

**ZMATH 2013a.00755**

**Groth, Randall E.**

**The role of writing prompts in a statistical knowledge for teaching course.**

Math. Teach. Educ. 1, No. 1, 23-40 (2012).

Summary: Teachers of grades pre-K-8 are charged with the responsibility of developing children's statistical thinking. Hence, strategies are needed to foster statistical knowledge for teaching (SKT). This report describes how writing prompts were used as an integral part of a semester-long undergraduate course focused on building SKT. Writing prompts were designed to help assess and develop the subject matter knowledge and pedagogical content knowledge of prospective teachers. The methods used to design the prompts are described. Responses to a sample prompt are provided to illustrate how the writing prompts served as tools for formative assessment. Pretests and posttests indicated that prospective teachers developed both SKT and knowledge of introductory college-level statistics during the course. It is suggested that teacher educators employ and refine the prompts in their own courses, as the method used for writing and assessing the prompts is applicable to a broad range of statistics and mathematics courses for teachers.

*Classification:* K49 B50 K79 D49 D69

*Keywords:* statistical knowledge for teaching; mathematical knowledge for teaching; SOLO taxonomy; writing prompts; formative assessment; subject matter knowledge; pedagogical content knowledge