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Epistemological judgments in mathematics: an interview study regarding the certainty of mathematical knowledge.

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, 227-238 (2015).

Summary: Research on personal epistemology is confronted with theoretical issues as there exist conflicting data regarding its coherence, discipline-relation and contextdependence as well as methodological issues regarding the often used questionnaires to measure epistemological beliefs. We claim that it is necessary to distinguish between relatively stable “epistemological beliefs” and situationspecific “epistemological judgments”. In a sequence of interviews with regard to the topic of “certainty of mathematical knowledge”, we show that the usual categories used in questionnaires to measure epistemological beliefs have to be differentiated. We argue that epistemological judgments provide a promising framework to interpret the statements of the interviewees.

Classification: C20

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