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Eric Sullivan* (esullivan@carroll.edu), Carroll College, Helena, MT. *Enhancing Student Writing with L^AT_EX and MATLAB in Multivariable Calculus*. Preliminary report.

In this presentation we will show how MATLAB can be used in conjunction with L^AT_EX to build students writing and visualization skills in multivariable calculus. In our multivariable calculus classes students are given an hour and a half per week of computer lab time where they complete investigative MATLAB activities. At the completion of the lab, MATLAB's powerful `publish` command allows students to create a full L^AT_EX document that embeds all of their code and figures. Students are then required to use L^AT_EX to give meaningful and thorough explanations of the mathematics in the form of a technical lab report. Several examples will be presented along with preliminary data of the effectiveness of this method. (Received August 07, 2013)