## 1086-H1-1728 Maria Terrell\* (mst1@cornell.edu), Mathematics Department, Malott Hall, Cornell University, Ithaca, NY 14853, and Peter Lax (lax@cims.nyu.edu). Single Variable Calculus Revisited.

As mathematicians and educators our goal must be to simplify the teaching of old topics, and make room for new ones. It is fair to ask: Why should we introduce any new subject material, or new ideas into calculus? Here is the paradox of education: Science and mathematics are growing by leaps and bounds on the research frontier, so what we teach in high school, college, and graduate school is falling behind by leaps and bounds. This paper reports on Maria Terrell's and Peter Lax's efforts to revise the 1977 text "Calculus with Applications and Computing" by Lax, Burstein and Lax. The original text was predicated on a number of fairly unconventional ideas and it included some very new and non traditional material. We share our current efforts to introduce new subjects in the basic calculus course. (Received September 24, 2012)