Leigh M. Harrell Williams* (leighh@vt.edu), Teri J. Murphy, M. Alejandra Sorto, Rebecca L. Pierce and Lawrence M. Lesser. Aligning the Self-Efficacy to Teach Statistics (SETS) Instrument to the Common Core State Standards for Mathematics.

Research in mathematics and science education has shown that teacher knowledge and beliefs affect teachers’ effectiveness in a classroom. We have developed the Self-Efficacy to Teach Statistics (SETS) instrument, based both on states’ mathematics standards for students and teachers and on the Guidelines for Assessment and Instruction in Statistics Education (GAISE) Pre-K-12 Report (ASA, 2007). The SETS is designed to measure pre-service middle school teachers’ self-efficacy to teach topics at levels A and B of the GAISE framework. The items on the SETS instrument ask teachers to rate their self-efficacy on a scale of 1 (not confident at all) to 6 (completely confident). We conducted a validation study on the instrument which resulted in a Cronbach’s alpha estimate of reliability of .958 (Harrell, Pierce, Sorto, Murphy, Lesser, & Enders, 2009; Sorto, Harrell, Pierce, Murphy, Enders, & Lesser, 2010). In this presentation, we will show the degree of alignment of the instrument to the Common Core State Standards for Mathematics (www.corestandards.org) regarding statistical skills and knowledge. We will also discuss current as well as potential uses of the SETS instrument for assessment of teacher preparation, program evaluation, and professional development for in-service teachers. (Received September 15, 2011)