

Morning Programme

	10:30-11:00	11:05-11:35	11:40-12:10	12:15-12:45
Room 2.04	Venkat & Askew Exploring differences and development in primary mathematics teaching in South Africa <i>Pratt</i>	Askew & Venkat Developing South African primary learners' multiplicative reasoning: The impact of a short teaching intervention <i>Coles</i>	Freeman Improving children's place value understanding using the Japanese abacus <i>McCullough</i>	
Room 2.07	Sür, Delice & Hacıömeroğlu Mathematical communication through a game: What do "I spy" with? <i>Kenna</i>	Kenna Problem solving and educational interactive games: A case study of Year 6 children <i>Sür</i>	Povey, Adams & Jackson "It was all led by them": Opening up opportunities for making mathematics through a children's exhibition <i>Ineson</i>	
Room 2.10	Webb How to improve Key Stage 3 students' abilities to create mathematical proofs: An action research study in a British international school in Spain <i>Coles</i>	North Muddled methods: Student responses on a mini-ratio test <i>Jones</i>	Bamber Raising attainment of middle-lower attaining GCSE students <i>North</i>	
Room 2.18	Palmer, Hough, Kennedy & Pope A mathematics intervention project: A Level students working with pupils in Years 5 to 8 <i>Timlin</i>	Yazici & Delice Concept with no definition: Simplification of Trigonometric expressions <i>Ingram</i>	Pope & Rogers Using the history of mathematics in education <i>Working Group</i>	
Room 3.78	Martin & Towers What to do with what they already know? Folding back as a pedagogical tool <i>Ingram</i>	Archer Reflection in lesson study: The Figured World of initial teacher education <i>Pickard-Smith</i>	Brown The beginnings of school-led teacher education <i>Curtis</i>	
Room 3.79	Alderton Kelly's story: Transformative identity work in primary mathematics teacher education <i>Mendick</i>	Naik 'When Mamta met Nancy and Emily to do some mathematics' – what intellectual and personal resources do primary student teachers draw on when doing and considering the teaching of mathematics? <i>Pope</i>	Clark-Wilson & Wake Building and sustaining active research collaborations with teachers of mathematics <i>Working Group</i>	
Room 3.80	Sinyangwe, Dimitriadi & Billingsley 'Collaboration' as a tool for professional development: The perspective of secondary school mathematics teachers in Zambia <i>Clark-Wilson</i>	Swanson Being systematic: Exploring the relationship between connectionist mathematics pedagogy and Vygotskian theory through the story of the development of a heuristic concept <i>Jay</i>	Inglis & Foster Five decades of mathematics education research <i>Askew</i>	
Room 3.81	Katmer, Bayrakli & Aydin Usability of cognitive maps to analyse beliefs related to mathematics <i>Broderick</i>	Alam Bangladeshi rural secondary school children's attitudes towards mathematics: Does it vary by gender? <i>Webb</i>	Timlin The attitudes towards numeracy of teachers in three English secondary schools who teach subjects other than mathematics <i>Marks</i>	Hacıomeroglu, Delice & Sur STEM hidden in elementary education: Seeing the pattern or living the moment by experience <i>Alam</i>

12:45-13:30 Open Forum (Room 2.18) - optional
12:45-14:00 Staggered lunch served at 12:45 and 13:30 (Room 2.19)

Afternoon Programme

	14:00-14:30	14:35-15:05	15:10-16:10
Room 2.04	Palmer & Lister Using a second language to develop mathematical understanding <i>Timlin</i>	McCullough If 'good enough' is sufficient for primary mathematics teaching, do we need excellence? <i>Naik</i>	Jay & Rose Research at the boundaries of home and school: Working with or against the 'system'? <i>Inglis</i>
Room 2.07	Pratt Assessment in primary mathematics: what, and who, matters? <i>Marks</i>	Back, Gifford & Griffiths Making Numbers: An update and some questions <i>Povey</i>	Curtis Concrete materials for learning algebra <i>Gifford</i>
Room 2.10	Kosyvas The students' involvement in a workplace inquiry activity: Solution of the solar panel problem <i>North</i>	Jones A conceptual approach to assessing achievement and progress in mathematics <i>Archer</i>	Lortie-Forgues Why is students' understanding of arithmetic with numbers below one so poor? <i>Bamber</i>
Room 2.18	Ergene & Delice The weakest link of Polya's stages through integral problem solving process: What to check <i>Archer</i>	Black, Harris, Hernandez-Martinez, Jooganah, Pampaka, Wake & Williams Transmaths special issue of five papers for 'Teaching Mathematics and its Applications' <i>Williams & Black</i>	
Room 3.78	Ingram, Andrews & Pitt Patterns of interaction that encourage student explanations in mathematics lessons <i>Inglis</i>	Andrews, Ingram & Pitt Mathematics teachers working on pauses <i>Timlin</i>	de la Fuente, Deulofeu & Rowland Developing algebraic language in a problem solving environment: The role of teacher knowledge <i>Palmer</i>
Room 3.79	Karadeniz Teachers' perspectives on using graphing calculators in advanced mathematics <i>Say</i>	Say & Akkoc Mediating role of technology: Prospective upper secondary mathematics teachers' practice <i>Karadeniz</i>	Chonchaiya, Russ & Beynon Blending classroom and computing activities for mathematical resilience by making construals <i>Nikolakopoulou</i>
Room 3.80	Nikolakopoulou Implementing multi-touch tables into classroom: In what ways are students engaged in an interactive mathematical activity "around the table"? <i>Russ</i>	Choudry Ethnic and EAL measures or underlying migrant history: Impact of English as an additional language on secondary mathematics attainment across ethnic, gender and social class differences <i>Pickard-Smith</i>	Pickard-Smith Performatives <i>Webb</i>
Room 3.81	Broderick Vernacular numeracies: Exploring the everyday numeracy events and practices of students in further education on pre- level 2 functional skills mathematics programmes <i>Jay</i>	Bellamy Effective teaching of GCSE Mathematics in Further Education colleges <i>Broderick</i>	Clarke & Coles Sustainability and mathematics education <i>Working Group</i>

16:10-16:40 Tea/coffee (Room 2.19)