Gerald W. Kruse* (kruse@juniata.edu), Juniata College, Huntingdon, PA 16652, and David Drews. Assessing and Improving Quantitative Reasoning Skills with CLA Performance Tasks. Preliminary report.

Juniata College’s MA 103, Quantitative Methods, is taken by students to satisfy a quantitative skills graduation requirement, and to assess their quantitative reasoning skills, a Scholarship of Teaching and Learning (SoTL) project was implemented. The pre and post assessments used in this project are based on the performance tasks which are a component of the Collegiate Learning Assessment (CLA), and which have been identified as useful assessments of quantitative reasoning. The structure of the course is conducive to a valid design, including course time dedicated for assessment, multiple sections, and several in-depth projects. The experiment is based on Solomon’s four-group design, where students in one section took the pre-assessment and post-assessment, and completed course projects during the semester which were CLA performance tasks. Students in a second section took the pre-assessment and post-assessment, but completed traditional open-ended projects, and students in a third section only took the post-assessment. The detailed scoring rubric and results of the experiment will be presented, with a focus on how completing performance tasks during the semester affected quantitative reasoning skills. (Received September 15, 2011)