class compositional factors and (b) language achievement and student growth of minority students in segregated schools is needed.

Following research question is examined: 'What is the relationship between student compositional class variables and students' listening and reading comprehension achievement and growth in socially and ethnically segregated elementary schools?'

In this study, three-level repeated measurement analyses are conducted based on language results of 683 second grade students, nested in 42 classes (mean age= 7/8; 49,1% boys, 50,9% girls). Listening and reading comprehension were measured by means of standardized achievement tests administered in September 2013 and May 2014. At student level, the educational level of mother, home language and gender were included in the model. At class level the ethnic diversity (herfindahl-index), socio-economic status and the proportion non-natives were taken into account.

Results show that the proportion non-native students is significant and negatively related to listening comprehension in September and students who don't speak the language of instruction at home also achieve less in September. Both negative relationships however disappear over time, suggesting that schools are able to compensate for the negative relationship during one school year.

The results are slightly different for reading comprehension achievement and growth. Students with a low educated mother have poor September results and students with highly educated mothers make less progress. No class compositional characteristics are significantly related to reading achievement in September. In general, no class characteristics are related to learning growth in both language skills.

The relationship between student, class compositional factors and language outcomes is a dynamic process. However classes seem to compensate for some negative relationships, it is still unclear if compositional characteristics are directly or indirectly related to language achievement and learning growth. Further insight is needed for pre-and in-service teacher education in order to research conditions for effective learning in segregated schools.

## LDP Innovate! Session

Title: When Teacher Leaders Meet Resistance: Fostering Horizontal Accountability

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3066

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 12.30 -13.00

Location: Argyll Suite 3

Author/Speaker: Tanja Westfall-Greiter

Company/Organisation: Center for Learning Schools, University of Innsbruck

Co-Authors: Christoph Hofbauer

Helga Diendorfer

Presenting Author: Christoph Hofbauer

Presentation Method: Innovate!

#### Abstract

The overarching goals of equity and excellent are the focus of most school and system reform, yet these goals do not necessarily represent values held by practitioners in schools or the society at large. Further challenges arise in systems where accountability is primarily vertical in the hierarchy of centralized education systems and formal accountability systems are weak. At the Center for National Schools, one of our key challenges is supporting teacher leaders in initiating and sustaining change in their schools. Fostering horizontal accountability among professionals in and across schools and linking equity and excellence to values held by school leaders and teachers is a system-wide effort that should support teacher leaders who bring in a reform agenda at their schools. Initiating and sustaining transformative culture change is complex, yet our experience has shown that it is often a simple solution or a low-threshold tool or strategy that can have the greatest impact.

In this Innovate! session we want to draw on the experience and knowledge of others to find innovative solutions for the following specific challenge: How can teacher leaders work effectively and productively with resistance in their schools so that horizontal accountability becomes part of their school culture? To do so, we will adapt appreciative inquiry methodology: In a brief Discover Step we will present examples of processes and strategies that have worked well for teacher leaders, followed by a Dream Step in which we ask our co-thinkers to do lateral thinking and brainstorm processes and strategies that might work in the future. To support brainstorming, system elements will be provided that can be mixed and matched to discover new ideas. Two teacher leaders and several members of our team at the Center for Learning Schools will feed forward by sharing resonance to the ideas in the last few minutes of the session.

# **LPD Symposium**

Title: Leading from the middle

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3325

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Castle Suite 1

Author/Speaker: Andrew Hargreaves

Company/Organisation: **Boston College** 

Co-Authors: Dennis Shirley

> Alma Harris Carol Campbell Ann Lieberman Anna Yashkina Joanne McEachen Joanne Quinn

Presenting Author: Dennis Shirley

Discussant: Alma Harris

Presentation Method: Symposium

### **Overarching Theme:**

Internationally, the downward press of curriculum standardization and the fragmenting force of individual school competition is squeezing out school districts and local public democracy as forces for educational improvement. Yet most high performing jurisdictions have strong local control and strong districts are often positive forces for systemic improvement. This symposium demonstrates how schools can collaborate successfully for improvement within, through, and across their districts in a strategy we call Leading from the Middle (LfM). LfM is a way to take collective responsibility for initiating and not merely implementing educational change. It is about shifting cultures and expectations by "re-imagining and redesigning the relationships between different levels of school systems, with less of an emphasis on compliance or even agreement and more on trust and collegiality" (Hargreaves, 2015).

#### Issue or Questions to be addressed:

- How do we define and operationalize Leading from the Middle (LfM)?
- What are the implicationS of LfM for district-to-district collaboration and school networks?
- What are some system-wide examples of LfM in the US and Canada?
- How is LfM a unique approach for driving improvement and not merely mediating top-down reforms

#### PAPER 1 ABSTRACT

Leading from the Middle: How Districts Take Collective Responsibility for Improvement. Andrew Hargreaves & Dennis Shirley

#### The Issue or Question:

The last decade has seen concerted attempts by many national governments, global consulting organizations, and publishing and technology conglomerates, to hollow out the role of local communities, democracies and control in public educational provision and reform (Hargreaves and Shirley, 2012). Despite the fact that many of the world's highest performing educational systems are either Asian city states, or invest great authority in local municipalities as in Finland and Canada (OECD, 2014; Sahlberg, 2011), little international attention has been given to the importance of local democracy and community as driving forces of successful system-wide educational change.

#### **Key Ideas:**

In response to the hollowing out of the middle, a middle-tier of peer-to-peer learning and school- to-school support has started to emerge instead (Chapman & Hadfield, 2010; Schleicher, 2015). One of the most promising middle-tier initiatives capitalizes on the evidence that strong districts can be sources of effective improvement (Honig & Hatch, 2004; Johnson et al., 2015; Leithwood, 2013) by enabling and expecting neighboring districts to work together to exercise collective responsibility for system-wide success (Ainscow, 2015; Supovitz, 2014). This paper describes the efforts and results of ten (one seventh of) Ontario school districts that have taken collective responsibility for improving equity in relation to students with special educational needs, and then for leading ongoing system-wide efforts to increase student engagement and wellbeing.

#### **Main Findings:**

Ontario districts exemplify LfM in five senses:

- They collectively drove a significant part of the government's equity and achievement agenda in the first phase, and defined the pursuit of student engagement and wellbeing in relation to the government's vision in the second and current phase.
- They established transparency of participation and results.
- They cohesively assumed collective responsibility for all districts' and students' success.
- They encouraged individual district responsiveness to local diversity while creating system coherence through deliberate circulation of initiatives and ideas.
- District leaders were mindful of the need for constant communication with each other and with the vision and priorities of central government authorities, without merely implementing the mandates of those authorities.

#### Conclusion:

By examining the collective role of districts in initiating, as well as implementing system-wide improvement, this study carries lessons for system leaders and improvement researchers about the role of the middle-tier in educational change. This tier can be more than a redundant irrelevance to reform or an innocuous mediating level of implementation. Rather, districts can be powerful collective agents of local democracy and regional responsibility in securing effective and equitable systemic change.

#### PAPER 2 ABSTRACT

From Flipping the System to Enabling a New System for Educational Improvement: Teachers' Professional Learning and Leadership For, With and By Teachers. Carol Campbell, Ann Lieberman, Anna Yashkina.

#### The Issue or Question:

As school improvement research extends to system improvement, questions continue about the appropriate balance between top-down reforms delivered by governments, teacher-led bottom-up change, and roles for middle tier districts or networks (Campbell, 2015; Fullan, 2009, 2010; Hargreaves and Shirley, 2009, 2012; Mourshed, Chijioke & Barber, 2010). Using evidence from Ontario, we focus on the current question of 'flipping education systems' (Evers & Kneyber, 2015) to enable teacher-initiated improvement.

#### **Key Ideas:**

Launched in 2007, the Teacher Learning and Leadership Program (TLLP) is a joint initiative through partnership between the Ontario Teachers' Federation (OTF) and the Ontario Ministry of Education with goals to:

- support teachers to undertake self-directed advanced professional development;
- develop teachers' leadership skills for sharing their professional learning and exemplary practices; and
- facilitate knowledge exchange for spread and sustainability of effective and innovative practices.

TLLP projects are on topics identified by teachers' as important - flipping the idea that professional development should be on mandated priorities. TLLP teachers receive funding for their projects - flipping the idea that someone else (formal administrators) hold the teachers' professional learning funds. And teachers lead their own professional learning and learning of their peers - flipping the idea that professional development is delivered by outside 'experts' and 'programs'.

#### **Main Findings:**

In 2014-15, we surveyed TLLP project leaders over all cohorts. All respondents indicated professional learning benefits, including improvements in: knowledge and/or understanding; instructional practice; communication/collaboration between teachers; energy/inspiration; self-efficacy; and technology. 97% of respondents indicated that the TLLP had supported development of their leadership skills. Ten teacher leaders wrote vignettes; they spoke of the challenges but ultimate benefits of: stepping into leadership and working with peers as partners; growing leadership in their team; learning leadership while implementing new ideas; developing collaboration, courage and support as a leader; and identifying and overcoming personal and interpersonal challenges. To share their knowledge, a combination of de-privatizing practices and professional collaboration (in person and online) is very powerful for teachers' individual and collective professional learning and leadership development.

#### **Conclusions:**

Evers and Kneyber (2015) argue "the educational system requires to be flipped. Replacing top-down accountability with bottom-up supports for teachers" (p. 5). TLLP embodies teacher-led collective action with considerable benefits for school and system improvement. However, we propose two further considerations. First, TLLP - and similar initiatives - do not negate the need for a wider system of supports involving governments, unions, and administrators enabling and championing teacher-initiated change. Second, a flipped hierarchy is still a hierarchy. Our growing evidence about how knowledge flows has moved from linear models to understanding multi-directional influences and interactions – an ecosystem of action rather than a hierarchy of authority. The time has come and the evidence exists to move beyond traditional systems - or even newly flipped systems - to rethinking and developing interactive systems of professional respect, mutual influence, and collective action for educational improvement.

#### PAPER 3 ABSTRACT

New Pedagogies for Deep Learning: NPDL. Joanne McEachen and Joanne Quinn

#### The Issue or Question & Key Ideas:

New Pedagogies for Deep Learning (NPDL) is a three year global partnership building new learning partnerships centred on deep learning accelerated through digital technologies in over 600 schools in 7 countries. Organized as clusters of schools in each participating country, NPDL partners are building knowledge of the new pedagogies needed for deep learning at every level of the system. NPDL has developed new measures and tools to assess deep learning and identify learning conditions at the school, district, and policy levels for their consolidation and dissemination in their respective educational systems. This presentation will look at the role NPDL clusters are playing as Leaders from the Middle as they connect laterally with other clusters, vertically with NPDL schools, and upward with educational system leaders to move the NPDL work forward. In particular it will discuss emerging lessons on the strategies and conditions that are being created and capitalized on by NPDL clusters to enhance the development of new pedagogies, their consolidation in schools and their dissemination to new sites.

#### **Main Findings:**

NPDL clusters exemplify Leadership from the Middle in the following ways:

- Cluster leaders as lead learners. NPDL has been a catalyst for cluster leaders to shift the nature of their relationship with schools. The collaborative inquiry cycle that is used at all levels is modeling and new way of working that is shifting from directing and prescribing to learning alongside teachers and principals about what works and what doesn't.
- Cluster leaders learning laterally. A culture of collaboration between clusters has been established, with cluster leaders connecting and learning from leaders in other clusters/countries on an ongoing basis.
- Cluster leaders as system players. NPDL cluster leaders have played a crucial role in influencing upwards to system leaders. At the most basic level, they have mobilized the necessary resources to initiate and sustain NPDL in schools. At more sophisticated levels, some cluster leaders have capitalized on the positive movement spurred by NPDL to reshape the education system where NPDL is nested and to strategize expansion to the country.

#### Conclusions:

NPDL offers a unique opportunity to build practical knowledge on the strategies and conditions under which deep learning can take place in classrooms, while simultaneously reshaping the entire system. While in its initial stage, 5 interactive factors have been identified as fundamental to spur and sustain deep learning in schools and across an educational system through school clusters. These 5 interactive factors are:

- 1. Precise definition of powerful pedagogy. (Deep learning competencies and defined learning progressions)
- 2. Action-based collaborative Inquiry as modus operandi (Within schools, between schools, and between cluster leadership and schools)
- 3. Capacity Building as a priority (Ongoing development and support at all levels)
- 4. Explicit attention to the whole system (Rubrics that identify key enabling conditions at the classroom, school and system)
- 5. Spread through contagion (Visibility of student engagement and depth of learning feed interest of other schools and administrators)

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## TE Symposium

Title: Authentic professional learning through collaborative inquiry: cultures and conditions for

improving learning and students' achievement

Topic: Teacher effectiveness, teacher quality and professional learning

Abstract ID: 3142

Parallel Session 6 Session:

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Castle Suite 2

Author/Speaker: Alan Bovle

Company/Organisation: Leannta Education Associates

Co-Authors: Beate Planche

Lynn Sharratt

Presenting Author: Alan Boyle

Chair and Discussant: Karen Edge

Presentation Method: Symposium

### **Symposium Outline**

In this symposium we focus on collaborative professional learning as the vehicle to sustain teacher effectiveness, quality and learning which relates directly to sub-theme 1 of this Congress. We define the overall approach to collaborative learning as modeling a positive learning stance that is being willing as a teacher and teacher leader to become a collaborator and co-laborer as well as co-learner. It means both participating in making a decision to undertake an inquiry, and, enabling the collective capacity of the teams by providing positive, supportive cultures within which to deliberate on the impact of the inquiry findings.

Built on this premise, this symposium will provide current research evidence about the positive impact of collaboration as the common thread among the three papers presented. Empirical data from the United States, Canada and England will be discussed and examined in this interactive session. The scholarly significance of this symposium is that our research on collaboration suggests that it is a leading factor in improving educational systems across the globe.

Following our three brief presentations, a facilitated conversation will focus on two questions:

- 1. What lessons from these studies can we learn and apply in our context?
- 2. What are the implications for the School Effectiveness and Improvement body of knowledge?

#### PAPER 1 ABSTRACT

Developing a co-learning culture as a way to build teacher quality, Beate Planche

Developing collaborative cultures where co-learning is valued as the format for collective capacity building requires both technical (first-order) and cultural (second-order) change. First-order changes are foundational but do not represent silver bullets for change or solutions in themselves unless second order or adaptive changes to implement a culture of learning are embedded (Planche, Sharratt & Belchetz, 2007).

Using recent research findings, this paper will address three things.

- · First, the paper briefly address some of the technical and cultural changes that build readiness for collaborative learning and pave the way for teachers and leaders to become co-learners which is integral to improving the quality of teaching in a school (Sharratt & Planche, in press).
- Secondly, research findings regarding how a learning culture can be sustained will also be highlighted (Sharratt & Planche, in press). Learning is the ultimate work we need to address (Fullan, 2008; Sharratt and Fullan, 2009. The ability of school leaders to facilitate teacher growth through an inquiry approach is at the center of building stronger learning cultures.
- Thirdly, this paper outlines an approach to teacher learning through inquiry that is driven by assessment that can be used at all levels of a school district - from the classroom to the boardroom. As several of our research participants recently outlined, we are increasingly clear on what 'should be' and we need to become focussed on what needs to happen to mobilize learning for all stakeholders in a school (Sharratt & Planche, in press). Dr. John Malloy, Assistant Deputy Minister, Ontario Ministry of Education makes this point well in the following recent reflection:

Collaborative learning insists that all educators are leaders in this process. Having said, this, those who have positions of leadership such as principals play a very important role to create the conditions necessary for inquiry to lead to changed practice. (in Sharratt & Planche, in press).

The drive towards improvement is a constant. Collaborative learning is a common phrase in education that is easy to say and challenging to implement. However, moral purpose leads the way. We must develop disciplined ways to inquire about effective teacher practice in order to wrestle with the implications of serving all students in the best way possible and which puts individual FACES on data to drive improvement (Fullan & Boyle, 2014; Sharratt & Fullan, 2012).

#### **PAPER 2 ABSTRACT**

The emergence of collaboration as a common strand in three big-city school reforms, Alan Boyle

In 2008, for the first time in human history, more than half of the world population lived in cities (UN population website). The success of urban school systems is therefore of increasing importance everywhere in the world. While each city is unique, cities have similar characteristics that affect education. Many urban schools struggle to deal with the educational challenges they face. And while you may find outstanding schools in all big cities, there are few examples of high-performing education systems within urban environments and even fewer cases of successful system-wide improvements.

In the decade 2002 – 2012 extensive and deliberate school reforms were implemented in three big-city education systems: New York, Toronto and London. Our detailed research into these reforms over the decade reveals the complexity you would expect in such large systems over a ten-year period.

Out of this research we examine how collaboration between teachers had a significant impact on teachers' practice and students' achievements in each of the three big cities. These were independent initiatives that were unconnected in any way and yet each demonstrates remarkable success in helping teachers to improve learning and teaching through authentic professional learning. The paper explains how collaboration was initiated, the way it was supported and how well it was sustained in each case. In this way we will reveal similarities and differences.

In New York the work of Inquiry Teams showed huge early promise but system-wide implementation was too pushy and its potential was never realized in terms of improving student achievement across the system.

Collaborative Inquiry in Toronto was more successful at raising the bar of student achievement in many schools while it engaged teachers. But achievement gaps were not closed across the system and the reforms were disrupted by disputes between the government and the teacher unions.

In London, school-to-school collaborations through informal and formal school federations had a remarkable and sustained impact and significantly raised achievement across the system and also reduced achievement gaps.

#### **PAPER 3 ABSTRACT**

The attributes of teacher-leaders who use collaboration to make a difference, Lyn Sharratt

Leaders who can articulate a vision for a school culture that values increased teacher voice and teacher leadership, are especially influential in increasing teacher's capacity to change practice to increase all students' achievement (Rennie Center on Educational Research & Policy and Edvestors, 2012, p. 9)

This paper discusses the impact of teacher leadership as the optimal way to support and motivate teachers when teacher leaders create the conditions where teachers can be successful day after day - involved in structured collaborative work in schools as well as across and beyond schools. As Hargreaves and Fullan suggest (2013), when the right conditions are in place, teacher leadership emerges. Those conditions include:

- focusing on the FACES of individual students;
- building a culture of trust;
- being open to dialogue;
- supporting professional relationships; and,
- putting structures in place to allow teachers to work together.

Shared ownership of the outcomes (a positive culture) and the infusion of skilled collaborators ("home grown" via intentional learning structures) are factors that develop strong team work. As one of our research participants noted, "Teachers change their practice when they are supported to take risks to try more effective teaching strategies". They become better teachers and good leaders with their peers. This paper will outline teacher voice in highlighting the impact of teachers' own work with each other, teacher leaders and students who learn along-side teachers in classrooms.

