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The philosophy of mathematics education: Stephen Lerman's contributions.

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Summary: This chapter addresses two issues. First, the status and the nature of the philosophy of mathematics education as a subfield of research in mathematics education. Second, Stephen Lerman's contributions to this subfield. A narrow interpretation of the philosophy of mathematics education concerns the aims and rationale of the practices of teaching and learning mathematics. This implicates issues including the roles of the teacher, learner, and mathematics in society and the underlying values of the relevant social groups, in addition to the teaching and learning of mathematics, and the underlying aims and rationales of this activity. Addressing these issues Stephen Lerman's early work explores the relevance of recent advances in the philosophy of mathematics for the teaching and learning of mathematics, especially for its theorization and pedagogy. However a broader view of the nature of the philosophy of mathematics education raises a further, broader set of questions. What is mathematics? How does mathematics relate to society? What is learning (mathematics)? What is teaching (mathematics)? What is the status of mathematics education as knowledge field? Stephen Lerman's contributions to these wider questions is outlined, drawing on a sample of 19 of his published works.

Classification: D20 A30

Keywords: research in mathematics education; philosophy of mathematics education; Stephen Lerman's work

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