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Challenges of Developing and Sustaining a Research Partnership for Work Integrated Learning

Back in 2007 at WACE in Singapore, Zegwaard reported that in 1997 research into Work Integrated Learning (WiL) had been 'limited, uncertain and sparse'. Things had improved slightly in 2004 where Bartkus and Stull said 'What has been published is good'. Things have moved on in recent years with the growth of a much larger WiL research community. Much of this has been supported by WACE members who have organised research events around world conferences and symposia, and also with the re-invigoration of two specialist journals. Yet in many ways WiL is still an emerging research field.

This paper will explore some of the practicalities of developing and sustaining a research partnership for WiL. The author will discuss getting started in research, building knowledge in the field and developing WiL resources. At a local level, difficulties faced by researchers include managing projects alongside busy 'day jobs' and maintaining continuity as team members change. At a global level, the most significant challenge is ensuring a partnership approach by developing working relationships across international boundaries.

Consideration will be given to how to set up a research team and to the challenges of working across disciplines as Peach *et al* (2011) explore further in their article on boundary spanning. The paper will also explore issues of sustainability, including funding models – in particular, the continual search for financial resources to sustain ongoing research. The author will conclude with reflections on issues of team and interdisciplinary working.

Keywords:

WiL Research Partnerships Funding Resources

Introduction

This paper will discuss the challenges of developing and sustaining a research partnership for Work Integrated Learning (WiL). It will explore some of the issues of conducting WiL research and some of the practicalities of developing and sustaining a research partnership for WiL. The author will discuss getting started in research, building knowledge in the field and developing resources for WiL research. Throughout the discussion paper, reference will be made to our ongoing research projects.

Why Research WiL?

Work Integrated Learning (WiL) is broadly defined as educational activities that integrate theoretical learning with its application in the workplace (Cooper *et al*, 2010). WiL provides an authentic experience of work or professional practice in a workplace or in the community. Research in this area is particularly relevant in the light of imminent tuition fee reforms, record numbers of graduates (Browne *et al*, 2010), and the increasing difficulty of securing employment post-secondary education (Chevalier & Lindley, 2009). These challenges are shared in many global economies. Universities are now challenged to design programs that equip students with the skills, knowledge and experience that increase their employability (Bates, 2008). WiL provides a plausible mechanism to develop these skills through placements, sandwich education (a third year in industry in a four year degree programme) and professional training (Bates, 2008; Boud & Falichikov, 2006; Rhodes & Shiel, 2007).

In a recent survey of employers conducted by the UK Chartered Management Institute (Woodman & Hutchings, 2011), three quarters of respondents felt that failures in the UK

education system are contributing to a skills crisis in the UK. Although WiL is growing in recognition and increasingly utilised in the UK, it has been suggested that the system of vocational education in the UK is not well developed (Little and Lore, 2010) and has a "loose fit" with graduates' subsequent areas of work (Little, 2001). In contrast, WiL is a well established educational method in the USA, Canada and Australia.

Early approaches to WiL research

My first encounter with WiL research was back in 2007 at WACE in Singapore, where Zegwaard reported that research into WiL, up to 1997, had been 'limited, uncertain and sparse' (Zegwaard & Coll, 2007). Things had improved slightly by 2004, when Bartkus and Stull said 'What has been published is good' (Bartkus & Stull, 2004). In many ways WiL has not been regarded as a traditional academic subject in its own right, but perspectives are beginning to broaden: WiL research is now diverse and multidisciplinary, and there is a recognition of the potential of WiL as a pedagogical philosophy, rather than simply a model for facilitating links between education and work (Kjellen, 2010).