# **LDP Symposium**

Title: The empowerment of teachers as agents of change

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3325

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Castle Suite 3

Author/Speaker: **David Frost** 

Company/Organisation: University of Cambridge Faculty of Education

Co-Authors: Claudette Anderson

> Gordana Miljevic Gisela Redondo-Sama

Val Hill

Sarah Lightfoot Hanan Ramahl

**David Frost** Presenting Author:

Presentation Method: Symposium

#### PAPER 1 ABSTRACT

Sustaining support for non-positional teacher leadership in 17 countries. Claudette Anderson, David Frost, Gordana Miljevic and Gisela Redondo-Sama

This paper focuses on non-positional teacher leadership as an alternative to the development of leadership capacity through organisational development. The OECD report, Improving School Leadership (2008), advised that schools should 'distribute leadership' but through formal structures and leadership training for middle management. In contrast, this paper assumes the validity of an alternative, one that focuses on the means to mobilise all teachers and education practitioners as agents of change and empower them to exercise leadership in their schools (Bangs & Frost, 2015). Since 2009, this approach has been adopted and adapted by a variety of organisations working with schools in many countries in Europe and more recently in the middle-east. An interim report on the 'International teacher Leadership' initiative was published in a few years ago (Frost, 2011) and the key question arising from that was concerned with the sustainability of such a bottomup approach. This paper reports on an on-going audit of the activity presented in the 2011 report. It focuses in particular on recent research visits to Bulgaria and Macedonia and others planned for Moldova, Portugal and Bosnia/Herzegovina. The data collected on those visits is mined in order to make an interim assessment of what has been sustained and what has been learnt about how to sustain such work.

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Bangs, J. and Frost, D. (2015) Non-positional teacher leadership: distributed leadership and self-efficacy in J. Evers and R. Kneyber Flip the System: Changing Education from the Ground Up, London: Routledge.

Frost, D. (2011) Supporting teacher leadership in 15 countries: the International Teacher Leadership project, Phase 1 - A report, Cambridge: Leadership for Learning University of Cambridge Faculty of Education.

Pont, B., Nusche, D. and Morman, H. (2008) Improving School Leadership, Volume 1: Policy and Practice, Paris: OECD.

#### **PAPER 2 ABSTRACT**

Seizing the initiative: a teacher-led masters degree programme. Val Hill and Sarah Lightfoot, with Sheila Ball, Tracy Gaiteri, Clare Herbert, Jo Mylles and Paul Rose.

This paper arises from the launch in September 2015 of a new masters degree programme led by serving teachers under the umbrella of the HertsCam Network in the UK. The design of the degree programme presented in copious documentation for the purposes of university validation rested on intensive consultation with a range of stake-holders including teachers who had participated in a previous masters programme within the same network. Headteachers and other senior school leaders were also consulted about the kind of programme that they believed would support innovation and improvement in their schools. The evidence from these consultations is drawn upon in this paper in which the team responsible for the design and teaching of the programme present the rationale for the programme, one that is designed to enable teachers and other education professionals, regardless of status or position, to enhance their moral purpose and develop their leadership capacity. This rationale draws on the tradition of 'non-positional teacher leadership' (Frost, 2014) and 'teacher-led development work' (Frost & Durrant, 2003; Frost, 2013) in which it is assumed that change and improvement can be achieved through well-planned, time-bounded development projects. The paper discusses the pedagogy of the degree programme which is based on a set of key principles that have been the subject of consultation with teachers in the process of design and validation by a UK university.

### References

Frost, D. (2013) *Teacher-led development work: a methodology for building professional knowledge*, HertsCam Occasional Papers April 2013, HertsCam Publications, www.hertscam.org.uk.

Frost, D. (ed.) (2014) Transforming Education Through Teacher Leadership, Cambridge: LfL.

Frost, D. and Durrant, J. (2003) Teacher Leadership: Rationale, Strategy and Impact, *School Leadership and Management*, 23 (2), 173-186.

## PAPER 3 ABSTRACT

Case studies of teacher leadership for community participation in schooling. Gisela Redondo-Sama

This paper focuses on ways in which teachers have been able to act strategically to enable parents and other community members to participate in the life of their children's schools. It reports on the research undertaken by the author, a Marie Curie Research Fellow based at the University of Cambridge Faculty of Education. The design of this research drew on three complementary programmes: one being the INCLUD-ED: Strategies for inclusion and social cohesion in Europe (Flecha, 2015; Flecha & Soler, 2013) project from education project funded by the European Commission and based at CREA (Centre for Research on Theories and Practices for Overcoming Inequalities); the second being the International Teacher Leadership initiative funded by Open Society Foundations and led by David Frost at the University of Cambridge (Frost, 2011); the third being the APREME project funded by the European Union and Open Society Foundations and coordinated by the Kosova Education Centre (Vranješević & Čelebičić, 2014). In this ongoing research the role of teacher leadership, especially in relation to community based solutions to educational problems, is explored through a series of investigations in the HertsCam Network in the UK, in a number of the countries involved in the International Teacher Leadership initiative and in the APREME project. The paper looks at recent developments in Macedonia, Bulgaria, Bosnia & Herzegovina and Moldova. The paper explores issues concerned with the sustainability of programmes such as this in the light of current global trends dominated by the performativity agenda. The issue of inclusion is highlighted in view of the centrality of moral purpose as the key to teachers' motivation.

# References

Flecha, R. (Ed.) (2015) Successful Educational Actions for Inclusion and Social Cohesion in Europe. Dordrecht: Springer.

Flecha, R. and Soler, M. (2013) Turning difficulties into possibilities: engaging Roma families and students in school through dialogic learning. *Cambridge Journal of Education*, 43 (4), 451-465.

Frost, D. (2011) Supporting teacher leadership in 15 countries: the International Teacher Leadership project, Phase 1 - A report, Cambridge: Leadership for Learning University of Cambridge Faculty of Education.

Vranješević, J. and Čelebičić, I. (2014) Improving the participation of ethnic minority families in schools through teacher leadership, in D. Frost (Ed.) *Transforming education through teacher leadership* (pp. 94–107). Cambridge: LfL, University of Cambridge, Faculty of Education.

#### **PAPER 4 ABSTRACT**

Reforming Palestinian education from the bottom up: teacher leadership for emancipation, Hanan Ramahi

This paper reports on the first year of a teacher leadership programme in Ramallah, Palestine. Hanan Ramahi is a founder and director of an 'all-through' school (kindergarten through secondary). In her school she has introduced a programme based on the principles of 'non-positional teacher leadership' using techniques, tools and strategies developed in the HertsCam Network and refined through the International Teaching Leadership initiative. The paper also includes reference to similar programme recently launched in Egypt (Ramahi & Eltemamy, 2014). The approach has been adapted for the context of a school in Palestine through an action research study linked to Hanan's doctoral study. The paper draws on the monitoring of the programme in its first year to provide evidence of the ways in which teachers have been empowered and enabled to have a voice for the first time in their careers as teachers. An initial analysis of teachers' previous experience of interventions identified the shortcomings of training programmes and other professional development initiatives in which agendas were predetermined. The outcomes based approaches which were a common feature of that experience have been replaced with a process-based approach featuring reflection and collaboration to maximise ownership and agency. The paper includes an account of the state of the Palestinian education system which has been distorted by waves of foreign intervention and neglect. The analysis focuses on the potential of the teacher leadership programme for emancipation and the development of a Palestinian narrative about change and improvement in education (Ramahi, forthcoming). The concluding recommendations are for localised, contextual initiatives which take account of the realities of a disenfranchised society with a history of outside control

# **Mixed Paper Session**

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Staffa

Chair: Celia McArthur

## **PAPER 1 ABSTRACT**

Student-Led Parent-Teacher Conferences in Austria: "I didn't expect my child to develop so well!" Andreas Schubert, Laura Bergmann, Center for Learning Schools – Austria

In the context of the Austrian middle school reform, student-led parent-teacher conferences were mandated nationwide in 2012. The concept of student-led parent-teacher conferences emerged in the German-speaking world in recent years and was piloted regionally (Kiemayr). As part of change processes relating to school and learning culture in the classroom, students take the lead in presenting their progress, strengths and talents. The conversation is structured in various ways to support the student in leading the conversation and ensure that the adults remain responsive. While teachers and principals report positive changes in the relationship with parents and a higher participation rate of parents in comparison to the traditional parent-teacher conferences, there are several challenges to ensuring the student-led conferences have a positive impact on all stakeholders: the culture shift from negative to positive feedback, from product to process, from adult to student ownership. This paper presents examples of how schools have defined student-led parent-teacher conferences, available data on their development and challenges to implementation within the framework of Spillane's notion of practice as a phenomenon of the in-between: How have new tools, routines, structures and actors related to student-led parent-teacher conferences had an impact on school culture and the relationships among students, parents and teachers?

## **PAPER 2 ABSTRACT**

Differentiated instruction in Hong Kong secondary classrooms: edible or unpalatable? Sally Wain-Yan Wang, The Chinese University of Hong Kong.

Differentiated instruction has been widely accepted as the most effective approach to cater to learner diversity. In Hong Kong, recent reforms highlight the use of differentiated instruction in regular classrooms. Previous studies indicated that teachers encountered obstacles in the implementation of differentiation. Yet these studies were largely carried out in the western context. It is the aim of this paper to examine Hong Kong secondary school teachers' teaching beliefs related to differentiated instruction. This study uses multi-methods approach, with the application of a survey and focus group interviews with teachers. In the study, all subsidized secondary schools in Hong Kong were invited. A total of 17 secondary schools agreed to participate in the study, involving 503 teachers participating in the survey and 15 focus group interviews involving 35 teachers. The study was guided by two central research questions: a. What are teachers' teaching beliefs of differentiated instruction, and b. Are there any relationships between teachers' teaching beliefs of differentiated instruction and demographic characteristics such as gender, teaching experience, job ranking and professional development? Using Principal Component Analysis, three components of teaching beliefs were identified: Factor 1 Curriculum Planning, Factor 2 Teacher Expectations, and Factor 3 Fairness. Key findings suggest that: a. Teachers in general were positive towards differentiated instruction but they faced struggles and dilemmas in the implementation. b. Teachers more likely regarded differentiated instruction as a way of curriculum planning and design. c. Teaching beliefs of differentiated instruction were significantly associated with professional development related to catering to learner diversity. This study contributes to the literature of the implementation of differentiated instruction in Asia context. This paper concludes with the implications for curriculum development and teacher professional development.

## **PAPER 3 ABSTRACT**

Flourishing: A reciprocal relationship between student learning and teacher learning. Jennifer Kelly, University of British Columbia, Okanagan.

## Context:

Professional development in British Columbia (and within Canada) has traditionally revolved around a facilitated session by an expert in a specific field. With continual research (Hargreaves & Fullan, 2012; Mitchell & Sackney, 2009, 2011), the educational community is beginning to realize a change of focus is needed in order to fully utilize our greatest assets within our schools - our teachers. Changing Results for Young Readers is a provincial initiative that relies on a framework of continual professional development for teachers to meet the needs of their early readers who are struggling with the formation of their reading processing system (Clay, 1993; Pinnell & Fountas, 2009). The teachers participate in collaborative inquiry and choose a research question they will focus on throughout a year-long process, or perhaps longer. The professional learning involves knowledge for practice, knowledge in practice, knowledge of practice and knowledge of self (Cochran-Smith & Lyle, 2001).

## Purpose:

The three-year longitudinal qualitative case study began with the intent to examine the lived experience of a group of teachers participating in Changing Results for Young Readers and the impact of this type of professional learning. The second year of the study I focused my interviews on the teachers who chose to commit to their collaborative inquiry for a second year through dinner meetings with the same cohort of teachers. The third year of the study is currently coming to an end with a specific focus on the purposeful connection between flourishing in schools (Cherkowski & Walker, 2013) and collaborative learning within schools.

## **Initial Findings:**

Teachers are learning to implement reform within a community aspiring to deepen their knowledge of pedagogy while inquiring into their practice. By encouraging collaborative teaching as a way to engage in the inspiring and playful art of teaching, we are able to see the impact of this innovative professional learning initiative. One of the benefits of a longitudinal study involves noticing the sustained impact of teacher learning and the capacity-building influences in many schools led by the members of the district professional learning community.

## Significance of this research:

This project examines the lived experience of teachers committing to professional learning over the span of multiple years. In addition, I intend to continue this research and explore how participating in collaborative professional learning is connected to the notion of flourishing and when teachers' feel alive and passionate about their practice. This research is significant because the academic world tends to look for what is not working within education with the intent of reform - I am looking for what is working and how we can create more opportunities for flourishing within schools

## **PAPER 4 ABSTRACT**

The multiple forms of connection in a rural school network: supports and interactions to promote teacher collaboration and increase student engagement. Michael O'Connor, Boston College.

Connecting teachers to participate in professional learning is a crucial means to enact educational change, improve teacher effectiveness, and enhance student learning. But undertaking professional collaboration to improve instructional practice is particularly challenging for teachers in rural schools because of geographical isolation and a shortage or absence of peers in job-alike roles (specifically, content or grade level). This paper describes the work of a rural network in the US Pacific Northwest designed to promote students' engagement by developing professional capital (Hargreaves & Fullan, 2012) among rural educators. It specifies the collaboratively designed architecture of the network of nine (now 15) rural schools across three states, while highlighting collaboration among three English / Language Arts (ELA) teachers addressing new argument writing emphases in the Common Core State Standards (CCSS). This writing project points to the importance of professional cross-school collaboration, not only among the teachers themselves, but also across their district and state systems.

This study utilized qualitative methods to examine the argumentative writing project in three secondary English classrooms and the collaborative interactions of the teachers via the rural school network. In the writing projects, students adopted a stance toward 1:1 technology implementation in their schools and wrote an argument to convince a designated school or community audience of their position. To investigate the teachers' collaborative practices and the effectiveness of the various supports that facilitated their work, data were collected from multiple interviews with each of the three participating teachers, examination of their shared curriculum materials, and examination of online artifacts. The study found that peer-to-peer collaboration to initiate and implement curriculum change, along with support from system administrators and network leaders, led to successful curriculum innovation and implementation across isolated, rural schools. In-person meetings provided a space to develop trust, as well as intentional time to develop common goals and action steps. Network supports, such as a digital platform to collaborate, post, and share resources, provided a structure for teachers to work together on their project beyond in-person meetings. Support from local educational agencies gave teachers the professional autonomy to pursue their shared curriculum interests, while also encouraging the teachers to share their connective experiences to motivate others both in their schools and the rural network. The collaborative project led to improved teacher professionalism, the effective implementation of the CCSS writing standards, as well as increased student engagement and learning. While the project was largely successful, challenges will be discussed, including the realistic obstacles of isolation and technology limitations present in some of the rural contexts.

This paper provides a case example of teachers connecting in innovative ways to engage in professional learning in cross-state, rural contexts often overlooked in educational research (Kannapel & DeYoung, 1999). Lessons from the ELA argumentative writing project and teacher collaboration indicate the multiple levels of support and interaction that are necessary for successful cross-school improvement efforts in which teachers become initiators and drivers of innovation.

# **PTM Symposium**

Title: Measuring What Matters- re-thinking education measurement and accountability through local

and central assessment processes in Ontario, Canada.

Topic: Policy translations and mistranslations

Abstract ID: 3039

Parallel Session 6 Session:

Saturday 9 January 2016 11.00-12.30 Session Date and Time:

Location: Shuna

Author/Speaker: **David Cameron** 

Company/Organisation: People for Education

Co-Authors: Annie Kidder

> Elyse Watkins Jacqui Strachan Dan Hamlin

Presenting Author: David Cameron

Presentation Method: Symposium

## **PAPER 1 ABSTRACT**

Broader student competencies and their supporting conditions. David Cameron, Annie Kidder, Elyse Watkins, Jacqui Strachan.

This paper will frame and build context for larger themes detailed within the symposium. It will work through the current working sets of competencies and conditions that have been distilled over the course of the project's partnership work with scholars and other stakeholders.

This paper first will briefly unpack a multi-stakeholder process of developing a broader competencies framework drawn from wide scale consultations, intensive work with key Canadian scholars and ongoing work within research and practice communities. The paper will then work through each 'domain' area in creativity, citizenship, social-emotional learning and health. The paper will be framed by three interrelated areas:

- Summary descriptions of working competencies
- Supporting set of school learning conditions
- Potential interrelationships between competencies across domains—that support broader areas of student success.

The paper will close by introducing a core set of challenges that have emerged through work within the project and that may have implications in broadening local and system wide approaches to broader measures in key domains described as follows:

- How can we introduce broader goals and measures without simply adding to schools' workloads?
- What steps can be taken to ensure that new goals and/or measures won't be misused in the same way current test scores are often used to rank schools?
- Are there communications strategies we should undertake to ensure that this initiative doesn't reinforce the misconception that schools bear sole responsibility for students' success in all of the domains?

- Is it possible to develop sets of measures that can be relevant to both local needs and context, as well as applicable to a central understanding of the domains?
- How can we resolve the tension between the complexity of education and the public desire for concise reports or simple proxy measures of success?

Through a discussion of the concrete areas of student learning and development and the system-wide implications in moving towards different approaches to articulating the 'health' or effectiveness of school systems (Raptis, 2012), the paper is a launch point from which the symposium will dig more deeply into two major considerations:

- The explicit connections and disconnections between teacher practitioner measurement and classroom assessment processes and wider scale system measurement processes often done through large population student assessments and viewed as key components of accountability frameworks.
- The educator use of competencies as a means to deepen understanding of connections between classroom learning experiences and the articulation of domain specific student competencies, skills and behaviours detailed within MWM framework.

## PAPER 2 ABSTRACT

School field trials and educator consultations. David Cameron, Annie Kidder, Elyse Watkins.

This paper describes a case study of 12 school boards in Ontario, Canada. The case study is a part of the large broader measures partnership project, Measuring What Matters, in which areas of creativity, citizenship, social-emotional learning and health are defined and measured as a means to shift perspectives of educational accountability toward a model that is inclusive--done with educators not to educators-- and focuses on broad areas of school and student success that are critical for students, public education and society. The case study explores the use of specific student competencies as a means to develop a set of broader student competencies. The case study provides insights into building synergistic relationships between different knowledge types—infusing practitioner expertise and knowledge with scholarship and research. In so doing, the paper has four key objectives:

- To share findings from a case study of schools and school districts in Ontario that are exploring broader areas of student success within a multi-institutional, participatory 5 year project to build a broad index of educational measures of success from Kindergarten to Grade 12 in Ontario, Canada
- To introduce and explore a design method in which the 'research subjects' are also the 'researchers' within key domain areas of educational success in citizenship, creativity, social emotional learning, physical and mental health and quality learning environments
- To discuss the potential for coordinated system change from different institutional perspectives within the project through ongoing, distinct central and local, divergent and convergent work
- To use participant insight and discussion as a reflective learning opportunity in moving the project forward.

This study marks a critical shift for Measuring What Matters-- from one largely substantiated in scholarship and research to one infused and integrated with practitioner knowledge and expertise. The findings will further deepen understanding of the implications for policy and accountability of building and supporting explicit measurement in critical areas of student learning that are evident in ongoing classroom work but infrequently measured. While the field trials only represent one facet of a number of different types of partnership work in broader areas of student success within the project, the information elicited will further expose and help deepen understanding of system approaches to measurement and accountability for broader areas of school success. In so doing the paper seeks to expose inherent tensions between policy, research and practice-- commonality and pluralism within understanding, perspective and educational approach (Schon, 1995).

