

**DEVELOPING TEACHERS' PROFESSIONAL COMPETENCE AND IMPROVING THEIR  
TEACHING PRACTICE THROUGH CROSS-CULTURAL PROGRAMMES**

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Shanghai Normal University, China

**Organizers**

Minxuan Zhang is a professor in comparative education, the former president of Shanghai Normal University, and the director of the Teacher Centre under UNESCO.

Rongjin Huang is a professor in mathematics education and the member of IPC for ICMI Study 25.

Shiqi Li is a professor in mathematics teacher education, and is the IPC in the past ICMEs.

Xingfeng Huang is an associate professor in mathematics teacher education leading the Shanghai team of Mathematics Teacher Exchange Programme between UK-China.

**Discussants**

Christian Bokhove, School of Education, Southampton University, UK

Debbie Morgan, National Centre of Excellence in the Teaching of Mathematics, UK

Jenni Ingram, Oxford University, UK

Julie Alderton, University of Cambridge, UK

Lianghuo Fan, East China Normal University, China

Minxuan Zhang, Shanghai Normal University, China

Rongjin Huang, Middle Tennessee State University, USA

Shiqi Li, East China Normal University, China

Xingfeng Huang, Shanghai Normal University, China

**Aims**

Since 2014, the UK government has funded the Mathematics Teacher Exchange Programme between UK-China to improve British teacher's professional development. Through this programme, nearly 1000 teachers from both countries have visited schools in counterpart schools and learned teaching and teacher professional development practice from the other country. Over the past eight years, participating teachers have benefited from the exchange activities and improved their teaching practice (Boylan et al., 2019; Huang, Huang, & Bosch, 2021). However, some contradictions have occurred due to cultural differences between China (the East) and the UK (the West) (Yuan & Huang, 2020).

Classroom teaching and teacher learning are cultural activities. Thus, the differences in mathematics teaching and teacher learning between the East and the West are rooted in their cultural values, educational philosophies and traditions, and practical wisdom. It is crucial to identify the strengths and weaknesses of mathematics education and understand the underlying cultural differences in order to learn from each other (Leung, Graf, & Lopez-Real, 2006). The contradictions regarding mathematics teaching and learning between the East and the West could be the driving force for teachers' learning, and promote their self-reflection and teaching improvement (Huang, Lai, Huang, 2021).

Therefore, based on these projects and research literature, this discussion group will focus on (1) what we can learn from the exchange programme between the Eastern and Western cultures; (2) practice and research on cross-cultural teachers' collaboration and learning in the future. This discussion is aimed to deepen our understanding of the theories and practice of mathematics teaching and teacher professional learning in the East and the West and improve our own mathematics education.

The Discussion Group will be held in a hybrid mode, so the participants and observers can attend online or physically.

### Planned structure

Based on the teacher exchange programme between UK-China, the difference in mathematics practice between the East and the West, and mathematics teachers' collaboration and learning in cross-cultural contexts will be discussed. The theoretical perspectives on teachers' cross-cultural collaboration and learning in mathematics education or other fields, as well as different models for teacher practices cross-culturally in the future (e.g. online lesson study) also will be focused on.

Planned timeline	Topic	Responsible person
21:30 – 22:00	<i>Sharing the experience in and research findings on the exchange programme between UK-China</i>	Minxuan Zhang
22:00 – 22:45	<i>Discussion: (1) Why it is necessary and important for teachers' collaboration cross-culturally; (2) What can be learned from the exchange programme between the Eastern and Western cultures; (3) Practice and research for teachers' cross-culture collaboration and learning in the future</i>	Rongjin Huang
22:45 – 23:00	<i>Comments</i>	Jenni Ingram

### Venue requirement: Internet, Microphone, Screen or Whiteboard, Computer and Projection

### Reference

- Boylan, M., Wolstenholme, C., Demack, S., Maxwell, B., Jay, T., Adams, G., & Reaney, S. (2019) *Longitudinal evaluation of the Mathematics Teacher Exchange: China-England-Final Report*. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/773320/MTE\\_main\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/773320/MTE_main_report.pdf)
- Huang, X., Huang, R. & Bosch. M. (2021). Analyzing a teacher learning through cross-cultural collaboration A praxeological perspective of mathematical knowledge for teaching, *Educational Studies in Mathematics*, Accepted 18, April.
- Huang, X. F., Lai, M. Y., and Huang, R. (2021). Teachers' learning through an online lesson study: An analysis from the expansive learning perspective. *International Journal for Lesson and Learning Studies*, 10(2). <https://doi.org/10.1108/IJLLS-09-2020-0076>.
- Leung, F., Lopez-Real, F., & Graf, K. (2006). *Mathematics Education in Different Cultural Traditions-A Comparative Study of East Asia and the West*. New York: Springer.