Reflective Encounters Between Primary Pre-Service Teachers and a Mathematics Teacher Educator to Explore Critical Mathematics Teaching Approaches

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Traditional mathematics teaching practices built around standardisation do not result in socially just and equitable outcomes when working with diverse student populations (O'Keeffe & Paige, 2021). Pre-service teachers (PSTs) tend to enter their initial teacher education program having experienced traditional mathematics teaching, and these experiences form the basis for their beliefs and views of mathematics teaching and learning (Ma & Singer-Gabella, 2011). Teacher educators must consider the ways that their practice and positionalities shape the experiences and perspectives of the PSTs with whom they engage. Past experiences and beliefs systems impact the practice of teacher educators (Kalinec-Craig et al., 2019). Leibowitz and Bozalek (2016) indicate that both teacher educators and PSTs need to undergo a process of learning and unlearning and of challenging their practices and assumptions to open up the possibilities for transformation of their practice. Therefore, in the field of primary mathematics education, it is important that both preservice teachers and teacher educators engage in self-study of their beliefs and teaching practices.

This project aims to explore the process of deconstruction and imagining possibilities for social justice in mathematics teaching practice undertaken by a group containing primary PSTs and a mathematics teacher educator. Hitherto, a pilot study has been undertaken through encounters between the researcher and two primary PSTs, with a focus on interaction and dialogue to support reflection, along with the researcher using a reflective journal.

In the session, I aim to share impressions and experiences from the study thus far and open discussion to explore teacher educator experiences of self-study and supporting PSTs to deconstruct and imagine possibilities for social justice in mathematics teaching. In particular, I am seeking guidance from experienced teacher educators to shape the ongoing development of the project.

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