This paper will serve to couple practitioner expertise and knowledge with research and scholarship. In so doing, it provides insights into system wide attempts to broaden what is measured and what counts in education. It will explore the possibilities and problems of building broader measures of school success that both have a coherent central, common language but work within diverse, local contexts. It will serve to ground research and scholarship within adaptive, practitioner expertise and study.

## PAPER 3 ABSTRACT

Exploring school and system conditions for enhanced student experiences in student well being. David Cameron, Annie Kidder, Dan Hamlin.

This paper explores the role of large-scale assessment in accounting for system quality within large education systems. Amongst other things, the paper will:

- provoke a conversation about Ontario's policy sincerity in developing goals for its education system around broader areas of student well-being and how those goals relate to current narrow school accountability measures that drive much of the public debate about effective school practices
- re-think the viability, productiveness and necessity of whole population assessment in a political and policy environment that is currently pushing towards a broader consideration and definition of student success and learning.

In considering broader student competencies, there is an interrelationship between the competencies in each domain and the role schools and systems play in establishing conditions through which these competencies are supported (e.g. Sears, 2014). For example, the likelihood of students being able to develop working peer relationships within classrooms (one of the competencies defined in the creativity domain) relates to opportunities students have to work together on projects in group based classroom environments (Upitis, 2014). Opportunities for students to work together also allows for students to practice and develop the social capacities to work amongst peers (an aspect of social-emotional learning) that may be critical to success for students in future work-place environments.

This paper draws from self-reported data sources in an attempt to explore or consider system capacity to establish some of the school-based conditions that support critical areas articulated in the student competencies within the project. The paper uses school survey data (n=1000) over the past five years to explore some of the conditions in Ontario that currently may be in place within schools as well as some of the potential challenges that Ontario schools may have in building learning conditions that most readily enable broader competencies to flourish.

The survey items represent relatively simple 'counts' of the structures and resources available that allow schools to establish and sustain key conditions articulated within each domain. For example, a number of studies have suggested that positive student health outcomes are best supported by comprehensive health programs in schools, which are best established when there is a specialist health and physical education teacher within the school (Hussain, Christou, Reid and Fremman, 2013). The proportion of Ontario elementary schools that have a specialist health and physical education teacher presumably then may be a system inhibitor or enhancer for building system-wide school comprehensive health programs.

The paper will discuss the policy and funding implications of supporting and measuring broader areas of student success articulated in things like student 'non-cognitive' or well-being competencies. The paper considers the potential influence of public accountability of narrow areas of student success on resource choices that local school districts make within a constrained funding environment. In pursuing student well-being, a policy shift may be required in Ontario away from the continual articulation of 'effective' practices that are connected to narrow achievement measures towards a balanced consideration of what a quality school program requires in relation to resources and physical capacity.

# **RCEL Symposium**

Title: Layers of practice creating conditions for effective learning

Topic: Researching the conditions for effective learning

Abstract ID: 3005

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Jura

Author/Speaker: **Ulf Blossing** 

Company/Organisation: University of Gothenburg

Co-Authors: Rilana Prenger

> Kristin Vanlommel Sigrun Ertesvåg

Presenting Author: **Ulf Blossing** 

Chair/discussant: Pam Sammons

Presentation Method: Symposium

Creating effective learning for pupils in a classroom sometimes looks like a single teacher's endeavour in relation with his or her pupils. However, not only the teacher and the classroom are important units of change, also the school as a whole is an important unit of change, as well as the school municipality administration. School effectiveness research states that successful schools are included in layers of practice at the classroom, school and municipality level, constituting cohesion in terms of mission, policy and working routines. On the other hand, to understand and be able to promote improvement of the school as a whole, teachers' personal characteristics, such as motivation and professional attitude, and teacher-student interaction within the classroom, are important factors. In this symposium we therefore focus both on characteristics and activities of individual teachers, as well as the role of the school as a whole. The four papers in this symposium, consequently, discuss different layers of practice; the individual teacher, teacher-student interaction, and the school, as a whole. Thus we will promote the discussion of the links between the different layers.

The first paper focuses on the teacher level, from a psychological perspective. The question that is addressed in this paper is: Which teacher characteristics need to be in place so that teachers use data to improve teaching and learning in the classroom. The second paper also addresses decision making of teachers and asks if and on what basis they make high stake decisions. The third paper addresses teacher-student interaction and how the school as an organization promotes or inhibits teachers' improvement in classroom interaction skills. The fourth paper focuses on the local school level and the differences between successful and failing schools in terms of their organization. Also the relation to the municipality administration is included.

Our aim is to explore the links between the different level or layers or put in another way; the practice of the cohesion. What is its character? How is it linked through the different layers? And what can we learn when it comes to school development and planning for effective learning? From earlier research and the four papers we start the symposium discussion with the statements that the character of cohesion is multi-functional, both personal, relational and organizational; that is linked through the layers by working routines and organizational structures; and that when planning for improvement working routines and structures from the individual teacher, via the local school and to the municipal administration should be noticed. If that is possible and how, would be an interesting question to discuss. Finally we would also like to address what should be observed in new research projects from the basis of this discussion.

## PAPER 1 ABSTRACT

Organising data-based decision making for teacher and student learning: a psychological perspective on the role of the teacher. Rilana Prenger, Kim Schildkamp, University of Twente.

## Objectives and theoretical framework

Data-based decision making, in short data use, can improve the educational quality of schools (Schildkamp, Lai, & Earl, 2013). In this study, data use is defined as teachers' systematic analysis of data sources in order to study and adapt their educational practices for the purpose of maximizing learning results. Data-based decision making is both a collaborative and a highly personal activity. Teachers are asked to apply their data-based findings to their personal teaching activities and enact their educational principles. Evans (2009) stated that the efficacy of reform strategies, such as strategies to enhance data use, are only as effective as the individuals who deliver or implement them. 'Much more attention needs to be paid to the psychological states of teachers and leaders, as what they do most likely is derived from what they think about what they do and who they serve' (p 87). Therefore, it may be important to look at factors at the individual user level (Coburn & Talbert, 2006; Earl & Katz, 2006; Little, 2012; Wohlstetter, Datnow, & Park, 2008; Young, 2006), where psychological factors could have an important influence on data use.

Psychological (also referred to as motivational) factors determine a person's (intention to) behavior change (e.g., Pintrich & Schunk, 2002). Few attempts have been made to examine the impact of the psychological factors on teachers' data use practices. Also, most research applied qualitative methods. Understanding the relevant psychological factors influencing the use of data may contribute to effectiveness of interventions that aim to enhance data use among teachers. The present study aims to build a structural understanding of these relations by exploring which psychological factors contribute to teachers' data use (intentions). The main research question of this study is: To what extent can data use for instruction be explained by psychological factors among primary school teachers?

#### Method

In this study a quantitative methodology was employed by means of a questionnaire. We included the following psychological constructs: affective attitude, instrumental attitude, perceived control, social norms, self-efficacy, collective efficacy and intentions towards data use. These constructs were based on a literature review and existing theories of behavior change (e.g., Theory of Planned Behavior (Ajzen, 1991); Social Cognitive Theory (Bandura, 1986). Data use for instruction in the classroom was the outcome measure in this study.

## **Results**

Results show that perceived control, instrumental attitude, and intention towards data use all significantly influence data use for instruction (p<0.05). Instrumental attitude was partially mediated by intention towards data use. This means that a positive perceived control, a positive instrumental attitude and a positive intention increases data use for instruction among primary school teachers.

## Significance of the study

Effective learning of both teachers and students can be enhanced by applying data-based decision making. However, several psychological factors need to be considered when using data. Interventions aimed at data-based decision making can take the psychological factors found in this study into account to optimize results of data-based decision making and, consequently, educational quality.

## **PAPER 2 ABSTRACT**

Explaining teachers' data use in making high stake decisions. Kristin Vanlommel, Roos van Gasse, Jan Vanhoof, Peter van Petegem, University of Antwerp.

## **Objectives**

Student's lives are affected profoundly by decisions that teachers make (Earl & Katz, 2006) yet little is known about the way teachers make these decisions (Harteis et al., 2012). Research has shown that decisions vary in the degree to which they are based on intuitive or analytical processes (Kahneman & Frederick, 2005; Klein, 2008). Data-based decision making can challenge and complement intuitive judgments by adding additional information to the process, before the decision is made. This study sets out to explore to what extent teachers use data when they have to make high-stake decisions.

## **Theoretical framework**

In the decision-making process of teachers 4 stages can be defined, based on the model of Blackwell, Miniard, and Engel (2006): (1) Defining the Problem (2) Search for Information (3) Evaluation of Alternatives (4) Decision. Data are expected to be a valuable source of information in all of these stages. In this study, we will define data as 'all cognitive, social and emotional context, input, process and output data that are directly related to the pupil'. When these data become relevant to the teacher by adding meaning through a code, legend or framework, these data become information (Vanhoof, Mahieu, & Van Petegem, 2009).

## Method

With the aim of exploring the decision-making processes of teachers and providing in depth answers to the present research questions, we used a qualitative research design including semi-structured in-depth interviews with 17 teachers in first year of primary education. The coding process was mainly deductive, the theoretical framework was used as a starting point and utilized in analyzing the data (Schilling, 2006).

### Results

Observations in the classroom appeared to be the main data source when teachers have to make high-stake decisions that are directly related to pupils. However, observations are mediated by the person of the teacher who (unconsciously) uses his or her intuition to select, arrange and interpret the data into information that is relevant for him/her as a decision maker. In this manner, teachers transform data arising from observations into information that he or she will use during the decisionmaking process.

The results of non-standardized tests are set forward as the most important quantitative data source. Results from standardized tests are perceived to be less valuable, since teachers feel that these tests disable them to adapt the content and instruction to the specific needs of their pupils. Teachers state that they do not search for information by reading scientific research results because they find it hard to fit into practice. The main reason why teachers collect quantitative data appeared to be accountability.

## Significance of the study

These results are relevant to gain insight in the decision-making processes of teachers and will help to define how the quality of high-stake decisions within schools can be optimized. A second contribution of this study lies in its value for existing theories and conceptualizations with regard to teachers' data use in schools.

Paper 3 Abstract Organizing for teacher quality in the classroom. The role of the school as an organization. Sigrun Ertesvåg, Pål Roland, Merete, Högseth Kronstad, University of Stavanger.

## **Objectives**

Recently, the idea of studying the interactions between teachers and students in the classroom as a context for providing students with the opportunity to engage in insightful learning processes has gained currency in educational research. Prominent theoretical models that describe the most important aspects of instructional quality have been developed (Kunter & Baumert, 2006; Pianta, Hamre, & Allen, 2012; Wubbels et al., 2015). These models address domain-independent instructional quality and consistently organize teachers' instructional behavior into subdomains. For example, Pianta and colleagues describe three subdomains of teacher support: emotional support, classroom organization, and instructional support. Within this framework, the quality of teacher-student interactions and student-student interactions in each domain is considered a feature of the classroom (Pianta et al., 2012). These classroom interactions either promote or inhibit developmental change to the extent that the teachers engage and meaningfully challenge the students and provide social and relational support.

Effective teaching is not an activity that can be performed by single teachers in isolation. Teaching also includes professional activities at the school level, such as collaboration or building professional learning communities (Ertesvåg, 2014). These activities shape the learning environment at the school level (e.g., school climate, collective culture and leadership) and thus, directly and indirectly via classroom processes, affect student learning. To improve the learning environment in schools, the implementation process should involve both the individual teacher and the organization (Stoll, 2009). The joint effort among staff that is needed requires leadership of the process of implementation and collaboration. However, the effects of leadership on student outcomes are indirect, arising through organizational processes, rather than direct (Muijs, 2011).

#### Method

This mixed-methods study was employed by means of questionnaire and interviews. Classroom interaction was measured as a three dimensional concept (emotional support, monitoring and instructional support) (Ertesvåg & Havik, submitted). Moreover, we investigated how students' behavioral and academic outcome was related to teachers support and monitoring. Case study interviews shed light on the teachers' improvement of classroom interaction and the schools role in organizing for this.

## Results

A multiple indicator multilevel model indicated that there are significant differences between classrooms in student' perception of teacher support and monitoring. Generally, classrooms level support monitoring varied within the schools. However, descriptive statistics revealed that at some schools students reported higher classroom level mean of support and monitoring than the overall mean for all classrooms. The interview data indicated that the teacher did not have a clear perception of their role as part of a collective at school level. Also, knowledge in implementation processes, e.g. implementation drivers (Fixen et.al. 2005; Blasé et al. 2012) was scarce. Accordingly, the result depended on the formal school leaderships' promotion of collective processes in implementation process.

## **Significance**

The results shed light on how schools as an organization can promote or hinder teachers' development of classroom interaction skills and subsequently effect student outcome. In this, the results may contribute to improving teacher quality. Furthermore, the results contribute to the theoretical understanding of classroom interaction understood as a

## PAPER 4 ABSTRACT

Organizing school success. An institutional perspective on organizing leadership, teacher work and teaching in successful and failing schools. Ulf Blossing, Maria Jarl, Klas Andersson, University of Gothenburg.

## **Objectives**

The aim of this paper is to study the relationships between institutional elements (Scott, 2001) in the organization of the inner life of schools in order to explain school success. The paper summarizes a four-year Swedish research project studying the impact of schools' internal organization on student outcome. Variation in student performance between schools due to factors and processes associated with internal organization is receiving increasing attention in the fields of school improvement and school effectiveness (Hopkins et al., 2014; Reynolds et al., 2014). This paper contributes to the discussion by presenting results from a study using an indirect method of difference (Mill 1967) comparing the inner life of consistently successful and consistently failing schools over an extended period of time.

### Method

In the design we stress the importance of comparing successful and failing schools, selecting cases on the variation of the dependent variable (i.e. school success or not school success). We also stress the importance of a longitudinal perspective in the process of case selection as well as in the empirical search for explanatory factors and mechanisms within the selected schools. For the identification of 4 successful and 4 failing schools, we used data from the Gothenburg Educational Longitudinal Database (GOLD). Case study data was collected through in-depth interviews with principals, teachers and representatives of the school owners. Also, former principals of the schools were interviewed to gain a picture of development over time. 119 individuals were interviewed.

#### Results

Preliminary results indicate that successful schools are characterized by similar normative and cognitive elements while there is a variation concerning regulative elements. One indication of the core of the normative and cognitive elements seems to be that teachers jointly understand their mission as adapting teaching for the pupils so they can learn and reach the goals of the curriculum. It is the task of the teacher to develop instruction in relation to the needs of the pupils. However, the regulative elements vary, which could make the successful schools appear different at first sight. One school could appear to be structurally organized with clearly defined teacher teams and leaderships roles, while another could appear less definable in its organization.

Concerning how schools' internal organization has developed over time, results indicate that successful schools are characterized by a long development in the directions of joint normative and cognitive elements, with relatively minor external involvement which disrupts organizing processes. We often find for example that far back in the school's history there was a goal-driven school leader, who stated their intentions for the institutional elements of the school and began organizing accordingly.

## Significance

This study contributes by confirming earlier results of successful schools, and adding the importance of long term stability in normative and cognitive institutional elements. Support from the municipal administration is important. One important implication of the study is that principals who aim at developing the practices of the school should introduce working routines/rules, especially concerning the teaching work and student learning, to promote cohesion throughout the local school organization.

# SE Roundtable Discussion

Title: Making the journey from self-evaluation to self-improvement

Topic: Self-evaluation: schools and systems improvement

Parallel Session 6 Session:

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Barra

Author/Speaker: Alan Armstrong

Company/Organisation: **Education Scotland** 

Co-Authors: Graeme Logan

Presenting Author: Alan Armstrong

Presentation Method: **Round Table Discussion** 

Scotland has a very well-established approach to school improvement. Key elements of the education system, including classroom practices and learners' experiences, show evidence of increasingly high quality. However, there is a gap between progress made by learners from most socially disadvantaged backgrounds compared to those from more advantaged backgrounds. Scotland is strongly committed to addressing this issue.

Within the 'Scottish approach' to school improvement, schools are responsible for evaluating the quality of their work, and taking action to secure continuous improvement. School self-evaluation is supported and challenged by Scotland's 32 local authorities who have a statutory responsibility for providing public education and ensuring continuous improvement in schools. Schools are also subject to external evaluation by Her Majesty's Inspectors (HMI) from Education Scotland.

Schools, local authorities and HMI use the same quality indicators from How good is our school? (4th edition September 2015) in evaluating a school's work. The indicators cover the full range of a school's work and help to identify strengths and priorities for improvement. They play an important role in stimulating evaluative reflection and professional discussion in schools.

The Scottish education system works well for most children and young people, who make good progress in their learning. However, inequity and the poverty related 'attainment gap' persist. In direct response, the Scottish Government's First Minister launched the Scottish Attainment Challenge in February 2015, bringing a greater sense of urgency and priority for everyone involved in Scottish education to focus efforts on narrowing the attainment gap. An Attainment Scotland Fund was also introduced (£100m over four years), providing additional, targeted finance to local authorities and schools with the highest concentration of primary-aged pupils living in poverty.

Education Scotland, the national improvement agency, will appoint Attainment Advisor for each local authority to support the Scottish Attainment Challenge. They will work collaboratively alongside local authority staff on agreed priorities which support raising attainment.

A new draft National Improvement Framework was launched on 1 September, bringing together evidence and data needed to improve further Scottish education. The Framework is based on the OECD Synergies for Better Learning report and six key areas of evidence. Part of learner assessment evidence will be new standardised assessments, which will support and inform teacher judgements. We need to ensure that assessment results are not taken out of context or that perverse incentives of 'teaching to the test' return.

Education Scotland will also create a national hub which will be a centre of educational expertise that will support the Scottish Attainment Challenge. The hub will provide specialist and bespoke support to practitioners to help raise attainment of those children living in areas deprivation. It will play a key role in moving knowledge to action around the education system.

This Round Table discussion will focus on how we ensure that current systems and structures adapt effectively and are aligned to provide clearer improvement, support and accountability. How can we ensure that the success of education on improving children's outcomes is evaluated effectively, based on a balanced range of measures?

# **Mixed Paper Session**

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Rockall

Chair: Dr M McCulloch

## PAPER 1 ABSTRACT

Critical analysis of concepts and traditions in "disadvantaged schools" research. Heidi Vartiainen, University of Helsinki.

This presentation is based on a forthcoming critical literature review article, which deals with the concepts and research traditions related to disadvantaged schools' research. As a background is the observation that the previous school improvement research seems to divide into at least two openly "competing" traditions, that of school effectiveness research and the one criticizing it (e.g. Thrupp 1999; Wrigley 2011; Sammons & Bakkum 2010). A division seems to go all the way back to Coleman report (1966), Bernstein (1971; 1973; 1977) and studies that wanted to improve disadvantaged schools and to fight against the predestinated world view created by the previous research (e.g. Rutter et.al. 1979).

For this paper, the school improvement research is understood broadly relating to all research that concerns "disadvantaged schools". The main research question is: How is the disadvantage constructed in the research settings? Subquestions are: What kind of research traditions can be identified in the disadvantaged schools research? How are the concepts relating to "disadvantaged schools" constructed in school improvement research?

