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Theories in and of mathematics education. Theory strands in German speaking countries.

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Publisher's description: This survey provides an overview of German meta-discourse on theories and mathematics education as a scientific discipline, from the 1970s to the 1990s. Two theory strands are offered: a semiotic view related to Peirce and Wittgenstein (presented by Willibald Dörfler), and the theory of learning activity by Joachim Lompscher (presented by Regina Bruder and Oliver Schmitt). By networking the two theoretical approaches in a case study of learning fractions, it clarifies the nature of the two theories, how they can be related to inform practice and renew TME-issues for mathematics education as a scientific discipline. Hans-Georg Steiner initiated the first of five international conferences on Theories of Mathematics Education (TME) to advance the founding of mathematics education as a scientific discipline, and subsequently German researchers have continued to focus on TME topics but within various theory strands.

Classification: D20

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