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**James R. Valles, Jr.\*** (jvalles@smwc.edu), 1 Saint Mary-of-the-Woods College, St Mary-of-the-Woods, IN 47876, and **Rebecca Ortiz** and **Xiaobo She**. *Understanding Representations and Manipulatives through the Eyes of Preservice Teachers*. Preliminary report.

One teaching method that can be used to encourage students to learn in a math course is by integrating written assignments as reflection tools into the student assessments. By having students reflect on classroom lessons and topics covered, one can gauge various student factors, such as self-efficacy and the student's perceived relevance of the topic, as related to their expected learning outcomes.

At Texas Tech University, MATH 3370 (Elementary Geometry) is a mathematics course intended to prepare students to be middle school mathematics teachers and elementary school teachers by providing a basic background in geometry. This talk will focus on the use of written assignments given to different MATH 3370 sections that focus on the students' abilities to integrate representations and manipulatives into their mathematical content knowledge. Since the NCTM defines a representation as the capturing of a mathematical concept in some form and also as the form itself, there will be discussion regarding preservice teachers' perceptions of concepts as well as associated representations. (Received September 22, 2011)