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Jim Gleason* (jgleason@as.ua.edu), Department of Mathematics, Box 870350, The University of Alabama, Tuscaloosa, AL 35487-0350. Structure of the Content Knowledge for Teaching-Mathematics (CKT-M) Instrument with Pre-service Teachers.

The Content Knowledge for Teaching-Mathematics (CKT-M) instrument is designed to measure the specialized mathematics content knowledge teachers need to facilitate student learning. Since the initial calibration and validity study involved only in-service teachers, and since pre-service teachers a priori have a different level of this specialized content knowledge, a separate study of the instrument using only pre-service teachers is necessary in order to use the instrument to evaluate the mathematics courses for pre-service elementary teachers.

In this talk, we focus on the structure of the CKT-M instrument when used with the pre-service teacher population. Using confirmatory factor analysis, we analyze a published form from the CKT-M and compare the results with those obtained using in-service teachers. Additionally, we study a separate form composed of items from the CKT-M with items selected from other instruments designed to measure mathematics content knowledge to determine what construct the CKT-M is measuring among pre-service teachers. (Received June 17, 2008)