More than a decade ago, Coll and Chapman (2000) explored the choices of methodology open to WiL researchers. In particular they emphasised the call for demonstrable quality in research work, and how this perhaps conflicts with the perceptions of the often self-taught practitioner-researcher about their own research abilities. The paper focused on the importance of clearly articulating the philosophical underpinnings of a project, together with the creation of a research design appropriate to the issues under investigation. Bartkus (2007) further explored the issue of research quality in the publication world outside of the known boundaries of the *Journal of Co-operative Education and Internships*. The main problem appeared to be the quality of existing quantitative (i.e. statistical) research, partly the

accuracy and appropriateness of statistical analysis, and the failure to follow accepted conventions for research design or reporting statistical results. Limited opportunities for generalisation – for example because of the use of convenience sampling – were not always acknowledged; small samples were also an issue, with only 13% of previous studies reviewed by Bartkus having sample sizes greater than 500. Coll and Kalnins' more recent review of qualitative studies of cooperative education (2009) reinforced the call for research to be firmly grounded in theory. Their paper called for data collection and analysis techniques to be transparent, evident, and audit-trailed to allow judgements to be made about research quality quoting Guba and Lincoln's (1989) criteria of credibility, confirmability and transferability as key issues for interpretive studies.

Things are moving on with the growth of a much larger WiL research community. Much of this has been supported by WACE members who have organised research events around world conferences and symposia, and by the re-invigoration of the two specialist journals. In the case of the *Journal of Cooperative Education and Internships* (JCEI), a new editor and editorial board are in place, together with the open access sharing of this resource and publicity circulated to WACE members. In the case of the *Asia-Pacific Journal of Cooperative Education*, successful conference tie-ins have lead to greater levels of submissions, subsequent publications, and an increase in citations and an improvement in ranking to a 'B' journal.

Our research journey: getting started

The lead author has become increasingly interested in WiL research, starting out as a practitioner-researcher discovering the benefits of WiL in terms of degree classifications, salaries and jobs (Ward, 2006). An investigation of placement journeys followed,

documenting the triangular relationship between student, employer and institution (Ward, 2009).

Attending WACE conferences allowed for the opportunity to explore future possibilities for WiL research – in particular, the potentially positive psychological influence of WiL is not yet well established. Our lead researcher met with Drysdale at WACE events in Vancouver and Graz. Drysdale described the international research project which she was leading, looking at psychological influences of WiL. She had conceptualized the research project, provided the compiled questionnaire and research design, and sourced international partners. In 2010 the study had already been designed and piloted internationally across four European and North American cohorts, and possibilities for the University of Huddersfield to contribute to this project became apparent.

Joining an international study

The early literature describes the potential limitation of the role of practitioner-researchers. For our university to participate in the project, experienced local research partners needed to be found. A core research team was formed with experience in WiL and both quantitative and qualitative research. The team of three each had busy day jobs and felt that the most could be achieved on this project with the support of a Research Assistant (RA). We applied to our Teaching and Learning Innovation Fund for project support. Whilst the bid was successful, we compromised by taking on an RA two days a week for six months rather than for one day a week for a year. Our research, 'Are placement students better psychologically prepared for life and work? A quantitative study,' formed part of Drysdale's larger international comparative study.

Once the project was approved, a suitable RA needed to be appointed. As with all university appointments, approvals had to be agreed and protocols followed. The core researchers spent a large amount of time complying with university recruitment procedures. The range of applications was good, and we were able to select an excellent RA from a strong field. However, we were immediately made aware that our RA was applying for Professional Doctorates and would leave the project in six months regardless of whether the project continued. Being in a position of offering only a short research contract does lead to a greater likelihood of staff turnover.

The research contract amounted to around 40 days work. During this time there was much to organise. Induction for the RA was condensed. A monthly steering group was set up for all the project members to meet face-to-face. Research ethics approvals were needed, inevitably leading to delays. Setting up the on-line survey, designing and executing a marketing campaign and administering the survey all took time, although this was interspersed with a literature review. The analysis phase of the research was very tight. Deadlines for conference papers and research bids meant that paper-writing and data analysis were carried out simultaneously. Luckily our researcher was able to work independently with email and phone support from the core team, and the project deliverables were achieved.

Building knowledge in the field

First phase – Quantitative study results

A total of 957 undergraduate students responded to our on-line survey investigating the impact of WiL on a variety of psychological traits. We found that students who pursue placements generally have significantly higher hope and confidence in attaining their goals

and lower test anxiety than students who have not experienced placement. In addition, this effect appeared to be intensified by the cumulative impact of multiple work-related experiences. The more work-related experiences students have the more hope, intrinsic goal orientation, confidence in attaining their goals, and academic self-efficacy they have.

