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Jack Y Narayan*, Mathematics Department, SUNY Oswego, Oswego, NY 13126. *Classroom practices which integrate a variety of technological and communication tools to improve student learning in a Finite Mathematics and Applied Calculus.*

We engage students, many of whom are underprepared in college algebra, in a large class with a variety of tools including Microsoft Excel, graphing calculators, tablets, smart phones, instructor created videos, and the WebAssign homework management system in order to enhance student learning. Students are required to bring their laptops and mobile devices for solving problems and taking notes in class. WebAssign extends the learning outside of the classroom. It provides students with e-book access and feedback on assignments. In a one-semester required course, we emphasize spreadsheet algebra to explain the difference quotient, inverse functions, piecewise defined functions and properties of logarithmic and exponential functions. Numerical derivatives are used to motivate the concept of limits as part of the understanding of the definition of the derivative. We create videos with tablets and laptops to reinforce concepts and provide feedback on homework problems. Students also create videos. These videos are on the WebAssign server as resources for students to access on their computers or mobile devices. We find that our strategies, which integrate technology in this manner, are effective with this audience and improve students' chances of success in subsequent classes. (Received August 15, 2012)