

1106-D5-1889 **Kimberly O. Muller*** (kmuller@lssu.edu), 650 W. Easterday Ave., School of Mathematics and Computer Science, Sault Ste. Marie, MI 49783. *Early Continuity, Then Communicate, Communicate, Communicate*. Preliminary report.

In many cases the first month of teaching college calculus can be the hardest. Early student work is often fraught with (1) the misuse or underuse of signs of equality, (2) algebraic errors, (3) incorrect use of procedures when finding limits, and (4) premature use of derivatives before that material is covered. These errors are caused by poor prerequisite skills, misconceptions and perceived low expectations. Much of this can be prevented before the first test day by requiring that students not only show their work but explain their work in writing in each of the formative assessment activities leading up to the exam. In class, it is emphasized that communication is a necessary collegiate skill. Teaching an intuitive definition of continuity early in the course gives the students the vocabulary needed to effectively communicate about limits. Through thoughtful grading of these writing assignments the instructor is able to correct many misconceptions and thus prevent common errors. (Received September 15, 2014)