1046-H1-1943

Ian Whitacre\* (ianwhitacre@yahoo.com), Department of Mathematics and Statistics, San Diego State University, 5500 Campanile Drive, GMCS 415, San Diego, CA 92182, and Susan D Nickerson (snickers@sciences.sdsu.edu), Department of Mathematics and Statistics, San Diego State University, 5500 Campanile Drive, GMCS 415, San Diego, CA 92182. Assessing the Effectiveness of Inquiry-Oriented Teaching in the Context of TA Professional Development. Preliminary report.

This presentation addresses assessment of the effectiveness of discovery-based programs. The context for this research was a professional development program for university mathematics TAs teaching a math content course for preservice elementary teachers. The course curriculum emphasized student inquiry around topics in elementary mathematics. The course coordinator and TAs engaged in a form of lesson study. Two research lessons were conducted per semester during the 2007-2008 school year. The lesson study group assessed students' learning by means of both in-class assessment during the lessons and written post-test measures. A common final exam was administered in all sections. The final included problems specifically designed to address the goals of the research lessons. The Constructivist Learning Environment Survey was administered to the students and instructors of all sections of the course during the sixth and fourteenth weeks of each semester. We will present highlights of our analyses and discuss issues around assessment of the effectiveness of inquiry-oriented teaching in the context of TA professional development. (Received September 16, 2008)