Proposal Form

Title of Proposal: Can pedagogical approaches developed in Shanghai and Singapore inform our own teaching and learning in primary mathematics and beyond?

Please indicate format:

Pecha kucha; Show and tell; Practitioner-led inquiry; Case study; Research paper/work in progress; Developmental/research project report; Workshop; Poster

Please indicate strand (delete those that don't apply)

3. Informing our teaching and learning

Keywords (for use on the website):

Primary Mathematics; Singapore; Shanghai; culture; pedagogy; national curriculum; exchange programme; bar method ; representation; progression

Description (what is the session about – 500 words max?)

Some countries in South East Asia do better than us in international mathematics tests. This would appear to indicate that their children are more able mathematically than ours. Our government is very keen to explore this further and has made improving mathematics a priority. This session will reflect on the practices in Singapore and Shanghai and explore whether we could actually learn anything from them which might improve our own teaching and learning in primary mathematics. This could also have implications for supporting our students with higher level mathematics.

International Tests include TIMSS (Trends in International Mathematics and Science Study) which tests children age 10 and 14 and PISA (Programme for International Student Assessment) which tests children age 14. However, it is what is behind the test that is most interesting.

This session aims to reflect upon research into their national curriculum, their approaches to pedagogy and classroom practices – allowing participants to reflect and consider whether England could learn anything from this. How does national culture influence classroom practices? What might work for us and what would not be appropriate?

This year the government is funding a primary teacher exchange programmes between Shanghai and England. This term (Autumn 2014) many of our primary school teachers across the country (in 32 newly formed Maths Hubs) have been placed in schools in Shanghai for 2 weeks. Next term teachers from Shanghai will be in our classrooms working alongside our teachers. So what is it all about ... come along and find out!

(Workshop only) Session outline (how is the workshop designed? Please give indicative timing- 200 words max)

The workshop will be practical and theoretical, and will explore the following issues:

- International Testing and Research
- South East Asia National Curriculum / Culture and Practices / Attitudes towards Mathematics
- Their Pedagogical Approaches: Representation and Progression
- Rote or Conceptual Understanding?

• Reflection: What can we learn for our own teaching and learning?

Session will be broken down into: sharing information (20 minutes); group discussions and practical activities (20 minutes); video clip (5 minutes); drawing conclusions (5-10 minutes)

Abstract (50 words summary of session for the online programme):

Some countries in South East Asia do better than England in international maths tests. This session reflects on their practices and explores whether implementing some key changes could improve our own teaching and learning in primary mathematics. This could have wider implications for supporting our students with higher level mathematics.

ROOM REQUIREMENTS (All rooms will have standard internet-enabled pc running MS Office with projector and speakers)

General teaching/seminar room:	X	
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computer lab 📃

Equipment/facilities required: access to white board for power point and a flip chart to write on

Equipment you will provide: concrete resources for modelling mathematics and for participants to use to 'have a go'

Type of space (eg. tables, open, outdoor) : tables in groups indoors

Preferred number of delegates: up to 20

Other information that will assist in the organization of the session: