Theme 1 Plenary Lecture

An Ethical Perspective on the History of Mathematics in Mathematics Education

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David Guillemette is a professor of mathematics education at Université du Québec à Montréal, Canada. In the context of teachers’ education, his research focuses mainly on otherness and ethics. He is interested in the cultural and historical dimension of mathematics, and in social and political issues in mathematics education.

Abstract:

In this plenary talk, I will introduce a perspective in which ethics is at the core of the reflection on the history of mathematics in mathematics education. Considering and discussing various empirical and theoretical studies in the HPM literature, I will present a theoretical positioning inspired by the writings of Bakhtin, Levinas and Freire, along with our recent works with pre- and in-service mathematics teachers grounded in this approach. Focusing primly on teachers’ education, this ethical perspective invites me to see the engagement with the history of mathematics as an opportunity to experience otherness, in which sensitivity to epistemology, to fundaments and purposes of mathematics education and to social and political issues in mathematics education develops. In this exploration, I will discuss especially the themes of responsibility, engagement and dialogicality. Moreover, I will highlight how pedagogical goals, ways of engaging with the history, teachers’ and learners’ roles, and challenges appear from this light, as well as some possible paths for research in terms of research problems and methodology.