
Peer reviewed version

Link to publication record in Explore Bristol Research
PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via The Psychology of Mathematics Education at https://drive.google.com/drive/folders/15Ky93wIVeE1NkcEJq8RoUrTQmWvjYTHb. Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available: http://www.bristol.ac.uk/pure/user-guides/explore-bristol-research/ebr-terms/
CONCEPTUALISING THE EXPERTISE OF THE MATHEMATICS TEACHER EDUCATOR

Tracy Helliwell¹ and Sean Chorney²

¹University of Bristol, UK; ²Simon Fraser University, Canada

BACKGROUND

The aim for this working group is to further the development of research within the domain of the mathematics teacher educator (MTE), specifically to move beyond descriptions of MTE knowledge towards ways of conceptualising and researching the expertise of the MTE. The phenomenon of expertise of the MTE is not easily defined. We follow Beswick & Goos (2018) by using the label MTE as “anyone engaged in the education or development of teachers of mathematics” (p. 418) and recognise that MTE, as a role, encompasses a diverse set of practices within mathematics teacher education. Recently, within mathematics teacher education, there has been increasing interest in the development of theories that can account for what and how MTEs learn; for example, the publication of a recent special issue of the Journal of Mathematics Teacher Education where some scholars have extended existing models of mathematics teacher knowledge as a way of describing the knowledge of the MTE (e.g., Leikin, Zazkis & Meller, 2018). This working group builds on foundations from previous PME working sessions that have been centred around MTEs (Goos, Chapman, Brown, & Novotna, 2011; Beswick, Goos, & Chapman, 2014) and looks to extend existing conceptualisations of the expertise of MTEs beyond descriptions of MTE knowledge (e.g., Appova & Taylor, 2017).

AIMS OF WORKING GROUP

• To begin to theorise the expertise of MTEs by exploring personal stories, experiences and a variety of frameworks.

• To formulate researchable questions.

• To explore and develop potential methodologies that support these questions.

OUTLINE OF SESSIONS

Session 1

• Introductions and sharing of experiences that inform ways of thinking about expertise and asking: what specific expertise do we have as MTEs?; how might we differentiate between MTE expertise and other domains of expertise, for example, teacher educator expertise more broadly?; The two presenters will begin by sharing their stories as MTEs (of practice, context, research). Attendees will then be invited to share their own stories leading to a discussion of themes, commonalities, differences, etc.

Helliwell and Chorney

- Brief presentation of existing ways that the expertise of MTEs has been described (considering what has not yet been asked or answered) moving to some suggestions for possible new approaches to and conceptualisations for describing MTE expertise that offer alternatives to expertise as knowledge.

- Discussion in groups with a focus on the development of frameworks that support the interaction between the practice of MTEs and conceptualisations of MTE expertise.

Session 2:

- Building off session 1, groups discuss: Creating a set of researchable questions in the area of MTE learning/expertise and consider i) which of these questions would you like to/be able to research? ii) what theoretical frameworks could you use/develop to support this research? iii) what methodologies are appropriate for these questions? iv) what would data consist of?

- Each group to share responses and then discuss and agree on next steps for future collaborations, including consideration of a possible joint output for participants such as a special issue for the *Journal of Mathematics Teacher Education*.

References