In order to theoretically conceptualize the subject the idea of "middle-class norm" (Power et.al. 2003; Skeggs 2004; Savage 2000) is used. Schools named as disadvantaged are most often socio-economically poor and multicultural and both ethnicity and social class intersect in theorizations of the middle-class norm. The hypothesis is that a so called disadvantaged school is constructed against the middle-class norm or normal, which means an image of a school as it should be. The problem is that this might lead to what Diane Reay (2004) refers to as demonized groups of children and schools. Larry Cuban (2003) states that if we only value one kind of (normalized) success of schools, we are bound to get schools, whose value is not valued. It is justified then to ask what makes a school disadvantaged in different studies. Research has an impact on policies, which in turn have an impact on actual lives. Thus, choosing and using the concepts and settings is not insignificant.

Following Peter A.J. Stevens' (2007; Stevens et.al. 2011) studies ten highly valued international education journals were chosen. From these journals articles that a.) relate to disadvantaged schools research, b.) have primary or lower secondary school in their focus, c.) are peer reviewed and d.) are published between 1995–2015, were chosen.

In the analysis four research traditions were constructed. The analysis shows that "disadvantage" is often defined against a norm or normal, which all (good) schools are expected to be like. When looking at what is not disadvantaged based on what appears to be, it means homogeneous (White) student body, well enough achievements in national learning tests and high rather than low socio-economic structure in school and its catchment area. This could be described as middle-class normal, the "invisible", against which all schools are compared to. Schools that fail to be "normal" are then disadvantaged or failing, even though we could instead value the other kind of goodness they might have.

#### PAPER 2 ABSTRACT

Character education and human flourishing. Gary Walsh, freelance consultant.

Research data from OECD is showing that 'social and emotional' skills are strongly correlated with life outcomes, often more so than cognitive skills (OECD, 2014). Linked to this is the global resurgence in the controversial field of character education (CE) and an increased focus on 'non-cognitive skills' (Gutman and Schoon 2013).

Based on a recently submitted Masters dissertation by the same author, this paper offers some background and contextual information in the form of critical literature and policy reviews, along with an exposition of the following research guestions: What is the research-evidence base for CE? What are the political purposes of CE? Does CE have an underpinning philosophy or ideology? Could the desired outcome of CE, claimed as 'human flourishing' (Jubilee Centre, 2013) be better achieved by other means?

The paper shows that CE cannot be justified as a discrete practice in its own right due to a lack of core theoretical principles or practices (Lapsley and Narvaez 2007); it is best understood instead as an umbrella term that may or may not include a variety of practices (Howard et al 2004); it tends to be implemented by governments in the absence of critical evaluation; and the evaluations that do exist show that while CE shows some promise, it is likely to have detrimental as well as positive results (SCDRC 2010).

The paper also shows that the claimed ideology of the 'traditional' CE movement is one of neo-conservatism and neoliberalism that emphasises stability, maintenance of the status quo, protection of existing power relations, competition, material success and the development of a compliant and industrious workforce (Purpel 1999, Winton 2008).

The paper concludes that any approaches aimed at the cultivation of character, non-cognitive and/or social and emotional skills should be understood within a broader sociological framework such as 'thin communitarianism' (Olssen 2014) with clear and explicit commitments to care, democracy, justice, rights and social solidarity.

## PAPER 3 ABSTRACT

Are primary school teachers stressed when they teach in more heterogeneous classes? Wolfram Rollett, Katja Scharenberg, Wilfried Bos, University of Education, Freiburg.

Teacher stress is one focus of empirical research on the teaching profession. Lower levels of teacher strain are considered as important aspects of school quality (Holtappels et al., 2009). Occupational strain can impair characteristics of the learning culture (like teaching quality, e.g. Klusmann et al., 2006) or organizational culture (like readiness for innovation, Lossen et al., 2013). The success of school development measures likewise depends on avoiding an overload of work related strain of teachers (Böhm-Kasper et al., 2001).

Research on teacher stress increasingly addresses characteristics of the workplace, the work activities or the organizational conditions. Yet, the effects of differences in classroom composition on teachers' strain have not been a topic of systematic empirical research so far. This is quite surprising since dealing with the diversity of students is one of the key issues in teaching (Trautmann & Wischer, 2011).

The present paper intends to contribute to close this research gap. Its theoretical foundation is the Erfurt model of school stress and strain (Böhm-Kasper et al., 2001). It comprises the stress-strain sequence (Rudow, 1994) and distinguishes objective requirements of the teachers' work place ("stressors"), mediating processes of subjective interpretation (indicated by job satisfaction, Böhm-Kasper, 2004) and resulting individual occupational strain. Based on this theoretical foundation we raise the following research questions:

- 1. Are dimensions of classroom composition important for teachers' occupational strain?
- 2. Are these effects mediated by processes of subjective interpretation?

The study KESS4 ("Competencies and attitudes of students - grade 4", Bos & Pietsch, 2006) provides data of 306 primary school teachers in Hamburg/Germany and indicators of the composition of their classes (total of 6,889 students): average level and heterogeneity of reading achievement, average level and heterogeneity of social composition (HISEI) and proportion of students with migration background.

Teachers' occupational strain was measured by two scales (time strain and psychophysical strain) of the Erfurt Stress Inventory (EBI, Böhm-Kasper et al., 2000; Scharenberg et al., 2013). The EBI job satisfaction scale was used as an indicator of processes of subjective interpretation. In addition, individual background variables of teachers (gender, years of employment, employment status) were taken into account.

To analyze the data, stepwise multiple linear regression analyses were performed. Missing values were imputed using an EM algorithm in SPSS 22.

For time strain and psychophysical strain, none of the indicators of classroom composition proves to be a significant predictor. Analyses for mediating and moderating effects of differences in job satisfaction do not show significant results.

Overall, our findings suggest that different dimensions of classroom composition are not psychologically relevant stressors for primary school teachers. This is an important result as it contradicts the findings of earlier survey studies where teachers have often highlighted students' heterogeneity as an important occupational stressor. According to our findings, however, primary school teachers manage to deal with a more heterogeneous classroom composition in their teaching so that it has no unfavourable effects on their job satisfaction or perceived occupational strain.

# **LDP Paper Session**

Topic: Leadership development and practice to build sustained improvement

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Location: Malin

John Daffurn Chair:

## PAPER 1 ABSTRACT

School leadership and its effect on student achievement: The mediating role of job performance of teachers and school climate. Vartika Dutta, Goa Institute of Management.

## **Purpose**

The present study examines the role of the job performance of teachers and school climate in mediating the relative effects of principal leadership behaviour on student achievement.

# Design/Methodology/Approach

In corroboration to various theories from school leadership and work psychology, we hypothesized relations among dimensions of principal's instructional and transformational leadership behaviours, teachers' perception about school climate (social and affective environment and physical environment), and their behaviours critically determining their job performance (organizational citizenship behaviour, counterproductive work behaviour, and task performance) and student outcomes. The effect of leadership behaviours of principals on student achievement is hypothesized as indirect, with either a weak or statistically insignificant direct positive effect on student outcomes. Path modeling was applied to validate a mediated effects model using cross-sectional survey data comprising of principals and teachers data from 306 secondary schools in two Indian metropolitan cities of New Delhi and Kolkata.

### **Findings**

Principal leadership behaviours were not associated directly with either of the teacher behaviours determining their job performance or school-aggregated student achievement. Rather, the transformational leader behaviour showed an indirect effect, through the social and behaviour, task performance, and counterproductive work behaviour. The physical climate, however, appeared to play a dominating role in mediating the instructional leadership effects on teacher job performance variables. Comparing the relative indirect effect sizes of the instructional and transformational leadership behaviours on student achievement, principals appear to favour the former approach. Out of the key job performance variables of teachers' the task performance of teachers appeared to be the most powerful mediating variable when considering the relative effect of various leadership behaviours on student achievement.

## Originality/value

This study provides further empirical evidence that instructional leadership better captures the impact of school leadership on student outcomes when compared to its transformational counterpart. By identifying the relative effects of different leadership practices, school leaders, and educational practitioners can focus more on altering the distribution and frequency of those practices that work best for ameliorating student achievement levels.

### **Research limitations**

The limitations pertaining to this study majorly have three key limitations. Firstly, data for the study were collected only once, during a limited time-frame. Secondly, the study is limited by aggregating teacher data to the school level. Thirdly, owing to the cross-sectional nature of the study, the inferred causality is not certain.

## **Practical Implications**

This paper tries to address some of the key issues, which affects the student achievement in secondary schools. The study's findings can be considered by school systems across the world to understand the importance of teachers' job performance variables and school climate.

Keywords: Leadership, Teacher job performance, School climate, Student outcomes, Secondary schools

## PAPER 2 ABSTRACT

Developing Leadership in Mathematics Education. Christine Suurtamm, Sarah Russell, Faculty of Education, University of Ottawa.

It is well documented that the role of the administrator as instructional leader has a strong impact on student achievement (Fullan, 2007; Hargreaves, 2009). However, school principals may face particular challenges in instructional leadership in the area of mathematics. Many school principals identify similar areas for professional growth as teachers with respect to enhancing their own understanding of mathematics and current mathematics teaching and learning (Adler & Ball, 2009; Ball, 2003). Principals may also feel ill equipped to address stakeholder concerns, or know how to best support their teachers in enhancing mathematics teaching and learning.

There are several initiatives in the province of Ontario, Canada to help to support the principal as instructional leader in enhancing mathematics teaching and learning. One such initiative was a collaboration between the provincial principals' associations, the Ministry of Education, and a mathematics education researcher which led to the design and implementation of a 3-day Mathematics Institute for School Principals. The following goals of the institute were developed collaboratively with the three partners:

- Increase principals' understanding of school mathematics
- Build principals' confidence in their own understanding of mathematics
- Provide research about current ways of teaching and learning mathematics
- Deepen their understanding of effective mathematics teaching and learning
- Support principals in discussing mathematics teaching and learning with various stakeholders
- To support principals in teachers' professional learning in mathematics teaching
- implement the Core Leadership Capacities of the Ontario Leadership Framework (OLF) to build Principals' leadership capacity in Mathematics education.

The program consisted of research presentations, analysis of videos of teaching and student thinking, the modeling of effective professional learning activities to support teachers (Bednarz, Fiorentini, & Huang, 2011; Loucks-Horsley et.al., 2010), discussion and use of a leadership framework, opportunities to discuss challenges and dilemmas and situate them within an effective framework (Windschitl, 2002), and hands-on mathematical activities.

At this point, approximately over 500 principals have participated in one of the 8 institutes that have been implemented across the province. Principals took part in an evaluation survey at the end of the institute as well as a follow-up survey several months after attending the institute. The data suggest that principals saw the institute as:

- Enhancing their own understanding and confidence with mathematics
- Providing models of activities to do with their school staff as well and the larger school community
- Developing insights into what a mathematics lesson might look like
- Creating an opportunity to network with principals across the province
- Giving them data and confidence to respond to parents, teachers and other stakeholders about mathematics teaching and learning
- Using the OLF to build leadership capacity in Mathematics and to guide them with their annual growth plan and

Principals reported using activities from the institute with their own school community and felt confident to provide lesson ideas to their teachers based on their new comfort and information. The institute design appeared to address the initial goals and to be an effective way to help to support principals as instructional leaders in mathematics education.

## **PAPER 3 ABSTRACT**

Gestalt Leadership - Enhancing achievement outcomes for pupils through the application of principles of teacher leadership and the development of moderated approaches to teaching, learning and assessment. Jay Helbert, Emma Dudley, Argyll and Bute.

One school in Argyll, Scotland developed a practice model for developing teacher leadership as a means to drive forward teachers' professional learning, school improvement and pupil achievement. By placing leadership at the heart of the school's collegiate development time and the school's curriculum, the school developed 'gestalt leadership' where managers, unpromoted staff and pupils all developed leadership attributes and characteristics to secure improvement.

This paper seeks to outline the practice model that was established, the process that led to its establishment and the impact the model had on achievement outcomes for pupils as well as teachers' views on themselves as emergent leaders. It also details a cyclical process for moderation to be implemented across the curriculum. Drawing upon BtC5 and NAR resources and led by a teacher trained Moderation Facilitator, staff worked collegiately to develop a sustainable model for moderation focused on learner centred approaches. The impact on pupil achievement, the professional learning of staff and the wider impact of the moderation process that was developed will also be discussed.

The process of developing gestalt leadership began with a review of available literature that focussed on the requisite attributes and characteristics of teachers and school leaders. The areas of overlap were deemed to be capacities of teacher leadership. We then explored what might constitute the difference between teacher leadership and high quality teacher leadership and concluded that the latter occurs when teachers' leadership impacts upon colleagues and students across, and potentially beyond the school or department setting. By applying a wider array of leadership skills and capacities teachers enhance outcomes for students and colleagues given the same, or fewer resources and these outcomes are sustainable.

If an establishment is truly going to disperse leadership so that all teachers are part of a leadership gestalt, then all teachers need to understand and develop the requisite capacities for leadership and these are best developed from the earliest stages of a teaching career (Watt et al 2014; Donaldson 2010; McMahon et al 2013; Pachauri and Yadav 2014). Teachers who lead understand that their job is not to merely replicate accepted practice, but it is to inform the development of future practice.

After establishing a modus operandi for developing High Quality Teacher Leadership, the school then set about using it so that teaching staff led various aspects of school improvement. We will use one of these areas (effective use of moderation of teaching and learning, assessment and feedback) to illustrate the development of one teacher's' leadership capacities and exemplify the impact that her leadership practice had on colleagues' and students' learning.

Harlen (2004) and Reid (2007) argue that there is a lack of research surrounding moderation, in particular within individual schools and it is therefore down to authorities and establishments to decide exactly how to take it forward. By utilising gestalt leadership, as well as support materials from Education Scotland a robust method of moderation was developed to enhance achievement outcomes for pupils.

# **TE Paper Session**

Topic: Teacher effectiveness, teacher quality and professional learning

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Hebrides Location:

Chair: Moyra Boland

## **PAPER 1 ABSTRACT**

Evolution of class effect and students' achievement: an analysis of math scores by students in the fifth year of elementary schools in the Brazil States. Gabriella Palermo, Eduardo Ribiero, University of Southampton.

Factors that influence students' proficiency are numerous and complex, and include dynamics operating on different levels, from socioeconomic and cultural features of individuals and their families, through the dynamics that take place in classrooms between teachers and students, and extending to structural features of schools. Significant factors that explain better or weaker student outcomes include students themselves as well as their relatives, school employees, principals and teachers. The objectives of this study were analyze the evolution of class effect and the student's achievement for the years 2007, 2009, 2011 and 2013, and their correlation. Then, we saw which factors that influence the educational achievements of students in the fifth year of public elementary schools for the 27 Brazilians states. For this purpose, threelevel hierarchical linear models were used to assess the effects of socioeconomic, cultural and family backgrounds of students, teaching practices and styles, and even educational policies, management aspects and other features of schools. The primary data source was Prova Brasil, it is an educational assessment procedures conducted by the Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (Inep/MEC). The study showed that there is a positive correlation between the evolution of both analyses, the class effect and proficiency evolution. Moreover, it pointed out that the school practices followed the same evolution in some of the states.

## **PAPER 2 ABSTRACT**

The teacher and home learning environment effects on student achievement gains in mathematics: a longitudinal study. Andria Dimosthenous, University of Cyprus.

This longitudinal study investigates the short-term and long-term effect of Home Learning Environment (HLE) and teacher effectiveness (TE) on student achievement gains in mathematics. It is argued that there are studies investigating either the TE or the HLE effect on student achievement but there is almost no study investigating the effects of both the TE and HLE. We therefore have almost no data on whether effective teachers can compensate for children with a poor HLE.

The effect of HLE was mainly examined by looking at its impact on achievement of early years. Specifically, these studies looked at the impact of demographic characteristics of parents, the educational resources that are available at home, the learning opportunities offered to students at home as well as the literacy habits of parents which may also be related to student achievement.

Variation on student achievement gains during the first years of primary school can also be explained by the teacher behaviour in the classroom. In this context, the dynamic model of educational effectiveness refers to eight teacher factors (i.e., Orientation, structuring, questioning techniques, teaching modelling, application, the classroom as a learning environment, management of time, assessment) which were found to be associated with the student achievement gains. However, there is almost no study investigating the effects of both teachers and HLE. In this context, this study investigates the short-term and long-term effect of both the teacher factors included in the dynamic model and of the HLE on student achievement gains.

At the beginning of the school year 2013-2014, 24 primary schools of Cyprus were randomly chosen. The sample consisted of 880 first grade students and their parents. The data collection continued also for the next year when the children were on the 2nd grade (2014-2015). External forms of assessment were used to measure student achievement in mathematics at the beginning and at the end of grade 1 and of grade 2. To measure the eight factors included in the dynamic model, three observations of the behaviour of each teacher in his/her classroom were conducted during the two years of the data collection. A questionnaire measuring the HLE was administered to parents at the beginning of grade 1.

Multilevel analysis, revealed that the factor measuring the "home learning materials" is associated with the student achievement at the beginning and at the end of grade 1, but also with the progress that student made during the 1st grade. The learning opportunities offered at home, were associated with the student achievement at the beginning of grade 1. Moreover each teacher factor of the dynamic model is associated with the student achievement gains, but the factor "classroom as a learning environment, student-student interactions" had much bigger effect than the other factors.

Furthermore, we will investigate the long-term effect of the HLE and TE. We will also examine whether effective teachers can compensate the effect that HLE may have on students coming from low SES.

## PAPER 3 ABSTRACT

Assessing teacher effectiveness: Searching for classroom context effects in measuring quality of teaching. Elena Kokkinou, Leonidas Kyriakides, University of Cyprus.

Research has consistently shown that the classroom level can explain more of the variance in pupil outcomes than the school level. It was also found that a large proportion of this classroom level variance can be explained by what teachers do in the classroom. Consequently, teaching practice has become integrated into theoretical models of educational effectiveness which attempt to identify teacher factors associated with student learning outcomes. In this context, the dynamic model of educational effectiveness (Creemers & Kyriakides, 2008) refers to the following eight teacher factors which are considered as generic: a) orientation, b) structuring. c) teaching modelling, d) application, e) questioning, f) assessment, g) management of time and h) the classroom as a learning environment. Four longitudinal studies (including a study that took place in six European countries) and a recent meta-analysis (Kyriakides, Christoforou, & Charalambous, 2013) provided support to the importance of these factors for explaining variation in student learning outcomes. However, these studies took place in primary school level and the extent to which the classroom context affects teacher behaviour could not be examined since teachers who participated had to teach in a single class. This study aims not only to identify the effect of teacher factors on achievement gains in mathematics of secondary students but also to examine whether teachers behave similarly in different classroom contexts. Emphasis is also given to the effect of misbehaviour incidents in teaching quality. Specifically, stage sampling procedure is used to select 12 secondary schools (gymnasiums) in Cyprus. Then, all teachers who teach mathematics in at least two classrooms of students of the same grade were chosen. Student achievement in mathematics was measured at the beginning and at the end of school year 2014-2015. Quality of teaching was also measured through student questionnaires and classroom observations. Analysis of data is currently undertaken. A generalisability study will be employed to find out the extent to which the classroom context affects teacher behaviour as this is measured by either student questionnaires and/or classroom observations. Multilevel modelling techniques will then be applied to identify the extent to which each classroom-level factor is associated with student achievement. We will also search for differential effects of teacher factors by considering the effect of misbehaviour incidents. We will draw implications of findings for educational effectiveness research and for research on dealing with student misbehaviour. We will also discuss the extent to which the working process model can be used for summative and/or formative teacher evaluation purposes.

