

**DEVELOPING A FRAMEWORK FOR RESEARCHING PROFESSIONAL
DEVELOPMENT IN MATHEMATICS
NCETM/BSRLM WORKING GROUP**

Rosamund Sutherland & Colin Matthews

The aims of the research projects instigated by the NCETM are:

- a) to investigate “what works” in terms of professional development in mathematics
- b) to develop a culture of action research being part of CPD by encouraging teachers to become active researchers and supporting them in doing so and
- c) to develop communities of practice as a result of the research.

With this as a background the aim of the working group is to develop a framework for researching professional development in mathematics. The first meeting of the working group centred around open discussions of a range of issues, drawing on the expertise of the participants. These issues (outlined below) will be used to structure the next meeting of the NCETM/BSRLM workshop at the BSRLM day meeting on June 16th 2007.

Purpose of professional development in mathematics

Professional development is about being stimulated to re-think, to experiment, to make fresh distinctions and to probe those distinctions to see if they are informative in enabling pedagogic and didactic choices which influence learners’ experiences and behaviour.

Landscape of professional development

There is a need to be open about what constitutes professional development. This could take many forms which include: individual inquiry; membership of professional organisations; participation in school-based or local authority networks; participation in research or curriculum development projects; participation in courses.

Researching professional development.

There is a need to develop research probes/questions that can be used to evaluate professional development. An example of such a question is “what evidence would convince you that the PD activity is informing teachers’ practices and students’ learning?” It is also important to understand how schools evaluate PD.

Identifying outlier schools

It is important to identify outlier schools in which students are achieving relatively highly in mathematics and then probe these in more depth.

What can we learn from the medical profession?

Can we learn from the ways in which doctors and nurses are freed up to research?

What is a practice informed by research?

Coherence of research supported by NCETM

The group expressed the view that it is important that the NCETM funds a coherent programme of research related to professional development, and that this should be articulated with research funded by ESRC and other fund-raising bodies.