An area of the findings of particular interest was that of the influence of multiple WiL experiences. Our UK findings (Purdie *et al*, 2011), combined with preliminary findings from the international study, suggest that multiple experiences may have a greater effect than a single placement on psychological factors (self-concept, self-efficacy, hope, procrastination, tacit knowledge, and study skills/work ethic). These factors are likely to affect not only personal wellbeing but also academic achievement and employability. However, the mechanisms by which this may occur and the way in which multiple WiL experiences may enhance the student learning experience over and above single placements are not yet understood and the evidence base is lacking. This is not to denigrate the positive value of single placements, however in a time of academic reform and rapidly adapting professionally oriented courses, multiple placements are becoming more common and a greater understanding and evidence for their impact is essential.

Second phase – Qualitative study

The project was fortunate to secure further innovation funding for 'The more the merrier? A qualitative examination of the contribution of multiple WiL experiences to student learning, personal development and preparation for employment.' The second phase of our research started in early 2012. We have another RA in post and are starting to formulate our research design and seek ethics approval. Once again we are looking at the sustainability of our

project. During this period we have submitted two conference abstracts, a research bursary application to allow an investigation of the links between psychological factors and graduate outcomes, and have submitted a bid for a funded PhD to extend our research into placement experiences using a mixed methods approach.

Discussion of issues

Research design: mixing methods

Attending to quality in research demands that the epistemological underpinnings of a project should be clear and unambiguous (Bartkus, 2007; Coll & Kalnins, 2009): is the premise of the project to discover 'objective' truths using measurement and statistical techniques, or to investigate subjectivity and personal meanings? Coll and Chapman (2000) suggest that some research questions may be best addressed by using a mixed methods approach, and that this does not necessarily compromise the philosophical basis of a project. They argue that quantitative and qualitative methods are not incommensurable – that quantitative research using surveys depends upon the subjective choice of appropriate statistical tests and the interpretation of results. Subjectivity is acknowledged in qualitative research, and in order to investigate students' experiences in depth, our qualitative study takes the epistemological stance of constructionism – the idea that meaning is not discoverable as 'fact', but constructed by human beings in their engagement with the social world (Burr, 2003).

The first and second phases of our project, drawing on both quantitative and qualitative approaches, fit neatly together. The survey gave us an understanding of the psychological factors attributed to WiL. The issue of sample size has been successfully addressed with a

large cohort of respondents and more than 700 fully completed surveys. The wider international comparisons benefit from an even larger sample size. The qualitative study will tease out some of the experiential detail associated with the survey results and allow us to set them in a richer context through focus groups and individual interviews with placement students. It will take its focus from the quantitative analysis, which shows that WiL is most influential when students consistently build on the gains they make through multiple placement experiences (Purdie *et al*, 2011). We aim to research what it is about multiple experiences that increases the benefits – in particular the student perspective on the advantages of multiple placements in comparison to few placements.

With an eye to research quality, we hope that triangulating our data using different methods – a survey, focus groups and individual interviews – will allow confidence in our findings. Coll and Chapman (2000) point out the benefits of a flexible approach to research design, allowing for alterations as the project progresses, keeping the research process dynamic rather than static. Each stage of our project is being used to inform the next: issues raised in the survey results will be addressed directly in the individual interviews and focus groups, which will address the perceived differences between multiple WiL experiences and single work placements on participants' learning, personal development and employability during their time at university. The use of reflective tools intended to elicit interviewee's perceptions with minimum investigator bias has now been piloted in individual interviews, and a suitable tool has been developed to directly address the aims of the research. The analysis process will be comprehensively audited, and this process transparently described in any future academic papers arising from the project. It is hoped that the results of the qualitative project will resonate with readers in the field of WiL and demonstrate a level of transferability. Our dissemination strategy of sharing findings allows for interested parties to discuss and question

our results, and make their own informed decisions about whether the findings can be usefully applied in other situations.

Developing resources

Issues of sustainability

The sustainability of the project was a major issue. At a local level, difficulties faced by researchers include managing projects alongside busy 'day jobs' and maintaining continuity as team members change. Throughout the first project, there was always the knowledge that without further funding, our efforts in establishing the core research team and our findings would not be realised. Therefore focus for the core team was primarily around funding activity. We submitted three research bids. Each of these bids, required lots of reading, preparation and a team-based approach to drafting. In some cases it was a challenge to match what we really wanted to do with what bidders were looking for.

