Towards a critical mathematics education research programme?


Summary: The author points towards a critical mathematics education research programme by addressing three salient features of critical mathematics education. The first concerns the diversity of the situations in which mathematics is taught and learned. In previous chapters, authors have discussed what it is like to teach and learn mathematics for diverse people in diverse settings, such as a school in Chicago explicitly identified with teaching/learning for social justice, a Pakistani student in Barcelona, landless peasants in Brazil, and many more. None of these fit the “prototypical mathematics classroom” that dominates published research in mathematics education. To challenge this bias forms part of critical mathematics education. The second feature concerns the forms of mathematics in action. Mathematics operates as part of very many different work practices and technical settings. Often mathematics is integrated in work practices in a form that is not transparent to people involved in the professional practice. It is, however, important to address such variety of practices to provide a critical investigation of how mathematics might function, and it is important to investigate possible relationships between out-of-school mathematical practices and how mathematics might be contextualised in a school setting. The third feature concerns the exploration of educational possibilities, which can be mediated by notions like empowerment, social justice, and mathemacy. All of these features appeal to explosive and contested concepts, as they are not confinable within strict definitions. Any critical mathematics education research program, accordingly, comes to reflect a deep uncertainty.

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