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Teachers' geometrical paradigms as central curricular beliefs in the context of mathematical worldviews and goals of education.

Bernack-Schüler, Carola (ed.) et al., Views and beliefs in mathematics education. Results of the 19th MAVI conference, Freiburg, Germany, September 25–28, 2013. Wiesbaden: Springer Spektrum (ISBN 978-3-658-09613-7/pbk; 978-3-658-09614-4/ebook). Freiburger Empirische Forschung in der Mathematikdidaktik, 15-26 (2015).

Summary: This article presents some results of a qualitative study on secondary teachers' beliefs, reconstructed as so-called individual curricula, a concept to represent a teacher's argumentative connections between his choice of content, methods, and goals of education. Within these individual curricula, two archetypes are figured out that are supposed to be oppositional in three dimensions: in the use of Geometrical Working Spaces in classroom teaching, in the general mathematical worldview, and in the choice of goals of education a teacher intends to achieve by teaching elementary geometry. The first archetype is characterised by deductive standards, a static view on mathematics, and expert-oriented goals of education; the second one is more empirical, dynamic, and guided by pragmatic goals of education.

Classification: C29 D30

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