1046-H1-780Jennifer Earles Szydlik* (szydlik@uwosh.edu), Math Department, UWO, 800 Algoma Blvd,
Oshkosh, WI 54901, and Carol E. Seaman. Guided Inquiry and Mathematical
Sophistication. Preliminary report.

In our mathematics courses for prospective elementary teachers, we exclusively use guided-inquiry to motivate and generate the content and to foster mathematical sophistication (specific behaviors, values, and habits of mind of the mathematical community). During the past two years we have designed a paper-and-pencil, multiple-choice instrument to measure mathematical sophistication, and this fall we assessed both the validity and reliability of the instrument with a large sample of undergraduates. We hope that our instrument will prove a valuable tool for assessing outcomes of problem-based pedagogies by capturing changes in facets of student learning not typically assessed by exams focused on course content. In this presentation, we will share our mathematical sophistication categories, our instrument, and the preliminary results of our study. (Received September 11, 2008)