

**ZMATH 2016e.00147**

**Dreher, Anika; Kuntze, Sebastian; Lerman, Stephen**

**Why use multiple representations in the mathematics classroom? Views of English and German preservice teachers.**

Int. J. Sci. Math. Educ. 14, Suppl. 2, S363-S382 (2016).

Summary: Dealing with multiple representations and their connections plays a key role for learners to build up conceptual knowledge in the mathematics classroom. Hence, professional knowledge and views of mathematics teachers regarding the use of multiple representations certainly merit attention. In particular, investigating such views of preservice teachers affords identifying corresponding needs for teacher education. However, specific empirical research is scarce. Taking into account the possible role of culture, this study consequently focuses on views about using multiple representations held by more than 100 English and more than 200 German preservice teachers. The results indicate that there are culture-dependent aspects of preservice teachers' views, but also that there are common needs for professional development.

*Classification:* C29 D40 C30

*Keywords:* fractions; multiple representations; preservice teachers; transnational design; views  
doi:10.1007/s10763-015-9633-6