#### **PAPER 4 ABSTRACT**

Evaluation findings for the College Readiness Program (CRP) on student outcomes. Marlene Darwin, Dan Sherman, Suzanne Taylor, American Institutes for Research.

This paper presents findings from an independent evaluation of the National Math and Science Initiative's (NMSI) College Readiness Program (CRP), formerly known as the Advanced Placement Training and Incentive Program, as part of NMSI's validation grant funded by the Investing in Innovation Fund (i3). Preparing students for post-secondary success in science, technology, engineering, and mathematics (STEM) fields is a national priority. Of secondary students who graduated in 2013, fewer than half were considered to be prepared for college-level math and only 36% were prepared for science subjects (ACT College Readiness Benchmarks, 2013). This lack of college-readiness is even more pronounced among minorities underrepresented in these subjects (National Math and Science Initiative, 2013). NMSI's college-readiness program, CRP, is an approach to promote STEM education and teacher professional growth in high school and prepare students for success in post-secondary STEM subjects. NMSI's CRP is a comprehensive program that uses College Board's Advanced Placement (AP) curriculum and provides extensive teacher supports to create a college-ready school culture where all students, especially students who traditionally do not enroll in AP STEM courses, are encouraged to participate and succeed in AP math, science, and additionally, English courses.

### Research Questions

- 1. What are the impacts of CRP on the likelihood that students in the 10th through 12th grades within a school a) take AP exams in targeted subjects (mathematics, science, and English); and b) pass these exams?
- 2. What key components of the program are implemented with high fidelity?
- 3. Are variations in program implementation systematically associated with differences in program outcomes?

The impact evaluation uses a comparative interrupted time series (CITS) design to address the first set of research questions on the impact of CRP on student achievement outcomes. The CITS design compares outcomes of high schools implementing CRP in Indiana and Colorado over time to outcomes of other schools within the states selected to be as comparable as possible to CRP schools in terms of demographics and prior test outcomes. Approximately 60 high schools in Colorado and Indiana (30 in each state implemented CRP over three years, with 10 additional schools joining annually in each state:

The final paper will present three-year impacts for Cohort 1, two-year impacts for Cohorts 1 and 2, and 1-year impacts for all three cohorts. The year-one findings for the first cohort are encouraging. The percentage of students taking an AP exam and the percentage of students passing an AP exam increased for the treatment schools, but decreased slightly for the comparison schools from baseline to the first year of implementation across subject areas, with the only exception being the AP science exam passing rate, which increased for both the treatment and comparison schools. The treatment schools also significantly outperformed the comparison schools in all the other outcomes examined.

# **LDP Symposium**

Title: CAN CAN Northlan - closing the poverty related attainment gap

Topic: Leadership development and practice to build sustained improvement

Abstract ID: 3258

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.00

Location: Orkney

Author/Speaker: Isabelle Boyd, CBE

Company/Organisation: North Lanarkshire Council

Co-Authors: Nancy Ferguson

Presenting Author: Isabelle Boyd, CBE

Presentation Method: Symposium

## CAN CAN Northlan - closing the poverty related attainment gap

North Lanarkshire is one of 7 local authorities involved in the Attainment Challenge Fund. The national programme is referred to as the Scottish Attainment Challenge. However when launching our approach our stakeholders renamed the programme as CAN CAN - Challenging Attainment in North Lanarkshire by ensuring a focus on challenge, support, care and nurture. We adopted this to exemplify our positive attitude to change and our confidence in making a difference. We can raise attainment while closing the poverty related attainment gap. Poverty is a barrier to educational attainment, however our philosophy is that educational attainment and achievement is a pathway out of poverty.

Of our 121 primary schools many have significant numbers of pupils living in the poorest communities in Scotland. 67 of our primary schools have over 50% of the pupil population from the three lowest deciles as determined by the Scottish Index of Multiple Deprivation SIMD.

As a consequence of CAN CAN our schools benefit from greater access to resources such as additional teachers and other professionals i.e. speech and language therapists and tailored professional learning opportunities for practitioners.

Our bespoke plan has a focus on improving literacy, numeracy, health and wellbeing while continuing to develop our selfimproving school model. Individual schools, classes within schools and sometimes individual named children have bespoke improvement actions selected from a menu of evidence based approaches within these themes and backed by data.

## We are:

- setting ambitious stretch aims in literacy, numeracy, health and wellbeing
- developing robust mechanisms to monitor impact
- supporting schools in embedding sustainable systems for gathering, analysing and responding to data
- implementing interventions underpinned by an evidential basis, with an emphasis on excellent teaching and learning
- using detailed school-level data
- building capacity through school based 'change radicals'

Primary schools have access to 'Universal Offers' to build capacity around the effective use of data to drive improvement. To ensure no child living in poverty is overlooked in North Lanarkshire, all schools are supported in the use of data to identify and intervene appropriately. Increased targeted and intensive support (keys to success) is provided to schools and clusters within the most concentrated areas of deprivation. This recognises that individual pupils and individual schools together with families of schools will require additional resources to close the poverty related attainment gap. Targeted funding is most effective when applied in the following context: collaboration between schools; better school leadership; strong school-level data; systematic evaluation to monitor impact.

In this symposium we will explore the specific interventions and actions to ensure equity in raising attainment. We will look at the universal offers and 'keys to success' in three schools. In school 1 we will examine approaches to literacy, in school 2 the building of a nurturing school and in the third how an increase in physical activity impacts on achievement and attainment.

By sharing our work within, between and across our schools we ensure -

'NO ISLANDS OF EXCELLENCE IN NORTH LANARKSHIRE'

# **LDP Roundtable Discussion**

Title: Working together to build a national leadership strategy

Topic: Leadership development and practice to build sustained improvement

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 12.00-13.00

Location: Orkney

Author/Speaker: Kenneth Muir

Company/Organisation: General Teaching Council for Scotland, Scottish College for Educational Leadership

Co-Authors: Gillian Hamilton

Presenting Author: Kenneth Muir

Presentation Method: Round Table Discussion

Teaching Scotland's Future (Scottish Government, 2012) confirmed the central place of educational leadership, at all levels in the system, as a key driver for improvement in outcomes for Scotland's young people. The report noted that:

"The importance of leadership for successful learning and the need to develop leadership qualities and skills from the outset of a career have been strong themes throughout this report. Scottish education needs to develop leadership attributes in all staff as well as identifying and supporting systematically its future headteachers." (page 84)

Subsequently, key national organisations have worked in partnership towards a strategy for career-long educational leadership in Scotland, firstly through the National Partnership Group and subsequently through the National Implementation Board. This national strategy aims to secure a widening of leadership capability and capacity as part of a wider aim to foster autonomy in professional learning across the teaching profession.

This round table discussion will begin by examining the different elements and approaches used to deliver this strategy to date, including:

- The revision of the GTCS Professional Standards with leadership as a 'golden thread' running through the suite of Standards, and for the first time, the inclusion of a specific standard for middle leadership which sets out the key purpose and professional actions of middle leaders;
- The support given to leadership development through the process of Professional Update introduced from August 2014 for all registered teachers in Scotland, and through effective, systematic PRD;
- The establishment of the Scottish College for Educational Leadership to drive forward professional learning in leadership for teachers at all stages of their careers as part of this national strategy;
- The combined role of GTC Scotland's Accredited Professional Recognition Programmes and SCEL's endorsement processes in supporting leadership development;
- The development of SCEL's Framework for Educational Leadership, which provides a national leadership development continuum; and
- SCEL's emerging suite of programmes supporting leadership development at all levels.

The authors will present a summary of each element and approach, demonstrating connectedness across the work of national organisations involved in Scottish education and leadership to achieve national aspirations. They will provide participants in the discussion with the opportunity to explore the impact of this work to date, and to consider whether as a nation, we are achieving the balance between addressing system needs and individual needs in career-long leadership development. The discussion will conclude with the consideration of next steps in these important areas.

# **RCEL Paper Session**

Topic: Researching the conditions for effective learning

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Science Centre Tower Base North 1 Location:

Chair: Val Corry

## PAPER 1 ABSTRACT

Social and Emotional Early Development: a study of an intervention to improve affective outcomes in primary schools. Daniel Muijs, Christopher Downey, University of Southampton.

This paper reports on the results of an intervention to improve the social and emotional skills of elementary school age children and to build their resilience and empathy. The development of social and emotional learning has previously been found to lead to positive social behaviour, fewer conduct problems and improved attitudes about self, others and school (Brown, Low, Smith, & Haggerty, 2011). The programme therefore explicitly aimed to develop such skills through targeted activities. The programme is based on principles of social and emotional learning, teaching thinking skills and gamification, and consists of ten discrete activities which encourage reflection through collaborative group work, prompted by a scenario depicted through a cartoon. Combining these three elements constitutes the innovative approach of this programme.

The programme was run in in three local authorities in England between January and July 2014. The final sample consisted of 16 schools, 42 teachers and 1218 pupils. The programme was run in year 1 and year 5 of primary school. A quasiexperimental design was used to study the impact of the programme. The 16 schools were randomly divided into two groups, with schools in group 1 receiving the intervention in the first ten weeks of the programme, and schools in group 2 receiving the intervention during the following ten weeks. Schools in group 2 therefore acted as a comparison group for schools in group one during the first ten weeks, while receiving the intervention subsequently. Schools were invited to take part in the programme on a voluntary basis, but were informed that they would be randomly assigned to group 1 or group 2. The programme ran for ten weeks in each group of schools.

Three main measures were used to measure impact: the Child Behaviour Scale, a measure of children's aggressive, prosocial, or withdrawn behaviour; the SEED-AS, a measure of pupils' personal and self-development, emotional literacy, empathy and tolerance, assertiveness and communication, and conflict management skills; and a peer nomination instrument. Fidelity of implementation measures were also used.

Overall, there appears to be a modest but significant impact of the programme on almost all subscales of the Child Behaviour Scales, with the exception being aggression. In both group 1 and group 2 an increase in mean scores was measured following the intervention. In group 1, where we were able to test this, there appeared to be a further improvement 10 weeks later. 2-way ANOVA's using group, occasion and a group/occasion interaction term as covariates suggested that all three terms were significant, suggestive of a programme effect.

Teachers reported class-level improvements on all aspects of SEED-AS as the programme progressed. These were particularly pronounced and statistically significant for emotional literacy, empathy and tolerance, and for conflict management skills. There were moderate and significant correlations between implementation fidelity and improvements in the SEED-AS subscale scores over time.

## **PAPER 2 ABSTRACT**

Creating caring environment to promote effective learning for immigrant students. Jisu Ryu, Jason Johnson, Jeff Walls, University of Minnesota.

Schools aim to create strong academic outcomes for students. Throughout the United States and Europe, schools face particular challenges educating students from recent immigrant families and attempting to create the right conditions for effective learning for this population. The present study examines the above challenge by exploring the case of Cosmopolitan School, an urban charter K-8 school in a Midwestern city in the U.S. Cosmopolitan School is a particularly fertile ground to examine the above dilemma because the student body is composed almost entirely of first or 1.5 generation immigrants, mostly from East Africa. This study focuses on the connections between educational caring and student engagement, with a particular eye to understanding the organizational aspects of engagement and caring.

Lawson & Lawson (2013) highlight the importance of organizational dimension that affects student engagement and effective learning. They argue that "exploring how the study of student engagement dispositions, population characteristics, school ecologies, and place-based, social geography might better highlight the engagement-related strengths and needs of vulnerable student populations (p.3)". Regarding caring, Tronto (2010) highlights three aspects of care that organizations ought to examine to ethically undergird the basis of care: the purpose of care, the particular care needed by individuals, and the power relationships that mediate care. By examining these three factors, the organizations can create a space that resolves conflicts among members, focuses on individual approach of caring, and balances power dynamics.

This study employs mixed-methods. Data from a student survey were analyzed using Exploratory Factor Analysis (EFA). Data were also gathered via interviews with teachers, and via photo elicitation interviews with students (Epstein, Stevens, McKeever, Baruchel, 2006; Harper, 2002). One of the unique organizational factors that emerged is a "Global Citizenship" factor that not only indicated that students in this school feel being aware of global issues is important but also feel they have a sense of agency to make a difference in the world. The importance of tying schoolwork to global awareness emerged in teacher and student interviews as well. A second important factor that emerged from EFA is a measure of student perception of teacher engagement that goes beyond typical academic support for students and includes elements of caring. A third factor contained items that indicated students feel they are cared for by other students and describe their

class as a family. The fact that this factor is distinct from the dyadic teacher-student caring relationship is interesting in that this finding supports the notion that a truly caring classroom environment encompasses more than the relationship between the teacher (caregiver) and student (care-receiver). In addition, teachers have built collaborative and supportive relationships not only among teachers and but also with administrators, which in turn contributes to a family-like atmosphere in school. Finally, the student interviews showed that the school might have created an appropriate and culturally responsive space which resolves conflicts and cares about student needs.

In conclusion, these findings have important implications for school leaders and policymakers to create the right conditions for effective learning of immigrant students.

#### PAPER 3 ABSTRACT

Accessible and reciprocal assessment practices - arrangements shaping development. Lisbeth Gyllander Torkildsen, Department of Development, Helsingborg City.

Assessment for learning has been a research area of interest for many years. The extent body of research mainly focuses on teachers' practices. However, in later years an increased interest of students' perceptions and experiences can be noted. This study brings forth students' voices on how to make assessment practices accessible and tailored to meet students' needs, and to support their learning. The study also problematizes application of assessment methods without prior considerations of embedded structures and pre-conditions that enable or constrain assessment practices. These structures and pre-conditions emanate from several practices integrated in the school context.

The theoretical framework consists of assessment, practice and validity theories that form a hypothetical construct of a valid assessment practice. The construct builds on prior research underpinning the importance of clarified goals, domain-specific feedback -at process or regulatory level -and comprehensive guidance on how to proceed. Valid assessment practices are dependent of how students are made aware of educational goals, how they are given opportunities to reach those goals and how they are able to access and gain agency in assessment practices.

Action research served as an overarching methodological frame. Data derive from focus group interviews, participatory observations and dialogical meetings with students and teachers in a secondary school in Sweden. Student and teachers used findings and dialogues as a basis for developing accessible assessment practices. Conceptual understanding as well as possibilities and difficulties that arose during the ongoing project, were discussed in dialogical meetings and joint analysis meetings, which were facilitated by the researcher.

Data was analyzed through a four step process. Initially, themes capturing students' comprehension of assessment were found through a content analysis. Secondly, data from the interviews and dialogical meetings with students and teachers were analyzed using a validity framework. In the third step, an empirically derived analysis model enhanced the understanding of the interdependency between themes, assessment aspects and pre-conditions in specific practices. Finally, data was analyzed from an overall perspective using the theory of practice architecture to understand how arrangements, from interconnected and interdependent practices, enabled and constrained assessment practices and the development of those practices.

Findings show that assessment is interpreted and communicated through concept and ideas brought into practice via theories, research and policy documents. Assessment is given meaning through teaching and learning activities that are relevant to students' learning and aligned with assessment methods. The analysis highlight that teaching and learning activities, as well as assessment methods, need to be chosen based on solid understanding of students' needs, preconceptions and understanding, as well as pre-conditions in the specific context. Applying assessment methods is therefore not sufficient to construct valid assessment practices that may enhance students' learning. Furthermore, analysis shows that ideas and concepts must be interpreted, understood and communicated by teachers and students. Findings thereby highlight the significance of enhancing student voice and agency, and teacher-student collaboration, in assessment practices.

Due to interconnectedness and interdependency between practices at individual schools, sustainable development of assessment practices may be dependent on development of other practices.

# **TE Paper Session**

Topic: Teacher effectiveness, teacher quality and professional learning

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Location: Science Centre Tower Base North 2

Chair: **Deirdre Torrance** 

## **PAPER 1 ABSTRACT**

A qualitative analysis of Teacher Design Teams: links between leadership, process-design, ownership and perceived outcomes. Floor Binkhorst, Cindy Poortman, Wouter van Joolingen, University of Twente/ELAN.

## Main issues and conceptual underpinnings

Teacher Design Teams (TDTs) are professional development programs in which teachers collaborate to (re)design innovative educational materials. TDTs can contribute to teachers' professional growth (Voogt et al., 2011). Furthermore, engaging teachers in the design-process could create a feeling of ownership, increasing the probability that teachers will use the innovative materials in practice (Carlgren, 1999). This leads to sustainable implementation of educational innovations (Handelzalts, 2009; Mooney Simmie, 2007). In this study, TDTs consist of 6-8 teachers from various schools, who have monthly meetings during an academic year, and are coached by a teacher-educator from the university.

A recent study showed that TDT-participants are satisfied with most outcomes, but do not often use the designed material afterwards (Binkhorst, Handelzalts, Poortman, & van Joolingen, 2015). Therefore, we question the sense of ownership the participants felt. The most important determinant of the outcomes was the process-design, including organization, types of activities and goal alignment. The team coaches played a key role in shaping this process-design. Furthermore, specific motivating leadership behaviours can enhance the feeling of ownership (Avey, Avolio, Crossley, & Luthans, 2009).

To determine how future TDTs could be optimized, this study is aimed at obtaining a more thorough understanding of the process-design and leadership styles in TDTs and the links with ownership and perceived outcomes.

## Method

We studied three cases of TDTs, by collecting qualitative data from multiple perspectives. For each TDT, we observed all meetings, collected logbooks and we interviewed both the team coach and three participants at the start and the end of the year.

## **Findings**

As outcomes of the TDTs, all participants mentioned professional learning gains and they all designed educational materials. However, most participants had higher expectations beforehand. Most participants were unsure whether the learning gains would lead to improved classroom practice and not all participants were planning to use the designed materials in practice in the future.

The feeling of ownership of the TDT varied among the participants. In general, the participants who felt more ownership were more positive about the outcomes, especially using the designed material in the future.

For the process-design, almost all respondents explain that a clear defined team goal is essential for the success of the TDT. This was missing for some participants.

The team coaches played essential roles in enthusing the team members. In two cases, some team members also showed leadership behaviour themselves by initiating activities and bringing in new ideas. In general, the participants who took initiatives felt more ownership.

#### Conclusions

To optimize future TDTs, team coaches should provide clearness and focus in the process-design. At the same time, they should create an atmosphere in which team members can take initiatives themselves, in order to enhance the sense of ownership and improve the outcomes. Then, professional learning in TDTs could be improved in such a way that it leads to sustainable change at the school level and beyond.

## **PAPER 2 ABSTRACT**

Teachers' preparedness to implement curricular reform: a case study of Scottish primary teachers' readiness for the '1+2'. Hazel Crichton, Francisco Valdera-Gil, University of Glasgow.

