Working Group report: Building and sustaining active research collaborations with teachers of mathematics

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The BSRLM working group met for the third time to explore collaborations between teacher and researchers in the processes of doing, reflecting upon and engaging with the findings, of mathematics education research. Following a brief presentation of the main findings from the recent ICME Survey on 'Teachers working and learning through collaboration' the group divided to address two discussion topics. The first concerned the opportunities for researchers to collaborate with teachers and schools as active participants in research studies and associated methodologies. The second concerned the format and content of texts that report outcomes of research studies in the form of a weblog (more commonly know as a 'blog') entries and other forms of communications, with a view to develop editorial guidelines for the new BSRLM blog.

Collaborative research, teacher inquiry, research-informed practices

Introduction

We structured the working group session around the following activities:

- A brief presentation of the key findings of the recent ICME Survey on 'Teachers working and learning through collaboration' (Robutti, Cusi, Clark-Wilson, Jaworski, Chapman, Esteley, Goos, Isoda, and Joubert 2016).
- Personal introductions that focused on current professional interests concerning the theme of the working group and suggestions for how the group might achieve some worthwhile outcomes.
- Sub-group 1: Discussion of the term 'active research collaboration' in relation to the personal experiences of group members.
- Sub-group 2: Guidelines for outputs that communicate research outcomes and processes to wider audiences through the forthcoming BSRLM BLOG.

Key related interests for the working group members

The nineteen participants at the working group represented the following professional roles/contexts:

- researchers leading large funded research projects involving teachers;
- teacher educators/researchers supporting teacher networks (Maths Hubs, Local Authority funded projects, informal groups);
- teacher educators/researchers looking to work more closely with groups/networks of teachers;

- doctoral researchers.
- Advisers supporting teacher-research groups.

Fourteen participants were participating in the working group for the first time.

Developing research links with teacher: Summary of discussion points

The sub-group comprised a mainly UK-based group and the discussion focused mostly on aspects of cooperation and collaboration in relation to projects that concerned practising teachers. Key discussion centred around:

- The role and status of the participants: Whilst it was accepted that participants would have different roles, it was considered an aim to try to achieve equal status for participants.
- The importance of transparency, openness and the sharing of ideas and a realisation not that everybody needs to do everything. For example, teachers did not need to engage in detailed data analyses, but be aware of the processes and have sight of the findings.
- The importance of the 'issue' that was at the heart of the collaborative work being decided/honed collaboratively, i.e. not solely decided by the teachers/school– otherwise only local issues tended to be addressed through the collaboration, which could be narrow or too intraspective.
- The ethics of the research, in particular the process of negotiating teachers' roles and expectations regarding their role(s) in data collection, analysis and triangulation.

The sub-group concluded that, in its experience, teachers would like to be more involved in mathematics education research but that it was important to overcome the ethical and methodological challenges to enable them to participate fully in the collaboration.

Guidelines for the BSRLM BLOG

The sub-group began by reviewing the submission guidance for the British Educational Research Association (BERA) BLOG, which is extracted here:

The blog is open to anyone to make a submission. The aim is to stimulate debate and thus differences of opinion will be aired. However, all submissions must have some link to evidence rather than assertion and should be on substantive issues rather than personal criticism. The editorial team welcome articles of 500-750 words that are:

- short reports or summaries of research
- opinion pieces
- · responses to policies
- experiences as an educational researcher
- experiences using research
- Prospective contributors should ensure their contributions:
- are research informed
- avoid jargon, dense language and academic referencing
- provide links to sources where possible

- use inclusive and non-derogatory language
- do not include obscene or rude content, or content that belittles or attacks persons or groups.
- do not link to profane, obscene, rude, or illegal material or to sites that knowingly violate intellectual property rights. [https://www.bera.ac.uk/project/the-bera-blog, accessed Nov 2016]

These guidelines, if framed more positively, were thought to be a good starting point, and should be considered by the BSRLM Publications Officer for adoption in the first instance. The sub-group discussed blog audience, contributors and type of contribution. On the latter, there was agreement that blog contributions might include posts from teachers, teacher researchers or researchers reflecting on academic texts and their influence on practice and posts about the early stages of research - the thinking and planning that takes place before beginning action research for example. Furthermore, the sub-group concluded that the BSRLM BLOG offered a good opportunity for the BSRLM Community to make the outcomes of its work more visible to a wider audience.

Next steps for the group

The above described format for the group will continue at its next meeting and the ongoing discussion that concerns collaborations with teachers and schools as active participants in research studies would continue. In particular, the following themes have been highlighted for further discussion.

- How to nurture collaboration within projects even in those that start out as non-collaborative.
- Understanding the teacher perspective: What does a teacher want to get out of it? How to build honesty and trust between participants?
- How to clarify roles and be clear about what skills each person brings to a project.
- How to define boundaries that can move over time as roles change.
- How to emphasise joint purpose rather than joint activity.

In addition, there will continue to be opportunities to share and discuss draft writings for wider audiences that describe the activities and outcomes of research studies in the form of BLOG entries and other forms of communications.

References

Robutti, O., Cusi, A., Clark-Wilson, A., Jaworski, B., Chapman, O., Esteley, C., Goos, M., Isoda, M., Joubert, M. (2016). ICME international survey on teachers working and learning through collaboration: June 2016. ZDM, 48(5), 651-690, doi:10.1007/s11858-016-0797-5.