Reflecting upon the external bidding activity that we did, was this the best use of time and resources? It gave us the opportunity to develop our research ideas. Yet had we spent equivalent time on our project perhaps another journal article or conference paper would have emerged. The search for potential funding continues. Our hopes are currently on the application for a funded PhD stipend. This would allow the existing RA to become a PhD researcher, thereby ensuring project longevity.

The core team's decision to work with Research Assistants had consequences for the project. On a positive note, it ensured a drive and momentum to the project, someone with time to explore the issues and to draft papers. With an RA in the post, the project was full steam

ahead with co-ordination, research, publication and dissemination all pursued simultaneously. Our research outputs have undoubtedly been increased with this approach.

However there are some consequences to this approach as the project suffered from a stop, go approach with ideas generated, then paused whilst funding was found. An even more important factor was that the RA was the 'expert' on the data collected. That knowledge went with her. We have done our best to accommodate this with clear handover files and individual responsibilities for the core research team.

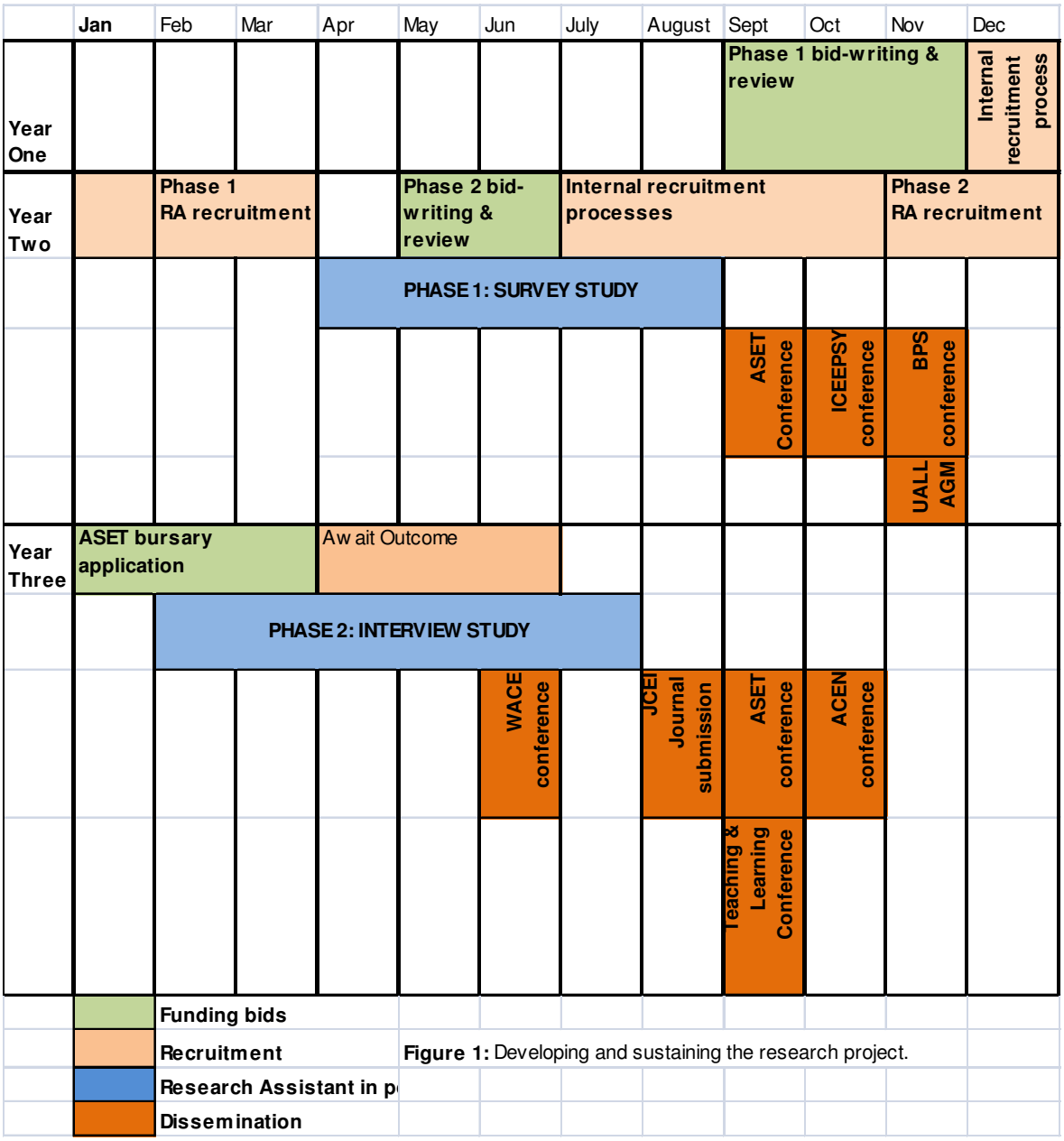

Figure 1: Developing and sustaining the research project.

Challenges of cross-boundary working

Peach *et al* (2011) argue that boundary spanning is an area of theory and practice with great applicability to a better understanding of the activity of WiL departments. Boundary spanners are people with a wide array of contacts and exceptional interpersonal skills, and are effective collectors and disseminators of information. Successful boundary spanners are trusted and respected by diverse stakeholders and they understand the social and organisational complexities of collaboration. They convene diverse and eclectic partners, assembling apparently disparate groups around shared concerns. The concept of boundary spanning can also be applied to research partnerships bridging local and international boundaries, and reflects the importance of collaboration and dissemination in moving towards shared understandings and new ideas.

At a global level, one of the most significant challenges of the research project described above has been ensuring a partnership approach by developing working relationships across international boundaries. Our relationship with the larger international project was mainly by email. Whilst in the early stages this facilitated communications, it also meant that for short deadlines such as research conferences there was not much time for consideration of the project partners' needs and ensuring consistency across the projects.