The European '1+2' model originated in 2002, as part of specific educational goals to be attained by 2012 (European Council, Barcelona, 2002). Sections 43-45 of the Presidency Conclusions of the 2002 Barcelona European Council set the educational strategies, aiming to achieve 'a competitive economy based on knowledge'. It is interesting to note that point 44 offers the only tangible proposal: 'to improve the mastery of basic skills, in particular by teaching at least two foreign languages from a very early age'. The Scottish Government is committed to providing all Scottish children with the opportunity to learn a second language in addition to their mother tongue from the first year of primary school, with a third language being introduced no later than the fifth year of primary school (Scottish Government, 2012) bringing it in line with other countries in Europe, who have already adopted the '1+2' as policy. This ambitious initiative is to be applauded, as it addresses an issue that meant that Scottish children, like their peers in the rest of the UK, (Macaro, 2008, Coleman, 2009) were disadvantaged in terms of their language learning compared to their European counterparts, with resulting consequences for future mobility, career opportunities and ultimately business and the economy (CBI, 2014). However, there exists a problem of teacher capacity, as primary teachers, many of whom have poor foreign language skills, are expected to deliver the language learning experience to their classes (Crichton and Templeton, 2010). The research described in this paper documents concerns of 40 primary teachers from two local authorities regarding the successful implementation of the '1+2' initiative. The teachers responded to questionnaires and ten were subsequently interviewed in focus groups. Six were then interviewed individually. The data were analysed inductively by each researcher before synthesis of the main themes took place through collaborative discussion. The teachers understood the value for the pupils of learning at least another language and were keen to assist the language learning process. However, they identified a number of issues they were anxious about, including their own level of language, sustainability, progression and support. These concerns have been raised in other research studies (Crichton and Templeton, 2010; Driscoll et al., 2014). Deeper issues, related to the primary teachers' conceptions of language pedagogy and cognitive development were also uncovered. The answer may lie in a sustained and sustainable coherent programme of professional development which addresses primary teachers' needs in a realistic, but effective way.

## PAPER 3 ABSTRACT

Initial Teacher Education in Ireland - a case study. Judith Harford, University College Dublin, Teresa O' Doherty, Mary Immaculate College, Limerick.

Within the last five years Teacher Education in Ireland has become a significant focus of policy change and development; influenced by a multiplicity of external and internal factors, the reform of the nature, content, duration, and structure of teacher provision and providers in recent years, provides an interesting case study of change in teacher education.

The establishment of the Teaching Council, the statutory body with responsibility for regulating the teaching profession, in 2006, was a significant development on the education landscape. Traditionally universities and colleges exercised high levels of institutional autonomy in relation to the content and nature of teacher education programmes with little state intervention or regulation, and teacher education was almost invisible within the higher education landscape with a resultant low public profile. This situation has changed dramatically and with alacrity within a short period of time.

This paper examines how international research and literature on good practice in initial teacher education has been reflected and refracted within a national policy. Influenced by Global Education Reform Movement, control of teacher education curriculum has shifted from the higher education institutions to the Teaching Council and government agencies. Reflecting the turn to practice within the literature, the role and place of school placement and partnership with schools is now a dominant feature within ITE programmes. In parallel, influenced by the need to achieve critical mass to support and maintain educational research, partnership between institutions has also been mandated, resulting in further loss of institutional autonomy for ITE providers.

A key strand of the research for this paper was supported by funding from the Irish Research Council

# **TE Paper Session**

Topic: Teacher effectiveness, teacher quality and professional learning

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00 -12.30

Location: Science Centre Clyde 1

Chair: Beth Dickson

## **PAPER 1 ABSTRACT**

The Interdependence of Teachers Collegiality, Cooperation and Readiness for Innovation - The Case of German Secondary All-day Schools. Karin Lossen, Wolfram Rollett, Ariane S. Willems, Institute for School Development Research, TU Dortmund.

Teachers are the actors who mainly have to implement innovations in schools and put them into successful practice (Buske & Zlatkin-Troitschanskaia, 2009). Accordingly, teachers play a central role in theoretical models of school quality and effectiveness (Scheerens, 1990). Especially attributes such as cooperation, collegiality, and teachers' readiness for innovation are variables which character the schools' organizational culture and influence the developmental processes of schools.

In our paper, we analyze the impact of teacher cooperation and collegiality on their readiness for innovation by applying multilevel-cross-lagged-panel analyses and discuss our results against the background of educational reform processes.

Cooperation in terms of collaboration in practical actions and collegiality in terms of the relational quality (Kelchtermans, 2006) describe related variables, which sometimes are summarized by the term cooperation only. Empirically high correlations are found for the two variables (Gerecht, Steinert & Döbrich, 2009), which can be interpreted in two ways: (1) teachers working closely together develop strong relationships to each other; (2) positive relations within the teaching staff lead to more cooperation. However, it is also plausible that closer relations between teachers reduce cooperation (Ahlgrimm, Krey & Huber, 2012). Additionally, Van Den Berg & Sleegers (1996) showed, that the innovative potential of schools depends on the level of cooperation between teachers.

In our paper, we approach the following research question:

- Does a higher starting level of cooperation and collegiality lead to a more favourable development of the readiness for innovation over time?
- Does a positive development of cooperation and collegiality lead to a more favourable development of the readiness for innovation over time?
- Does the impact of cooperation and collegiality on the readiness for innovation differ between individual teachers and school level?

Our results are based on data from a longitudinal "Study on the Development of All-Day Schools (StEG)" in Germany. Data was collected at three points in time: 2005, 2007 and 2009. The findings reported here are based on data collected from 4569 teachers listed as staff members in 181 secondary schools (without grammar schools) at all three measure points.

Different Likert-type multi-item scales were used to measure teacher cooperation, collegiality and readiness for innovation: While the intensity of teacher cooperation assessed the frequency of various aspects of pedagogical cooperation between teachers, collegiality examined the social climate within the teaching staff in terms of shared objectives, discussion of problems and harmonious collaboration. The readiness-for-innovation scale describes the openness to development and change in educational practice. All employed scales show good reliabilities (alpha = .85 to .88).

Our results indicate that a more cooperative school climate and its improvement over time leads to a more favorable development concerning the readiness for innovation. However, we also find a negative effect of teachers' collegiality on the readiness for innovation. Although the main results for individual and school level are very similar in the two-level-model, some differences between individual and school level can be found.

#### PAPER 2 ABSTRACT

Secondary school teachers' reports on classroom management learning activities and learning outcomes. Ksenia Solheim, Sigrun K. Ertesvåg, Grete Dalhaug Berg, University of Stavanger.

The study aims to contribute to understanding of how secondary school teachers learn classroom management in the context of educational intervention. The discussion is structured along two conceptual frameworks. The model of teachers learning patterns by Vermunt (2011), and classroom management interactions by Pianta et al. 2012. A tentative matrix for content analyses was developed in order to differentiate between the categories of classroom learning environment, learning processes and learning outcomes. Results on 40 Norwegian secondary school teachers present the content and activities on each category of the matrix. The findings indicated a great variety in teachers' descriptions as in learning activities, so in learning outcomes. This study demonstrates the added value to the knowledge about teacher learning in classroom management.

## PAPER 3 ABSTRACT

Teaching Digital Literacy: Policy and Practice. Melody Terras, Judith Ramsay, University of the West of Scotland.

The importance of digital literacy for education and societal inclusion is reflected in a number of global policy statements and initiatives e.g. the duty of Ofcom to promote media literacy in the UK, and the work of UNESCO. Whilst there is little disagreement about the importance of digital participation in the increasingly global world, there is less agreement on how this concept should be defined, taught and practised. For example, media literacy can be defined as "the ability to use, understand and create media and communications in a variety of contexts" (Ofcom, 2015, p. 19), whereas UNESCO (2015), regard media and information literacy (MIL) as composite concept, retaining the focus on critical evaluation and production of content, but setting them within the wider context of democratic participation. Education plays a major role in ensuring that citizens are equipped with the digital literacy skills to enable them to participate fully in society.

On the basis of our systematic literature review, we discuss the importance of digital literacy; how national and international policy and curriculum reform have both helped and hindered the teaching and promotion of digital literacy skills, and consider the opportunities and challenges presented by the iRights charter (UK). Within education, digital literacy is generally conceptualised as a set of skills. For example, "the skills, knowledge and understanding that enables critical, creative, discerning and safe practices when engaging with digital technologies in all areas of life" (Futurelab, pg 8). Digital literacy is not a simple concept underpinned by a small basic set of skills. Instead it is an evolving multi-faceted concept, supported by a complex set of higher-order psycho-social skills that develop, with experience, across different contexts to keep apace with technological advances. How should these skills be taught? As a distinct topic in its own right integrated within each individual discipline, or both? A major challenge is balancing the provision of opportunities to engage with a variety of online activities whilst maintaining safety. Concerns over safety, no matter how necessary and well intentioned, have arguably slowed the pace of digital literacy opportunities. However, the recent (Aug 2015) UK government commitment to the iRights charter represents a promising way forward. The five iRights principles are: the right to remove, the right to know, the right to safety and support; the right to make informed and conscious choices and the right to digital literacy. The embedding of digital literacy within the context of internet safety clearly highlights the relationship between safety and the acquisition of good digital literacy skills. We discuss how good literacy skills enable the application of the other four iRights principles and argue that the delivery of teaching and interventions to promote digital literacy must be underpinned by a sound evidence base that reflects a detailed understanding of the underlying cognitive processes and the socio-cultural and educational contexts of use.

# **PC Roundtable Discussion**

Title: Where will the next generation of ICSEI researchers come from?

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3128

Session: Parallel Session 6

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Science Centre Clyde 2

Author/Speaker: Steve Fleischman

Company/Organisation: Education Northwest

Co-Authors: Sam Stringfield

Presenting Author: Steve Fleischman

Presentation Method: Roundtable Discussion

Many researchers who participate in ICSEI seek to have their work inform practice or policy. This has been a distinguishing mark of the organization, exemplified by the careers of many longtime members and the aspirations of early career participants. In a way ICSEI provides a professional "home" for researchers who seek to have their work be of practical relevance. For many, it is likely that the ICSEI Congress only serves as a temporary shelter from what is often a harsh and challenging environment in which to build a career focused on improving policy and practice.

As many of the sustaining ICSEI members advance in their careers, it may a good time to ask: Where will the next generation of ICSEI researchers come from? What types of opportunities and incentives must be created to promote and sustain the careers of researchers who wish to promote school effectiveness and improvement?

This roundtable, which fits into the "Partnerships and Collaborations" strand, is designed to explore these questions. It will be conducted by two ICSEI members who (1) have a deep interest in the topic, (2) have taken personal, professional, and institutional actions to support the development of researchers' careers, and (3) represent two institutional settings that serve as professional "homes" for ICSEI researchers: academia and nonprofit/independent agencies. Arguably, since these two institutional settings are the main ones that prepare and employ researchers who could become the next generation of longtime ICSEI members, the moderators may be able to offer insights that spark a lively discussion on these questions.

This roundtable will focus on the institutional opportunities/constraints and incentives/disincentives that promote/ hinder the increase and quality of this next generation of researchers. Early career attendees are particularly invited to attend the roundtable, both as key informants to and potential beneficiaries of the discussion.

Our premise is that, while the environment in many countries may have become more hospitable for researchers who engage in partnerships and collaborations with practitioners and policymakers, there are few places for researchers to develop and practice their trade over a career. In addition, there is little recognition that the skill set necessary for the success of "partnership-oriented" researchers differs somewhat from that of more "traditional" social science researchers (i.e., those concerned with maintaining "distance" from "subjects" being studied, focusing on the purity of methodology, and avoiding making statements regarding implications for action based on study findings).

The discussion will ask participants to reflect upon the following questions:

- What are the conceptual and institutional barriers that hinder the development of the next generation of
   "partnership-oriented" researchers? (For example: current tenure practices, formal preparation programs that lack
   "clinical" experiences, and limited publication outlets.)
- · What opportunities and incentives might be provided overcome these barriers?

- Are there international examples of successful efforts to develop "partnership-oriented" researchers and promote their careers?
- What actions can ICSEI members take individually, collectively, or as ICSEI to address this challenge?

The co-moderators will issue a summary of the roundtable discussion to be published on the ICSEI website.

# **PC Symposium**

Title: Approaches to evidence-informed practice, knowledge creation

and exchange for meaningful learning and deep change

Topic: Partnerships and collaborations: schools, agencies, government, research

Abstract ID: 3056

Parallel Session 6 Session:

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Location: Science Centre Auditorium

Author/Speaker: Louise Stoll

**UCL** Institute of Education Company/Organisation:

Co-Authors: Mark Goodchild

Carol Taylor

**Emmeline Harrison** 

Presenting Author: Louise Stoll

Discussant: Lorna Earl

Presentation Method: Symposium

## PAPER 1 ABSTRACT

Evidence-informed knowledge exchange as professional learning within a middle leadership network. Louise Stoll, Mark Goodchild, Carol Taylor, Emmeline Harrison, UCL Institute of Education.

Many formal and informal partnerships have been formed in England where the policy context is oriented towards an evidence-based, school-led, self-improving school system. A growing number are turning to researchers to support them in strengthening their approaches to evidence-informed practice. Engagement with research is a process of learning (Stoll, 2010). External expertise brought by researchers is important but insufficient for professional learning. People's tacit knowledge needs to be surfaced and blended with explicit external knowledge (Nonaka and Takeuchi, 1995) - the research knowledge. Assumptions can then be explored and challenged in ensuing learning conversations (Earl and Timperley, 2008; Stoll, 2012) that lead to joint interpretation of knowledge and its conversion into new knowledge, used to improve practice.

This paper draws on experiences of and findings from an Economic and Social Research Council-funded knowledge exchange R&D project, a collaborative endeavour between UCL Institute of Education with Challenge Partners (CP), a voluntary national network of 300+ schools. CP wants to embed a culture of shared outstanding research-informed practice across its partnership which is oriented towards making an impact on teaching and pupil outcomes. The partnership has local hubs, each with a number of schools. Middle leaders are well placed to spread evidence-informed practice both within and across their schools and hubs. Given that teachers have the greatest impact on pupils' learning outcomes (Townsend, 2007), supporting them in informing their practice with evidence is critical. Successful middle leaders contribute to the effective practices associated with leading pupils' learning within schools (Robinson et al, 2008). As key links between teachers and senior leaders, they are well positioned to support teachers' learning.

Our project, working with 16 'catalysts' middle leaders, helped CP start to test out and establish knowledge exchange networks among its middle leaders. The four interlinked project questions were jointly decided:

- 1. What do we know about effective middle leadership within and across schools that changes teachers' practice?
- 2. What are powerful ways to share knowledge about excellent middle leadership practice within and across schools?
- 3. What evidence-based tools can be designed collaboratively between Challenge Partners middle leaders and academic partners to track changes in teachers' practice as a result of middle leaders' interventions?
- 4. What leadership conditions in schools help develop and embed cultures of shared outstanding practice?

We designed tools to bring the research knowledge to life, and processes to help middle leaders integrate this with their knowledge. We learnt how effective research use stems from a process that's both engaging and challenging, and more about how to help lead improvement in a theory-rich way. An iterative co-construction process generated answers to the four research questions. Seven 'messages' were derived for each question, and impact tools have been developed. Using the findings, we collaboratively designed a set of professional learning cards for middle and other leaders, currently being trialled by both partners.

This experience has provided greater understanding about partnership approaches to evidence-informed change with implications for traditional approaches to university/practitioner relationships.

## **PAPER 2 ABSTRACT**

System-wide co-creation of digital tools for evidence-informed practice and professional learning. Yngve Lindvig, Jarl Inge Waerness, Tore Skandsen, Conexus, Norway.

This paper is based on the processes and results from a Norwegian Research-Council funded project called Evidence-Informed Quality Work. The project's main purpose is to develop and test improvement processes and technology to support the professional learning in and networking of 90 schools and kindergartens in 27 districts.

This project is based on the assumption that the goal of educational leadership is to promote learning, achievement, wellbeing and success for all students (Robinson, 2011); so it is important to develop and improve the skills and capacities of people who work for and with educational organizations to provide those services and outcomes for students. This is what Hargreaves and Fullan (2012) refer to as professional capital. School leaders must therefore lead in a way that reinforces the teacher's professional capital in a professional learning community, which has the capacity to promote and sustain the learning of all professionals in school communities and those who support them with the collective purpose of enhancing student learning (Stoll 2010).

In the paper we discuss the process of constructing digital tools that stimulates what Fullan (2014) calls the right drivers: capacity building, collaborative effort, pedagogy and systemness. A key element in this process has been to test a model for system-wide co-learning, involving students, teachers, school leaders, school administrators and politicians. Three important findings from using digital tools for evidence-informed practice and professional development have evolved during the project based on participant feedback, which have led to further tool development.

First, the digital tool must collect data from multiple sources, both quantitative and qualitative. It is insufficient just to collect test and attendance data. For deeper learning we need more focus on the process and therefore more user-generated data from students, parents and professionals, like surveys, qualitative assessments based on word goals, information about professional activities etc. However, to synthesize data and use it to challenge their current thinking and practice, users need to know what data they need for what purpose. So on one hand, they need more data, so they have access to the most useful data. On the other hand, they need to use less data in their collective analysis.

Second, during the project a need evolved for a module to enable the professionals to connect and select the data to their own practice and add their own research questions. We will discuss the construction of this module, called the process designer, and the first evaluation of its use. Users have already constructed 8.000 processes in the process designer, and report that they find this approach very useful in motivating teachers to reflect more systematically on their current practice.

Third, during the project a need emerged for users to work more on their own mindset. As Fullan (2012) says, a tool is only as good as the mindset using it. The paper will describe how a mindset tool can be constructed as both a reflection and improvement tool.

### PAPER 3 ABSTRACT

World views and knowledge exchange - a coherent inquiry framework for expanding world views and activating knowledge exchange. Linda Kaser, Judy Halbert, Vancouver Island University and Networks of Inquiry and Innovation, British Columbia, Canada.

The work in British Columbia with the Networks of Inquiry and Innovation and the Aboriginal Enhancement Schools is designed to create a learning system that is much more intellectually engaging for young people. The theory of action involves a disciplined approach to professional inquiry by teams of teachers and leaders - within and across schools and increasingly - within and across school districts.

The cognitive tools used have been co-developed with New Zealand colleagues. They draw on the work of Professor Helen Timperley's studies of professional learning, facilitation and adaptive expertise and the work of Twyford and LeFevre (2013) on reducing professional uncertainty as a strategy for encouraging adult learning.

This consistent inquiry process draws on the evidence from the learning findings from the OECD's Innovative Learning Environments study (Dumont et al, 2010), the social and emotional research (Schonert-Reichl and LeRose, M., 2008), school case studies (BC), large scale system level literacy change studies (Timperley and Parr, 2009) and the formative assessment research (eg Wiliam, 2010). The process also utilizes the First Nations Principles of Learning that are a distillation of Aboriginal thinking and practice.

The questions we are currently investigating are:

To what degree does a focus on the Spiral of Inquiry framework by teams of educators:

- help to activate knowledge mobilization and exchange?
- · encourage innovative practice and risk-taking?
- create more adaptive expertise?
- lead to more positive outcomes for learners with a specific focus on school completion, the development of intellectual engagement and curiosity, and an appreciation of diverse world views (specifically in BC a more holistic indigenous perspective)?

