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Transcriptions, mathematical cognition, and epistemology.

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Summary: The epistemologies researchers bring to their studies mediate not only their theories but also their methods, including what they select from their data sources to present the findings on which claims are based. Most articles reduce mathematical knowing to linguistic/mathematical structures, which, in the case of embodiment/enactivist theories, undermines the very argument about the special nature of mathematical knowing. The purpose of this study is to illustrate how different transcriptions of mathematics lessons are generally used to support different epistemologies of mathematical knowing/competence. As part of our third illustration, we provide embodiment/enactivist researchers with an innovative means of representing classroom interactions that are more consistent with their theoretical claims. We offer a comprehensive transcription, which, when treated by readers in the way musicians treat their scores, allow them to enact and feel the knowledge that the article is about.

Classification: C80

Keywords: transcribing; epistemology; enactivism; performance; educational research; methodology