

Nuffield Seminar Series on Mathematical Knowledge in Teaching

Seminar 6: *Formulating a research agenda on mathematical knowledge in teaching*

11.30-12.00 Arrival

12.00-12.10 *Introduction to the seminar:* Kenneth Ruthven

In the themed sessions, each presentation will last 5 minutes, orally summarising key points from the precirculated paper, followed by 5 minutes for immediate questions and comments. The rest of each session will be spent on general discussion of the ideas raised by the presentations.

12.10-13.15 *Towards a programmatic framework* [chair: Kenneth Ruthven]

- Maria Goulding & Marilena Petrou: *Conceptualising teachers' mathematical knowledge for teaching*
- Andreas Stylianides: *Towards a research programme for identifying what mathematical knowledge is important for teaching*
- Johannes Siemons: *Mathematics knowledge in teaching: Formulating research*
- Julian Williams [not able to present]: *Towards a conceptualisation of a 'collective teachers' mathematical knowledge'*

13.15-14.00 Lunch

14.00-15.05 *Towards more informed provision* [chair: Tim Rowland]

- Lara Alcock: *The relative impact and teacher perceptions of different kinds of professional development*
- Julie Ryan & Julian Williams: *Teachers' stories of mathematical knowledge*
- Ray Huntley & Peter Huckstep: *The place of exemplification in mathematical knowledge*
- Anne Watson [not able to present]: *How can learning more maths impact on teaching?*

15.05-15.45 *Towards a comparative perspective* [chair: Julie Ryan]

- Paul Andrews: *The cultural location of teachers' mathematical knowledge: another hidden variable in research on mathematical knowledge for teaching?*
- Birgit Pepin: *What kinds of knowledge help teachers to become effective teachers of mathematics? What kinds of choices do teachers have? – a comparative perspective*

15.45-16.10 Tea

16.10-16.50 *Towards a broadened agenda* [chair: Birgit Pepin]

- Dolores Corcoran & Sandy Pepperell: *Mathematical knowledge in teaching for social justice*
- Marie Joubert: *Using ICT in mathematics classrooms*

16.50- 17.30 *Into the post-Williams era* [chair: Paul Andrews]

- Tim Rowland & Fay Turner: *Research into how deep knowledge of mathematics may be developed through ITE and PPD*
- Kenneth Ruthven: *The need for a programme of research on educative curriculum materials as a mechanism for the diffusion of mathematical knowledge in and for teaching*

17.30-18.00 *Discussion of future plans* [chair: Kenneth Ruthven]