At a local level, a major challenge faced in work related programs is developing structures and processes across boundaries that assist stakeholders to cross social and cultural borders between education and work. While boundary spanning is contextualised within organisational systems and structures in university departments responsible for *work related programs* (Miller, 2008), i.e. Work Integrated Learning (WiL) and Cooperative Education (Co-op), it could be argued that the concept includes not only the facilitators who build bridges between education and work, but also the students who cross these bridges. Our

research reaches across academic boundaries in addressing these issues. Project expertise spans two academic centres, with lead members drawn from the university's Teaching and Learning Institute and the Centre for Applied Psychological Research. Both phases of the project span multiple academic schools and models of WiL, taking an overarching view across work integrated learning in its many different forms. Findings will be disseminated at both local and international levels.

Conclusion

Our vision of what we can research, how we can research it, and where we should share our findings has been affected by the key factors described in this paper. We have discussed the multidisciplinary, multi-method nature of current WiL research, and placed the issues of research quality, effective partnerships and timely dissemination at the heart of the research process. The comparability and potential transferability of research findings can be informed by collaboration across international boundaries. The paper has also examined the importance of sustainability, weighing this against the time spent recruiting part-time team members and bidding for continued funding, and describing how this impacts on time allotted to research activities. All of these factors affect our activities at a local level, and will inform our future approach to practitioner-led research.

References

Bartkus, K.R. & Stull, W.A. (2004) Research in cooperative education, in R. K. Coll & C. Eames (Eds.), *International handbook for cooperative education: An international perspective of the theory, research and practice of work-integrated learning* (pp67-81). Boston, MA: World Association for Cooperative Education.

Bartkus, K.R. (2007) A review and synthesis of scholarly research in cooperative education and internships: Part 1. An analysis of quantitative research published outside the Journal of Cooperative Education and Internships, *Journal of Cooperative Education and Internships*, 41(1), pp56-96.

Bartkus, K.R. & Higgs, J. (2011) Research in cooperative and work-integrated education, in R. K. Coll & K. E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp73-84), Lowell, MA: World Association for Cooperative Education.

Bates, M. (2008) Work-integrated curricula in university programs, *Higher Education Research and Development*, 27(4), pp305-17.

