

**ZMATH 2008c.00070**

**Annetta, Leonard A.; Dotger, Sharon**

**Aligning preservice teacher basic science knowledge with INTASC I and NAST core content standards.**

Eurasia J. Math. Sci. Technol. Educ. 2, No. 2, 41-52 (2006).

Summary: Training preservice teachers to develop a predisposition toward constructivist instruction is a major goal for many faculty in teacher education. One critical attribute of a constructivist teacher is a strong hold on pedagogical content knowledge. This study examined the prior knowledge of preservice science teachers and how that knowledge aligned with INTASC Standard I and the NSTA Core Knowledge Standards for science teachers. Basic content knowledge of twenty-four preservice teachers in an introductory science education course was assessed through released items from the grade 8 Trends in International Mathematics and Science Study (TIMSS) and the National Assessment of Educational Progress (NAEP) tests. Kruskal-Wallis analysis showed no significant differences in content knowledge across 3 content domains.

*Classification:* B53 M69 M59

*Keywords:* science teacher training; science content knowledge; standards; non-parametric statistics; misconceptions