Linda McGuire* (lmcguire@muhlenberg.edu), Department of Mathematics & Computer Science, Muhlenberg College, Allentown, PA 18062. (Explain It) x 3. Preliminary report.

In this presentation we will describe an assignment specifically designed to develop student's oral and written communication skills. Called "Explain it x (times) 3," the assignment requires students to solve mathematical problems, and then present their solutions in three different ways: (1) written in a "proof-style" that a student of mathematics would understand, (2) written in a manner that any fellow college student would understand, and (3) written in a jargon-less, reporting style that could appear as an article for the general public in the local newspaper. In-class oral presentations of written work, complete with follow-up student-led Q&A sessions, are also required.

This assignment has been adapted for use in courses from introductory level liberal arts mathematics classes to junior/senior level courses for mathematics majors, and these varied assignments will be discussed. Specific examples of problems used, student work, assessment strategies, and student/alumni feedback will also be described in detail. (Received September 05, 2012)