

Plenary Panel

Mathematics teachers working and learning through collaboration – What works?

Teachers learn about the craft of teaching mathematics in a diversity of ways, which begin during initial teacher education and then involve a range of professional development activities in and out of school/college settings. Some of these activities might be described as ‘collaborative’ - but what exactly do we mean by this? And what forms of collaborative work involving teachers actually lead to meaningful developments in teaching and learning? These themes will be explored during a panel session, chaired by Dr Alison Clark-Wilson and involving four different speakers with a variety of perspectives and experiences.

Chair: Dr Alison Clark-Wilson (UCL Institute of Education)

Drawing on evidence from the ICME 2016 international survey into ‘Mathematics teachers working and learning from collaboration’¹, an overview of the different ways in which mathematics teachers around the world collaborate – with an emphasis on the approaches that seem to be more productive – and what and how teachers learn through such work.

Kate Gladstone-Smith and Paul McGarr (Langdon Park School, Tower Hamlets) – a school-based collaboration within a secondary maths department

Kate and Paul will ‘zoom in’ on selected themes from the ICME survey to highlight how their department initiates and sustains collaborative work that is focused on the ongoing development of curriculum units of work. Central to this is the school’s commitment to the teaching of mathematics in mixed ability groups until the end of Year 10.

Primary colleague (Helen Williams) - a school-based collaboration supported by an external consultant/researcher

-- a similar input offering a contrasting approach in a primary school, highlighting and responding to the particular needs of primary colleagues and support staff – ideally also involving some outside expertise – and highlighting what each person contributes to the collaboration – and what they each gain.

Professor Geoff Wake (University of Nottingham)– a research collaboration between secondary colleagues and researchers

This input will consider how collaborative lesson research involving teachers and researchers across boundaries can support high quality professional learning. Fundamental to the sustainability of such communities are structures, systems and changing notions of teachers’ professional capital. Both theoretical and practical issues will be considered.

Alison Clark-Wilson Nov 2016

¹ Reported in Robutti, O., Clark-Wilson, A., Cusi, A., Chapman, O., Esteley, C., Goos, M., et al. (2016). ICME international survey on teachers working and learning through collaboration. *ZDM*, 48(5).