Browne, J., Barber, M., Coyle, D., Eastwood, D., King, J. & Naik, R. (2010) *Securing a sustainable future for Higher Education: An independent review of higher education funding and student finance*, London: Department for Business Information and Skills. Accessed online at: http://www.bis.gov.uk/assets/biscore/corporate/docs/s/10-1208-securing-sustainable-higher-education-browne-report.pdf

Boud, D. & Falchikov, N. (2006) Aligning assessment with long-term learning, *Assessment and Evaluation in Higher Education*, 31(4), pp399-413.

Burr, V. (2003) *Social Constructionism*, London: Routledge.

Chevalier, A. & Lindley, J. (2009) Overeducation and the skills of UK graduates, *Journal of the Royal Statistical Society*, 172(2), pp307-37.

Coll, R.K. & Eames, C. (2000) The role of the placement coordinator: An alternative model, *Asia-Pacific Journal of Cooperative Education*, 1(1), pp9-14.

Coll, R.K. & Chapman, R. (2000) Choices of methodology for Cooperative Education Researchers, Asia-Pacific Journal of Cooperative Education, 1(1), pp1-8.

Coll, R.K. & Kalnins, T. (2009) A critical analysis of interpretive research studies in cooperative education and internships, *Journal of Cooperative Education and Internships,* 43(1), pp1-14.

Cooper, L., Orrell, J. & Bowden, M. (2010) *Work Integrated Learning: A guide to effective practice*, London: Routledge.

Drysdale, M. & Johansson, K. (2011) A scientific approach to research design and quality in cooperative and work-integrated education, in Coll, R.K. & Zegwaard, K.E. (Eds.) *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp85-97), Lowell, MA: World Association for Cooperative Education.

Fransella, F. (2005) *The Essential Practitioner's Handbook of Personal Construct Psychology*, London: John Wiley & Sons.

Guba, E.G. & Lincoln, Y.S. (1989) *Fourth generation evaluation*, Newbury Park: Sage Publications.

Kelly, G.A. (1955) *A Theory of Personality: The psychology of personal constructs*, New York: Norton.

Kjellen, B. (2010) Cases as boundary objects: transfer and authenticity in work-integrated learning, *Journal of Cooperative Education & Internships*, 44(2), pp26-31.Little, B. (2001) Reading Between the Lines of Graduate Employment, *Quality in Higher Education*, 7(2), pp121-29.

Little, B. & Lore, A. (2010) Less time to study, less well prepared for work, yet satisfied with higher education: A UK perspective on links between higher education and the labour market, *Journal of Education and Work*, 23(3), pp275-96.

Miller, P.M. (2008) Examining the work of boundary spanning leaders in community contexts, *International Journal of Leadership in Education: Theory and Practice*, 11(4), pp353-77.

Peach, D., Cates, C., Ilg Baden-Wuerttemberg, B., Jones, J. & Lechleiter, H. (2011) Responding to Rapid Change in Higher Education: Enabling University Departments Responsible for Work Related Programs Through Boundary Spanning, *Journal of Co-operative Education and Internships*, 45 (1), pp94-106.

Purdie, F., McAdie, T., King, N. & Ward, L (2011) In the right placement at the right time? An investigation of the psychological outcomes of placement learning, *Procedia - Social and Behavioral Sciences*, 29, pp717 –24.

Rhodes, G. & Schiel, G. (2007) Meeting the needs of the workplace and the learner through work-based learning, *Journal of Workplace Learning*, 19(3), pp173-87.

Ward, L. J. (2006) *Graduate Employment Links to Sandwich Year Work Placements.* In: Changing Student Choices. A Joint Higher Education Academy and Higher Education Careers Service Unit Conference, July, 2006, University of Manchester, UK.

Ward, L. (2009) Student placement journeys: An on-line collection of video resources showcasing the development of students on one year work placements with views from their employers and placement tutors, *Proceedings of the 16th World Conference on Cooperative Education*, Vancouver, Canada: World Association for Cooperative Education.

Woodman, P. and Hutchings, P. (2011) *Tomorrow's Leaders*, London: Chartered Management Institute.

Zegwaard, K.E. & Coll, R.K. (2007) Publishing research and accessing established knowledge for cooperative education, *Proceedings of the 15th World Conference on Cooperative Education*, Singapore City, Singapore: World Association for Cooperative Education.

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