In British Columbia and England the use of the spiral framework is embedded in highly active and philosophically ambitious networked communities. Initial research studies indicate that the approach being used is able to create a leadership culture of "catalytic affiliation" (McGregor, 2013) that both speeds progress towards ambitious goals and generates interest in adult professionals in accessing more innovative and evidence-informed knowledge and practices. As our world becomes increasingly globalized it is more important than ever that we invest our educational energies in some deeply local actions.

At the same time we are also wondering whose knowledge is being exchanged and as societies with strong indigenous traditions, why this matters. We are challenged by Chief Dan George who said: "What we cannot see, we cannot respect. We have taken so much from your culture. I wish you had taken something from ours."

At each stage of the spiral of inquiry are two key questions: 'What is going on for our learners?' and 'How do we know?' Using the First Peoples Principles of Learning (https://www.bced.gov.bc.ca/abed/principles\_of\_learning.pdf) and the learning principles that provided the underpinning for the OECD Innovative Learning Environments study can give us an expanded worldview of the experience of learners – and can lead to a richer and more diverse set of perspectives.

## **PAPER 4 ABSTRACT**

Research-practice-policy networks to mobilize knowledge for evidence-informed education: lessons from the Knowledge Network for Applied Education. Katrina Pollock, Doris McWhorter, Carol Campbell, David Tyrer, Patricia Briscoe, Shasta Carr-Harris, Western University, Ontario.

Despite long-standing and increasing awareness of the need for evidence to better inform educational practices, the ways in which evidence from academic research and from professional knowledge interact and inform improved practices are still far from explicit. Networks are one of a number of knowledge mobilization strategies utilized to promote evidence-informed practice (Cooper, 2014). The purpose of this paper is to further explore how networks work.

The paper presents evidence from the Knowledge Network for Applied Education Research (KNAER) – a tripartite partnership between the Ontario government, the University of Toronto, and Western University - established to support research-policy-practice networks to mobilize educational research to practice. Over four years, KNAER funded 44 partnership projects.

The methods utilized in the research to be presented include:

- analysis of KNAER projects' documents and data including: the projects' knowledge mobilization plans, 141 interim reports, 43 individual project final reports, and 8 virtual information sessions;
- review of the work undertaken by university partners involved in the overall leadership of KNAER, including analysis of: the tripartite agreement between the ministry and universities; 17 electronic notes from meetings; an external evaluation report; and KNAER university partners' interim and final reports; and
- interviews with nine relevant international experts on evidence-informed networks and practices.

Producing knowledge and strategies that educators could use to improve education does not necessarily mean that evidence will change practice. The idea of networks and networking can be adopted without an understanding of the complexity and challenges of effective knowledge mobilization through co-created and co-owned research-practice partnership networks. Our findings reveal that even though strategies, technologies, and skill sets to support building networks between researchers and practitioners can be developed with attention, time and resources; building sustainable networks are complex. Our study demonstrates the critical importance of appropriate structures and processes for leading and mobilizing research and practice. Furthermore, developing networks alone is not sufficient; our research reveals the importance of university partners providing governance, strategic leadership, knowledge mobilization capacity and research expertise to support networks to function.

Our findings add to research in the wider area of 'knowledge to action' in public policy (Best & Holmes, 2010) indicating the shift from 'linear' conceptions of knowledge into action to 'relationship' models prioritizing multi-directional interaction among and between practice, research and policy (Tseng, 2012). Often concepts of 'knowledge brokering' provide technical definitions of managing and transferring knowledge (Meyer, 2010); whereas the concept of 'knowledge mobilization' adds the important dimensions of social and interactive processes. However, our evidence indicates the importance of going even further by developing system leadership to champion this work and distributed leadership to influence the direction and action of activities to achieve outcomes for evidence-informed education in practice. While networks can work; the challenges to be overcome require leadership throughout the education and research systems. Our study provides evidence that can strengthen public education by understanding how to support the process of building networks to engage researchers and practitioners for the purpose of mobilizing research to practice.

# **RCEL Roundtable Discussion**

Title: Corporate Impact on Academic Achievement: Measures and Solutions

Topic: Researching the conditions for effective learning

Abstract ID: 3128

Parallel Session 6 Session:

Session Date and Time: Saturday 9 January 2016 11.00-12.30

Science Centre Boardroom Location:

Author/Speaker: Mary Douglass

Company/Organisation: Tallywhoa Enterprises

Co-Authors: Ariel Robinson

Presenting Author: Mary Douglass

Presentation Method: Roundtable Discussion

# **Poster Sessions**

Posters will displayed in the Mezzanine Floor at the conference venue for the duration of the conference. There will be general poster sessions during the lunch break on Thursday 7th January and Saturday 9th January when poster presenters will be available to discuss their posters.

#### **POSTERS ON DISPLAY**

1.Inquiry-based working, developmental capacity and leadership in the perspective of distributed leadership in Dutch primary schools, Judith Amels, Penta Nova.

# **Purpose**

This PhD-study investigates the impact of inquiry-based working by teachers and school leaders on the developmental capacity in primary schools in The Netherlands. Also the impact of leadership in the perspective of distributed leadership on this relation is inquired. The aim of this study is to gain insight into factors of success in inquiry based working and distributed leadership which enhance the developmental capacity of primary schools.

# Key ideas/concepts

Dutch primary schools are increasingly held responsible for school effectiveness and educational improvement. Therefore schools need developmental capacity. The notion of developmental capacity is defined in this research as the developmental space in schools (Derksen, 2014) and the way in which teachers participate in this space in professional learning activities, stimulated by their school leader (Leithwood, Jantzi & Mascall, 2002).

To realize educational improvement schools develop a culture that not only focuses on student learning but on learning of everyone participating in the school organization in which it is common to critically examine the quality and effectiveness of actions and change (Krüger & Geijsel, 2011). This requires inquiry-based working: making use of all available data in the school for school improvement and enhancing student outcomes (Earl & Katz, 2006). In such a culture everyone, teachers and school leaders, participate in informed and collective decision making and evaluation. They are all deep involved in collective capacity building. Leadership in a distributive perspective is concerned with the interactions in both formal and informal leadership and focuses upon leadership as a practice based on affinity and expertise of all members. It illustrates the power of co-construction of knowledge, which might enhance the ownership of teachers and school leaders as well as the developmental capacity of schools and school effectiveness (Spillane, 2006; Harris, 2008).

# Research question

The main research question in this study is 'What is the impact of inquiry-based working on the developmental capacity of schools in Dutch primary education, and what is the impact of distributed leadership on the possible relationship of inquirybased working and the developmental capacity in schools?'

# Methods

The first part of this PhD study is a survey, which will consist of a questionnaire submitted to teachers and school leaders of Dutch primary schools. Variables and items asked in the questionnaire are about inquiry-based working, developmental capacity and distributed leadership. The concepts in this study are operationalized and measured using existing scales and items. Confirmative factor analyses will be performed, and Mplus shall be used to analyse the measurement and structural models.

The second part of this study will consist of case studies by semi structured interviews with the use of vignettes.

#### Findings and conclusions

The theoretical model of this PhD-study was developed last year. The guestionnaire will be distributed in October/November 2015.

2.School accountability pressures and principals turnover: an exploratory study of Rio de Janeiro's school system. Felipe Andrade, Mariane Koslinski, Ricardo Ceneviva, Federal University of Rio de Janiero.

This study investigates principal's turnover and its conditioning factors in the Municipality of Rio de Janeiro from 2005 to 2015. In Rio de Janeiro's public school systems principals are assigned to elementary schools through election procedures that take place every three years. In 2009, the municipality has adopted many actions that have increased pressure on school principals including: high stakes school accountability policy (bonus payment), support programs for low performing schools and exams requirements for teachers to be eligible for principals' elections. The paper observes the patterns of principals' turnover before and after the introduction of school accountability pressures in Rio de Janeiro's school system and investigates whether performance in school assessment systems and pressures from school accountability is associated to principals' turnover.

International literature has been pointing out that principals' turnover is usually associated to labor conditions such as salary, working day, institutional responsibilities, labour stress, principals lack of autonomy, bureaucracy and students demographic characteristics. Moreover, many studies have claimed that school accountability pressures have led to increase in principals' turnover, as an unintended consequence, especially in contexts where school accountability design is not able to adequately measure school effectiveness and, thus, it holds principals accountable for factors beyond their control. The principals' turnover investigation becomes relevant considering the studies that observe principals' leadership and experience as important factors to promote school effectiveness. Otherwise, students' performance provides information about principal's effectiveness and it can become an indicator to select more effective principals or to pressure the less effective ones. Therefore, this abstract connects to sub-theme two: Leadership development and practice to build sustained improvement.

This research uses descriptive statistics to observe patterns of principals' turnover and uses a multinomial regression models to estimate whether principals and school characteristics as well as school performance and accountability pressures are associated to the following results: (i) principals re-election; (ii) principals not being re-elected; (iii) principals leaving the position during an appointment. The analysis is conducted during three cycles of principals' appointment, including a period before the school accountability measures were introduced by Rio de Janeiro's local government and two after the policy was adopted. The analysis have made use of principals administrative data, school data collected by the federal government school assessment and information systems and Rio de Janeiro's local school assessment system (2005-2015). The results show that principals' experience, school infrastructure and complexity is associated to principals' turnover in the three cycles investigated. Moreover, from 2009 principals turnover have systematically increased and the probability of principals not being re-elected or living the position during the appointment became highly associated to school performance in standardized tests.

3.The Un Buen Comienzo Project and its experience improving Chilean Preschool Education: general results and two cases of success. Katherine Becker, Francis Durán, Pablo Muñoz, Andrea Rolla, Fundación Educacional Oportunidad.

In Chile in general there is access to prekindergarten and kindergarten, therefore the issue of quality has come to the forefront. Fundación Educacional Oportunidad, a Chilean Foundation, in collaboration with Harvard University, designed the Un Buen Comienzo project (UBC, A Good Start), in order to improve the quality of preschool education, focusing on vulnerable schools in Santiago and in the Sixth Region. Almost 90 schools have participated in the project. One of the project's main objectives is to improve pedagogical practices in the classroom in order to have an impact on child outcomes. To measure the quality of these interactions, UBC uses the standardized classroom observation instrument the CLASS (Pianta, La Paro, & Hamre, 2012).

The CLASS is based on the theory that interactions between children and adults are the primary engine of supporting children's development and learning. The CLASS is composed of three dimensions: Emotional Support, Classroom Organization and Instructional Support, last one being the dimension with the lowest scores and the hardest one to improve in all the countries that apply the instrument (Treviño, Toledo & Gempp, 2013). In the project, an external evaluation team applied the instrument, and the teacher didn't receive her individual results.

The UBC project also incorporated the Continuous Quality Improvement methodology as a way to involve stakeholders in creating sustainable change. One of the main modifications of the CLASS application was providing feedback after each evaluation. At first this feedback was given by external evaluators and exclusively about Instructional Support, which resulted in CLASS scores increasing. In 2014, a new model was developed in which members of the UBC intervention team are providing teachers and their school leadership team with their scores and feedback based on the CLASS.

The main object of this presentation is to share overall project results, as well as sharing two case studies of success from those schools who improved in their CLASS results and student outcomes.

4. How do social science funding agencies support knowledge mobilization? Amanda Cooper, Queen's University.

# Social Science Funding Agencies' Support of Knowledge Mobilization: An International Study.

Purpose and Significance: Researchers are under increasing pressure to mobilize their research more widely with non-academic audiences and to demonstrate the impact of their work (Mitton et al., 2007; Nutley et al., 2007); however, little is known about a) how to actually measure research use and its impact or b) about how funding agencies globally are promoting and supporting KMb and research impact agendas. Funding agencies are important research brokering organizations as they support national research infrastructure and shape research agendas through their requirements for researchers. This study explores KMb policy, expectations, and activities of social science research funding agencies in 32 countries through a comprehensive environmental scan. The study makes two significant contributions. First, it provides empirical evidence comparing how funding agencies globally are approaching research mobilization and impact - an area that has not been systematically explored. Second, it provides an overview of resources (created by funders) for researchers to increase the impact of their work.

Research Question: How are social science funding agencies promoting (through requirements for researchers) and supporting (through agency initiatives) KMb and research impact in Canada, the USA, the European Union, Australia and New Zealand?

Conceptual Framework: The conceptual framework for this project explores the role of funding agencies in relation to three domains: 1) conceptualization of KMb and research impact, 2) requirements for researchers (at time of application, at end of study, and allowable expenses related to KMb), 3) and agency initiatives (funding, services, tools and techniques and linkages) (Figure 1).

Method: This study provides a comprehensive environmental scan of social science agencies' (N=32) promotion and support of KMb and research impact across 32 countries including Canada, the USA, the European Union, Australia and New Zealand. Environmental scans are not simply ad hoc online searches; rather, Conway (2009) highlights that environmental scanning is formal and systematic, using "formal methodologies for obtaining information for a specific purpose" (p. 2). The purpose of this environmental scan is to provide a systematic empirical overview of emerging international indicators (operational measures of environmental analysis), trends (systematic variation of indicators over time) and patterns (clusters of trends) in relation to KMb and research impact globally (Costa, 1995). The environmental scan will include data from websites using a common instrument (Table 1), social media feeds (Twitter and Facebook) captured and analyzed using NVivo, and semi-structured interviews (N=15) with key stakeholders regarding KMb and research impact.

Findings & Implications: There is a lack of clarity among funding agencies about how to operationalize KMb and research impact. Agencies vary widely in their capacity to support researchers with KMb. Evaluation of KMb and research impact is still virtually absent in most (but not all) jurisdictions. Some funding agencies are creating toolkits to help researchers articulate the impact of their work; however, there is no evidence on the levels of use of these tools by researchers or the effectiveness of these tools. Funding agencies need a more systematic approach to better support KMb.

5.The NMS Network - a professional knowledge base for innovating Austria's lower secondary school system. Helga Diendorfer, Neue Mittelschule St. Georgen.

This poster highlights the impact of "new media" on innovation and professionalizing teachers in middle schools in Austria.

Simultaneously with the latest lower secondary school reform in Austria an online network was created, which for the first time links all "New Middle Schools" and aims at creating a common knowledge base for school reform and innovation. Within a few years this network has become the most frequented within the German speaking countries. Collaborative learning fosters individual and social processes between participants. Reskilling and upskilling happen in a "learning community". Members of the community acquire professional knowledge as well as digital competence by using new media, which they would have hardly reached as individuals. Relevant information and knowledge is provided in the online library and is available for everybody. In various online courses that are supported by the Centre for Learning Schools (CLS) "Lerndesigners" (specially trained teacher leaders) collaborate on developing new ideas, discussing solutions and enlarging their collective knowledge. The professional language being used is one criterion that shows how far professionalization has extended.

Research at the moment concentrates on the Moodle course "Online Lernatelier for Lerndesigners" (OLLD) and the question how and to which extent "new media" can foster professionalization of teacher leaders. On the basis of the five domains of teachers' professionalism (developed by a special Austrian task force called EPIK - Developing Professionalism in an International Context) the threads of the online discussions shall be evaluated by the method of grounded theory. The domains define both individual competences and configuration(s) of system structures.

6.New schooling in Germany. Jena and Thuringia – a city and the regional government giving education a new structure. Arila Feurich, School-Model "ESOpP".

In Germany a new school-model is developed for new structures of leadership to optimize pedagogical processes in districts with high social issues and socially disadvantages. In the Federal State of Thuringia, this is unique because the city of Jena instead of the Federal State owns the school authority for two schools. Usually, the German federal states are responsible for education and set their own educational policies. Thus, each federal state has its own educational system.

The increasing birth rates since 2006 call for further schools in the city of Jena. However, during the past 15 years, the city council had closed too many schools. At the same time, parents in Jena have been especially interested in schools with progressive educational concepts. That is why dedicated parents, teachers and the city council founded two schools in 2011 and 2012 - i.e. in less than 18 months. This fast opening-process was pushed by the parents and subsidised by the town council and mayor - an exemplary work with regards to how society and politics cooperate for one goal.

The model takes part in scientific research since March 2013. The first period ended up in July 2015. During that time it was explored how the headmasters of the schools in cooperation with the city council built up a team of teachers working on pedagogical reforms and educational objectives. Pupils come from all over the city to visit these schools, pupils with and without handicaps are learning together as well. For the district where the two schools are built, it is enrichment: it is the biggest district of the city and in addition to that it includes the highest rate of single parent families, recipients of unemployment benefits and immigrants.

That is why the scientific research is a qualitative case study based on a cross-sectional-design, with interviews, participatory observations, document-based data and questionnaire surveys over three years. It elicits factors of school history, school development and cooperation between the parties within the school model. The analytic procedures include seven categories based on the German School Price: Achievement/Effort; Quality of Teaching; School Life, Climate and Partners outside; Handling Diversity; Responsibility; School as a learning System; Management/Organisation; and research the following hypothesis:

For the school development it is much easier recruiting staff and being part of the authority of the city council instead of the

Pupils with different backgrounds - for example poor and rich; handicapped and intellectual gifted - learning together tackles prejudices and has positive influence on equal opportunity.

The individual teacher team and the overall professional team of the schools improve school life, teaching quality and the relationships between all those involved in schools.

Building on recent work it is obvious that it is not enough to open and built new schools it is necessary that different systems, e.g. such as school and streetwork, people and administration, work together. It's suggested building up the district – and furthering the city – as an educational landscape.

The poster includes the results until July 2015.

7. Embedded Webinars for School-Specific and School-Run Staff Development. Tanja Westfall-Greiter, Christoph Hofbauer and Barbara Pitzer, Center for Learning Schools, University of Innsbruck.

In the context of nationwide school reform, collaboration with all system actors is key for ensuring that reform has a positive, sustainable impact on practice and school development. Professional learning is key, in particular when upskilling and reskilling teachers is necessary for the reform agenda. This poster presents an innovation in Austria, whereby a Webinar programme with a focus on a key area of reform was developed in collaboration with the local school inspectorate to provide up to 200 schools with access to experts in the focus area deemed most essential for the region. These "eLectures" are embedded in so-called pedagogical conferences, regular mandatory staff meetings oriented to school quality development. Participating schools are provided with online support between the eLectures. A virtual course room for school principals enables them to focus on their leadership challenges and learn from and for one another, while teaching staff and teacher leaders are networked in their own virtual space and can exchange experiences from practical experiments conducted between sessions. In particular, in a system such as Austria's with a relatively low degree of formal accountability, the prototype presented here is a viable, cost-effective alternative to foster horizontal accountability and professional learning in a mid-sized region or even nationwide.

8. I think therefore I AM: Developing an Iterative Account of Metacognition in Primary School Education. Heather Branigan and David Donaldson, University of Stirling

Existing psychological research has clearly demonstrated the benefits of metacognition for educational attainment: leading to deeper understanding of learned material and promoting learning across the curriculum (Georghiades, 2000; Adey & Shayer, 1993). Despite evidence of the clear value of metacognition upon academic success, vast gaps still exist when attempting to understand metacognitive research as a whole. The huge variety of measures of metacognition used by the psychological community, in addition to the differing definitions of metacognition in published academic literature, means that progressing understanding of educational effects is problematic (Desoete, 2009). Prior to being able to confidently measure the 'effects' of metacognition upon academic success, it is first necessary to gain a greater understanding about the metacognitive practices which occur during real-life learning in the primary school classroom environment. This 'winding back of the clock' is necessary due to the diversity of existing research, which often fails to investigate the metacognitive processes which take place during real-life classroom learning.

