

6th–9th January University of Birmingham

ASE Annual
2016
Conference



A spotlight on action research – the Research Specialist Group

Action Research (AR) was under the spotlight at this year's Conference with a series of science teacher practitioner research workshops and poster presentations, organised by members of the ASE Research Specialist Group.

The first workshop, led by Deb McGregor of Oxford Brookes University, was an introduction to AR, and was designed to promote discussion in small groups to consider the nature of AR and the ways it could be designed and implemented in real classrooms. Participants engaged in a lively discussion characterising AR, thinking about the different methodological approaches that are at its core and reflecting on the different stages of a research design.

The second session, led by Fiona Woodhouse (Huddersfield University) and Indira Banner (University of Leeds), generated discussion around the varied ways practitioners can collect data in schools. It began with an engaging activity considering data collection and from whom data can be collected (e.g. teachers, pupils, heads, governors, parents, etc.). Creative ways of garnering data included researcher-led narrative and pupil-pupil interviews, creative (pictorial) versions of questionnaires, students' drawings, photos of learning-in-action and reflective diaries. Specific examples of these were presented and shared, highlighting the advantages of using these less traditional strategies to provide richer data-sets of evidence to draw from.

Presenting creative ways of collecting data.

The third workshop, led by Shirley Simon, Sheila Curtis and Jo Nicholl (Institute of Education UCL), presented two AR case studies from Havering College. The outcomes from teacher AR presented showed how teachers focused on issues of importance in their practice, chose appropriate methodologies and achieved personal learning as a result of reflection

on practice. One of the AR projects featured was *Student perceptions in BTEC Science in relation to progression on to higher education*. This research arose from the premise that BTEC courses are for those students not eligible for a full A-level programme. Findings from the research highlighted how investigating students' perceptions about their expectations of sixth form experiences and career aspirations should be more carefully considered and reflected upon when advising and guiding students in their A-level or BTEC course choices. The process of the AR was as important as the findings and participating in the project impacted significantly on the professional development of the teachers involved.

Participants engaged in lively discussion during one of the workshops.

The poster presentations comprised a general overview given by each of the poster authors, followed by informal discussion with listeners in the audience. The research posters (20 in total) illustrated a wide range of different topics and methodological approaches. There were examples of projects that gathered qualitative and quantitative data, as well as some that involved mixed methods. The projects spanned primary and secondary science classrooms, as well as outdoor learning environments. Some projects focused on pedagogical approaches to develop inquiry skills (e.g. teacher posters from EU FP7 SAILS project). There were projects that focused on pupils' attitudes to STEM and STEM careers, and others that explored the nature of creativity in teaching and learning.

The posters represented a valuable engagement with research at various levels, from teacher inquiry to higher education studies. All showed how teachers as researchers had been reflective and analytical about practice. The posters incorporated theory in variable ways; this is of interest, as teacher inquiry

work can be enhanced if practice and reflection draws on theoretical concepts, for example of assessment, or of learning theory. Theory can provide explanatory power to teachers engaging in research, be it for doctoral/masters study, or teacher action research.

Overall, the workshops and poster session created a friendly and supportive environment for teacher-researchers to engage with AR and educational research in general. Regardless of the progress along the teacher-researcher learning journey, the workshops and poster presentations provoked further thinking about the different ways that AR can be used to support practitioner development and inform practice. The interactive sessions provided an opportunity to think about engaging with AR, planning an AR project, discussing issues and concerns and being inspired by different approaches resulting in intriguing findings!

The Research Specialist Group is already preparing for the 2017 ASE Annual Conference in Reading. We plan to expand this series of workshops and have a dedicated space for posters to be on display throughout the Conference.

If you have an interest in research and would like to share with other practitioners, we would love to hear from you. Please e-mail catarina.correia@kcl.ac.uk or dmcgregor@brookes.ac.uk

Articles about AR have been published in *EiS* (May 2015 and November 2015) with a third due to appear in the May 2016 issue.

Deb McGregor is Chair and **Catarina Correia** and **Fiona Woodhouse** are members of the ASE Research in Science Education Specialist Group. **Shirley Simon** is Professor in Education at UCL Institute of Education.