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The cultural notion of teacher education: comparison of lower-secondary future teachers' and teacher educators' beliefs.

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, 255-277 (2014).

Summary: This chapter describes a study whose aim is to highlight the cultural notion of beliefs related to mathematics teaching with respect to future mathematics teachers and teacher educators at the lower-secondary level. Through conducting multi-sample latent profile analysis, this study identified the belief profiles for the teachers and the educators. By associating the profiles with countries and employing hierarchical cluster analysis (HCA), cultural features influencing beliefs were revealed. Our results show that the beliefs of future teachers and teacher educators in the same country are homogeneous. This suggests that the country is an important factor for shaping beliefs. We also discovered that the beliefs are homogenous in countries that share the same cultural features: geographical regions, historical traditions, levels of human development, or knowledge achievement. HCA grouped all Western countries with a Greek/Latin/Christian tradition together, and divided the East Asian countries into two clusters – whether or not having Confucian heritage. All countries with very high human development indices (HDI) were grouped in one cluster. The countries in the other cluster had a lower HDI. All higher-achieving countries were in the same cluster as well. Our results also indicate that the process-of-inquiry view on the nature of mathematics and the active-learning view on teaching and learning mathematics dominated in all countries with respect to future teachers as well as to teacher educators.

Classification: C20 C60

Keywords: TEDS-M; mathematics belief; mathematics teaching belief; mathematics learning belief; achievement belief; future teachers; teacher educators; international comparison; culture

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