The need to create assessment literate and assessment confident teachers is increasing (Popham, 2009; 2011). Research has revealed that teachers are not well trained to use assessment in the classroom and are poorly trained in standardized testing (Zhang & Burry-Stock, 1997; Zhang & Burry-Stock, 2003). The purpose of this study was to: (1) evaluate the psychometric properties (i.e., reliability and validity) of an instrument that measures the assessment literacy and assessment confidence of pre-service teachers (i.e., the Classroom Assessment Literacy Inventory [CALI]), and (2) investigate the relationship between assessment literacy, assessment confidence, and scores on a performance-based assessment (edTPA).

In the pilot testing phase, Rasch Analysis and Rasch Principal Components Analysis (PCA) were used to evaluate the psychometric properties (i.e., reliability and validity) of the assessment literacy and confidence measures (i.e., the CALI). The pilot sample ($N = 165$) consisted of sophomores and juniors in one teacher preparation program in the Midwestern United States (US). After the pilot testing phase, the instrument was revised and administered to a second sample of 112 pre-service teachers who were in their final semester of the same undergraduate teacher preparation. Confirmatory Factor Analysis (CFA) was used to provide evidence of the internal structure of the CALI. Following the CFA, controlling for other demographic and academic variables such as teacher education program (e.g., Early Childhood, Middle Childhood, Adolescent Education, etc.) and Grade Point Average (GPA),
the impact of the second phase sample’s assessment confidence on the relationship between assessment literacy and performance-based assessment scores was examined.

Results indicated the limited range of the assessment-related content measured by the modified CALI, as well as the modified CALI’s relative difficulty for this sample. Significant relationships were found between pre-service teacher Program and GPA on the relationship between assessment knowledge, assessment confidence, and a performance-based assessment. Discussion and implications for teacher education programs emphasizes the relationship between assessment knowledge and performance, GPA and performance, as well as the differences between programs on the main variables of interest. Methodological and statistical discussion and implications are presented for the use of Rasch PCA, parceling, the CFA model, and the benefits to considering a mixed-methods methodological approach.