

ZMATH 2016c.00529

Phelps, Geoffrey; Howell, Heather

Assessing mathematical knowledge for teaching: the role of teaching context.

Math. Enthus. 13, No. 1-2, 52-70 (2016).

Summary: Assessments of mathematical knowledge for teaching (MKT), which are often designed to measure specialized types of mathematical knowledge, typically include a representation of teaching practice in the assessment task. This analysis makes use of an existing, validated set of 10 assessment tasks to both describe and explore the function of the teaching contexts represented. We found that teaching context serves a variety of functions, some more critical than others. These context features play an important role in both the design of assessments of MKT and the types of mathematical knowledge assessed.

Classification: D69 D39

Keywords: teacher education; professional knowledge; subject content knowledge; mathematical knowledge for teaching; teacher assessment; teacher knowledge; educational diagnosis; contextualization; role of teaching context; context relevance; professional development

<http://www.math.unt.edu/tmme/Vol13no1and2/03-Howell-Phelps.pdf>