Lisa O Coulter* (lcoulter@steson.edu) and William W Miles. Results from Assessment of Mathematics Majors at Stetson University involving Mathematical Communication and Conceptual Understanding. Preliminary report.

The Department of Mathematics and Computer Science at Stetson University hosts majors in both Mathematics and Applied Mathematics. We have had an assessment program in place since 2010 for students in Mathematics; in the last year we have added program level outcomes (PLO’s) for Applied Math as well. Among PLO’s which relate to mathematical communication are the expectation that students can both write and give presentations regarding mathematical concepts. Conceptual understanding is assessed via students’ abilities to solve complex problems and, at the formative stage, to use subject specific terminology and notation. Results from assessments of these areas will be presented and discussed, along with curricular changes that have been implemented in order to address issues that have been discovered. The math program at Stetson University requires all seniors to produce a research product in the last year of study. One of the curricular modifications that has been implemented consists of a structured submission/review/re-submission procedure designed to improve writing skills in the discipline. This also allows the senior project course to count as one of the required writing-enhanced courses at the university. Early results from this new curriculum will be presented. (Received September 14, 2018)