

ZMATH 06670850

Rott, Benjamin; Leuders, Timo

Inductive and deductive justification of knowledge: flexible judgments underneath stable beliefs in teacher education.

Math. Think. Learn. 18, No. 4, 271-286 (2016).

Summary: Personal epistemological beliefs are considered to play an important role for processes of learning and teaching. However, research on personal epistemology is confronted with theoretical issues as there is conflicting evidence regarding the structure, stability, and context-dependence of epistemological beliefs. We give evidence how theoretical and methodological issues can partly be resolved by distinguishing between relatively stable “epistemological beliefs” and situation-specific “epistemological judgments.” A qualitative content analysis of a series of semistructured interviews (study 1) with pre-service teachers, teachers, and teacher educators as well as a statistical analysis of pre-service teachers’ extensive answers in questionnaires (study 2), both on the topic of “mathematical discovery,” reveal not only beliefs of the participants but also different qualities of judgments. Therefore, in further research both aspects of beliefs should be considered in a more differentiated manner when categorizing belief structures.

Classification: C29 D60

doi:10.1080/10986065.2016.1219933