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An examination of future primary teachers attitudes about the teaching of mathematics: an international perspective.

Blömeke, Sigrid (ed.) et al., International perspectives on teacher knowledge, beliefs and opportunities to learn. TEDS-M results. Dordrecht: Springer (ISBN 978-94-007-6436-1/hbk; 978-94-007-6437-8/ebook). Advances in Mathematics Education, 279-296 (2014).

Summary: In this paper we explore the dynamics of teacher beliefs about mathematics with a special focus on future primary teachers. After reviewing earlier research about teacher beliefs, with special attention to the MT21 study and other work based on TEDS data, we examine the relationship among the different dimensions of teacher beliefs and the extent to which these beliefs are associated with teacher knowledge. We find considerable average variation in teacher beliefs about teaching and learning mathematics across countries, but find that most of the variation in beliefs is at the individual level. By contrast, teacher preparation programs appear to play little role in shaping beliefs. Employing multi-level modeling, we also find that teacher beliefs have a statistically significant and substantively important association with future primary teachers' knowledge of mathematics. Finally, our results raise questions about the cross-national validity of a sharp constructivist-traditionalist dichotomy.

Classification: C29 C39 C69

Keywords: primary teacher; attitudes; TEDS-M; beliefs; teacher knowledge; nature of mathematics; content knowledge; national culture

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