The present research explores the metacognitive activities that take place in the classroom environment by investigating primary school teachers' perspectives of metacognition. Using a survey comprised of both open-and closed-ended questions, we aimed to understand the knowledge, beliefs and attitudes of primary school teachers towards metacognition. Results from 88 practitioners throughout 15 local authorities in Scotland highlight that most teachers are familiar with the term 'metacognition'. Teachers report planning and reflection elements of metacognition to be extremely important classroom activities for children's learning development. In addition to practical benefits such as prompting memory and chunking information, teachers report the benefits of planning (a 'before' activity) and reflection (an 'after' activity) for developing pupil understanding about the wider processes involved in conducting tasks – for reflecting on past activities and planning future activities.

We discuss the implications of our findings in the context of the Iterative Account of Metacognition (IAM), which conceptualises metacognition as a suite of knowledge and regulatory processes which occur before, during and after task completion. The focus upon the metacognitive processes which occur in the real-life classroom environment distinguishes the IAM from traditional accounts of metacognition, which importantly begins to 'bridge the gap' between psychological theory and educational practice. Wider implications for classroom practice are discussed.

9. The academic results are not everything. Jon Mikel Luzarraga and Juan Etxeberria, University of Basque Country.

The use of standardized testing to evaluate the benefits to students of value added teaching methods is increasingly common in the field of educational evaluation. These evaluations are rarely carried out at (bachillerato level?) and are, instead, utilized in obligatory formal education. University entrance exams offer the possibility to study baccalaureate in an independent, objective and stable way.

The subject of this poster is to report a first analysis of the characteristics and teaching methods of baccalaureate schools, in the autonomous community of the Basque Country, of schools with both high and low value added. This is in order to develop guidelines for a more detailed further analysis. To this end, this poster is divided into two parts: the first quantitative and the second qualitative,

In part one, making use of specific statistical methods, educational centres which use both high and low value added were identified and analyzed. For this, the results of university entrance exams from these educational centres from between 2009 and 213 were taken into account, along with their socioeconomic and cultural status. Having adjusted the results from each educational institute using the SECS, they were then classified. Of the 2013 educational institutes, 24 were selected for further analysis. Twelve of high value added teaching and twelve of low value added teaching.

In part two, the aim was to discover the more complex internal aspects of these two groups. Making use of the qualitative methodology, a deeper study was carried out of the factors that play a part in the educational efficacy of these centres. To achieve this, semi-structured interviews were conducted with the reference inspectors of these centres, who brought with them an outsider's perspective on the latter. With the aim of gathering relevant information, an outline was developed of relevant categories related to educational efficacy: the educational atmosphere, familial involvement, evaluation, the school board, the characteristics of the centre, student monitoring, training and innovation projects, methodology, the organization and management of time, the participation of the professionals, expectations, the characteristics of the teachers and workplace satisfaction.

After having carried out a selective transcription of the information and after having analyzed this, the results indicated that the practices of the two groups in the categories analyzed did not differ as greatly as their academic results. It is worth pointing out that in many of the areas studied, centres from the low added-value group had better practices than those from the high added-value group.

By way of a conclusion, it can be said that to classify educational centres by their academic performance alone could be somewhat hasty. The education inspectors' perception of the centres studied has let it be seen that to study how an educational centre functions, it is essential that it be subjected to a more detailed analysis.

10. The Impact of Early Childhood Education in Reading Skills: Evidence from Chile. Cristobal Madero, University of California Berkeley/Graduate School of Education.

Since 1987, Chile has systematically measured achievement in reading for second graders. During the last decade, stakeholders have debated both the frequency and pertinence of this standardized test. I contend that this debate does not take into account relevant variables that affect reading in children. For this reason, I analyzed the effect of the following variables on the second graders reading scores: 1) the education level of the students' mothers', 2) the students' gender, 3) the students' school type, and most importantly, 4) the amount of preschool the students attended prior to entering the first grade. In general, I believe this specific standardized test is one of the best tools we have to assess the quality of preschool education. In this paper I answer the following research questions:

Q1: Do mean reading scores for second graders differ based on the number of years of pre-school completed?

Q2: After controlling for gender, does the number of years students attended preschool affect their reading score in the second grade?

Q3: After controlling for gender and school type, does the amount of preschool imply any difference in reading scores for second graders?

Q4. Does the effect of preschool attendance on reading achievement, after controlling for student's gender and school type, differ as a result of the education level of students' mothers?

For the analysis I used the SIMCE (Sistema de Medición de la Calidad de la Educación/ Quality of Education Measuring System) reading test for second graders. The test was given in 2012 to 240,917 students.

Here I will just comment on results for Q4, which looked at the regression of reading on the set of dummy variables for the mother's education level was significant at the 5% level after controlling for gender and student's school type: F(6, 91604) = 1617.26, p<.001). The regression coefficients for each of the mother's education dummy variables are positive and their values increase as the mother's education level goes up. These coefficients are all statistically significant at the 5% level. Each of the remaining predictors are also statistically significant. The model for Q4 explains 10% of the variance in reading test scores (=.1).

The literature consistently attests to the importance of preschool for better developing children's skills. This study confirms the statistical significance of such a relationship when looking at reading scores. The last two models depict puzzled situation. After controlling for all the aforementioned variables, average reading scores decrease for additional years of preschool. This evidence puzzles me and makes me think that the data set lacks some information, such as more information about how the students not attending formal preschool spend their time. Those unknown activities possibly matter as much or perhaps even more than those in a formal preschool setting. That said, this study only looked at reading as the response variable, and we would be premature to use it to make larger claims.

11. Global Learning: Fostering Knowledge, attitudes and skills for global citizenship. Jennifer Chavez-Miller, South Valley Academy

With Programme for International Student Assessment (PISA) scores indicating vast differences in education across the world, the discussion about students requiring 21st Century Skills is forefront in many contexts - economic, social, environmental, and political. Countries are responding with global education initiatives that vary in purpose, values, and intended outcomes. There is consensus that students need skills, knowledge, and values to prosper beyond compulsory education, but ways in which countries are addressing this need are diverse and contextual.

This inquiry project, Global learning: Fostering knowledge, attitudes and skills for global citizenship, was borne from my experiences learning about global competencies through the Teachers for Global Classrooms program, sponsored by the United States Department of State. As a secondary Humanities teacher, my goal was to inform my own practice and that of teachers in my community of New Mexico and across the United States in how to create conditions for effective learning through the U.S. national strategy for global competency. Through a Fulbright Distinguished Awards in Teaching fellowship, I conducted a 4-month study in 2015 of how Finland - an educational system lauded as one of the most effective in the world - is developing global education policy and practice. This study focuses on how student learning and development of global competence is impacted by systemic prioritization of global citizenship; the intersection and influence of international education, sustainable development education, global citizenship education, human rights education, and global education initiatives; cultural values; and teaching and learning.

Research methods included classroom observations; conversations and interviews with teachers, administrators, students, researchers, and policymakers; focus groups with university students; and review of literature including curriculum and policy documents, journal articles, and symposium conclusions and recommendations.

Conclusions from the study are described through six identified themes: (1) values of basic education in Finland; (2) articulation of curriculum through national, municipal, and school priorities; (3) teacher autonomy; (4) a collaborative approach to considering global education, defining global competencies, and formalizing policy; (5) an integrated approach to establishing global education as being central to learning; and (6) a commitment to equality.

Recommendations of this study are aimed towards elementary and secondary administrators and classroom practitioners in addition to policymakers and include the following: contextualizing global education policy and practice across the world; cultivation of a global pedagogical stance; and development of global learning mission statements for classroom teachers in their own cultural, linguistic, political, economic and social context to foster conditions for effective learning for all students and, specifically, in meeting the needs of underserved students.

12.A Comparative Study between Chinese and Australian Educational Inspection Systems, Rui Jin and Hechuan Sun, Shenyang Normal University.

In 2009 and 2012, the students of Shanghai attended PISA and won the first in the world. Analyzing and rethinking the successful experience of Shanghai have a practical significance for the improvement of education quality in the primary and secondary schools in China. This article aims at deeply analyzing the reasons of the students' winning, then summarizing the implications of Shanghai education and Chinese education, and then providing the reference for other provinces in China to improve the education quality.

There are several factors of Shanghai winning in PISA at different levels. On the national level, in August 2008, "the national medium and long-term education reform and development plan outline (2010-2020)" started, which takes the quality of education as the core task of education reform and development in our country. The policy provides a fundamental guarantee for the educational activities of different provinces and cities. It's the first long-term education reform and development plan in the 21st century, and it's also a programmatic document in the next period to guide the national education reform and development. Besides, in May 2010, the national education system reform leading group office launched the "education reform pilot project" across the country. Shanghai declared the 27 items of national education system reform successful pilot project, which is the most of the country.

On LEA level, Two phases of the curriculum reform of Shanghai have played a important role in the success of PISA. Shanghai curriculum reform draws lessons from the international advanced experience, and it also inherited the excellent tradition on Chinese education. In the process of curriculum reform, Shanghai not only created a new curriculum standard and teaching material, but also started a variety of courses, which particularly emphasizes on the teaching innovation and teaching evaluation. The core of Shanghai curriculum reform is to cultivate the students' comprehensive ability. The basic courses, expanding courses and research courses can fully meet the needs of the students and promote the improvement of students' academic quality.

The reason that Shanghai has achieved high marks is that Shanghai pays attention to bottom up. The data of the result indicated that Shanghai wins in the low-end grades high, and the overall grade distribution gap is small. Even in general secondary vocational technical schools, the reading points on average level is above the average in OECD. The indexes of PISA also fully shows that the differences between Shanghai's schools and students is quite small. Thus we can get a conclusion: Shanghai compulsory education balanced development is very effective.

This study belongs to a China national research project on educational science (BDA120028).

13. Analysis on the Successful Experience of Shanghai's Students Winning in PISA, Rui Jin and Hechuan Sun, Shenyang Normal University.

Issac Kandel (1881-1965), one of the famous educator of comparative education, once said, we study foreign nations' educational systems with correct status and strict scholastic attitude, the real value of which is to understand and study our educational system better. The paper aims at analyzing the development of Chinese and Australian educational inspection, inquiring the commons and differences between the two countries' educational inspection systems, summarizing the advantage and weakness so as to render the authors have a comprehensive understanding to the inspection system, and then to combine with the problems of Chinese inspection system to put forward some constructional suggestions to perfect Chinese educational inspection system.

The research methodology includes comparison and content analysis. Though visiting some related websites, analyzing the current material and comparing the two inspection systems, the conclusions then can be drawn.

The two countries have some commons on the educational inspection. For example, they both pay attention to the evaluation on students' performance and teachers' quality, school evaluation, and partnership evaluation. They all have qualified inspectors to improvement schools and organizations. And the inspection all start from the implement of compulsory education.

While they still have some differences as well as the commons. Firstly, Australia do not set up the educational inspection system independently, and it integrates the educational inspection into education administration. While China has the special education inspection organization. Secondly, Australia puts emphasize on the assessment of literacy and numeracy of the students especially. That's why it sets up Smarter Schools National Partnerships (SSNPs) and National Assessment Program- Literacy and Numeracy (NAPLAN). While Chinese inspection emphasizes the whole performance. Thirdly, Australia has multi-principal part of evaluation, which guarantees the reasonable results of the educational inspection to schools and the national education. While the main body of Chinese inspection is much sole. What should be mentioned about Australia inspection is ACER (Australian Council for Educational Research) and QSA (Queensland Studies Authority), which takes more responsibility for the external evaluation for the schools. Fourthly, Australia puts emphasizes on inspecting schools, while Chinese chooses to inspect the government combined with inspecting schools. The political characteristic is much more obvious.

Though the commons and differences of the two counties, we could draw some conclusions for the improvement of Chinese inspection system. Firstly, the forms of Inspections is too sole and the times of random inspection should be increased. Secondly, the main body of the inspection should be added to ensure the just of the inspection results. Thirdly, China should pay attention to the results of the inspection rather than the forms, which need to improve the quality of the inspectors and the inspection. This study belongs to a China national research project on educational science (BDA120028).

14. And suddenly they were here - providing education in an humanitarian crisis in a first world country. Barbara Schratz, Center for Learning Schools, University of Innsbruck.

While media images and reports show the unfolding drama of a humanitarian crisis of unknown dimensions and dynamics with thousands of people on the move toward Europe, Austrian schools struggle to embrace the new situation they are facing. Though the school system at compulsory lower secondary level is undergoing a reform process to empower schools to open to the notion of diversity, inclusion and changing learner needs, the situation of thousands of new students, whose legal status is yet undetermined and who do not speak German or have not had any schooling so far, pose for many schools and communities a range of immediate challenges. Because education in humanitarian crisis is predominantly a topic for action and research in developing countries, there are few guidelines and standards and fewer documented good practices available for Austria and other central European countries in such a situation. Further, general answers may not help an individual school in a community that has provided refuge for a proportionally large number of refugee families and/ or unaccompanied minors. Each school must find context-specific solutions. The poster will present the strategies taken for and by Austrian schools and the education system at large and share insights and learnings as they evolve.

15. Bringing policy into practice: Teacher leadership in Austria's mandated school reform. Maria Wobak, National Center for Learning Schools for the Federal Ministry of Education and Women's Affairs.

With the mandated school reform "Neue Mittelschule" in lower secondary in Austria, team teaching became a requirement for all middle schools. Due to school and personnel structures in Austria, resources for team teaching hours are provided out of the federally employed teacher resources, while most middle schools are staffed by teachers employed by the state provinces. Not only was team-teaching for the majority of teachers a new challenge, but also the differences in salary structures and status were a further challenge to finding meaningful and effective ways to teach together in the classroom. While opening one's classroom and practice to a colleague can be a powerful opportunity for collegial professional learning, most teachers cited team-teaching as the source of fear before their school began the reform. Interestingly, most cite teamteaching as enriching and consider it a high-potential innovation after their first year of experience.

This poster presents challenges and potentials of team-teaching based on the Austrian experience to date. Forms of team-teaching as they have emerged in the reform will be presented, along with current data available on teamwork, school culture, student engagement and school effectiveness in the New Middle School.

16. Leading, teaching and learning "in the Middle" - An international examination of the leadership dimensions, instructional practices and contextual philosophies that have transformed the middle years of learning. Brandy Yee, Calgary Board of Education.

Through the exploration of the lived experiences, beliefs and values of instructional leaders, teachers and students in Finland, Germany and Canada, this study sought to answer the question, "What factors contribute to the establishment of developmentally responsive, intellectually engaging middle level learning environments for early adolescents?" Provoked by current research emerging from the Canadian province of Manitoba calling for the transformation of middle level learning environments, leading, teaching and learning in the middle years are examined through the lens of Robinson's (2011) "leadership dimensions," Friesen's (2009) effective instructional practices and Dweck's (2008) "growth mindset." Consideration of these three research perspectives in the context of early adolescent learning and middle level learning environments, placed against an international backdrop, provides a previously undocumented perspective into this phenomenon.

Aligning with a social constructivist, qualitative research paradigm, the research design for this study incorporates collective case study methodology, along with constructivist grounded theory methods of data analysis. Three case study narratives were used to share the rich stories of study participants in Finland, Germany and Canada, selected using maximum variation and intensity sampling techniques. Interview transcript data was coded using processes outlined in Charmaz's (2006, 2012) constructivist grounded theory. A cross-case analysis yielded a conceptual framework, highlighting key factors that were found in the data to be significant in the establishment of developmentally responsive, intellectually engaging middle level learning environments.

Although this study focused on 12 schools in Finland, Germany and Canada, it informs the practice of all those working with early adolescent learners in middle level learning environments in all corners of the globe. Using the insight and practical wisdom shared by study participants as a catalyst to reflect on and question current practices related to leading, teaching and learning in middle years will provide educators and education systems around the world with the awareness needed to support the next generation of early adolescent learners.

In addition to the rich case studies from Finland, Germany and Canada, the conceptual framework offers educators practical insight into the seven key factors (with accompanying sub-factors) which were found in the research to be key elements of learning environments responsive the unique learning needs of early adolescents. The proposed poster for this conference will focus on the conceptual visual framework along with the recommendations that were put forth as part of the study I undertook for my doctoral research.

17. Analysis of Enlightenment of Evaluation Standards for Middle and Primary Education Quality on Liaoning Province. Hong Zheng and Hechuan Sun, Graduate School of Education, University of Bristol.

Research Questions: The study aims to conduct content analysis of national standards to figure out which factors of students' outcome were effective for Liaoning province to borrow so as to improve its provincial evaluation standards of education quality. Furthermore, the factors of students' outcome contributing to effective learning of Liaoning Province will be demonstrated.

Practical Context: In order to promote balanced development of compulsory education across different regions of China and further improvement of education quality, the ministry of education of China is to establish monitoring and evaluating system of schooling education quality to guarantee and improve education quality (Bureau, 2010). On June 3rd 2013, the Ministry of Education issued new evaluation standards entitled "Comprehensive Evaluation System of Education Quality for Primary and Secondary School" ("national standards" for short) which changed the fact that educational evaluation more focused on examination performance, instead of students' characteristic development and comprehensive quality. Moreover, the "new standard" expanded the concept of education quality from just academic achievement to combining other important factors supposed to influence educational quality. Morality development level, academic development level, physical and mental development, interests and specialty, and study burden were involved in new standards (The Ministry of Education, 2013). In 2011, Liaoning province issued "Inspection Principles of Balanced Development of Compulsory Education" also including standards about students.

Key Concepts: UNESCO (2004) argued that education quality concerning students' outcome can be illustrated as two areas. First, the success of students' cognitive development; Second, the development of students' values and attitudes towards undertaking responsibility of citizenship and cultivation of creativity and emotion-control (UNESCO, 2004, p. 17). Contrary to traditional Chinese teaching method which emphasize on academic achievement, learner-centered approach which led the new trend of Chinese educational reform, put more emphasis on cultivation of students' critical thinking skills and abilities of solving problems (Hua, Harris, & Ollin, 2011). Therefore, education quality in this research refers to other aspects of students' outcome including characteristics, morality, practical skills, and so on rather than just focusing on academic performance.

Methods: The study initially adopted documentary content analysis to analyze "national standards" and "provincial standards" respectively by arranging the dimensions of each evaluation system to figure out which factors were involved in each dimension. Then the constant comparative analysis of the first and second level indicators between "national standards" and "provincial standards" was conducted to find out the similarities and differences between them through constructing and categorizing themes emerging from the documents. Indicators which were mentioned by "national standards", but were not mentioned by "provincial standards" will be analyzed with more attention. So that useful factors could be extracted to feed in beneficial enlightenments to improve "provincial standards" of Liaoning Province.

Conclusions: The enlightenments of "new standards" on Liaoning Province could be summarized into four points: 1. Evaluation standards pertinent to students' study burden should be added; 2. Pay attention to develop students' creative and practical skills; 3. Evaluate students comprehensively to develop their potentiality; 4. Nurture students' skills of emotion control and interpersonal communication.

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