

1116-E1-1806      **M. Reba\*** (mreba@clemson.edu), Department of Mathematical Sciences, O-110 Martin Hall, Box 34097, Clemson, SC 29634, and **Allen Guest** and **M. Burr**. *Interactive Instructional Apps for Specific Calculus Concepts*.

Mathematics and Computer Science faculty and students have developed instructional apps for beginning calculus that resulted from two NSF grants. We discuss three completed apps (TouchCalc, CoreCalc, and EpiCalc), as well as some that are under development. TouchCalc is an interactive app intended to help students understand the graphical relationship between functions and their derivatives. CoreCalc is based on an analysis of common-errors made by students in Calculus I and offers questions in categories such as limits, derivatives, and optimization, including solutions and reference screens. EpiCalc, resulting from student input in a Creative Inquiry course, shows how calculus has been applied to modeling diseases in Epidemiology. Our discussion will include a demo of the apps, as well as results from limited classroom use. We will include anecdotal feedback from students, and describe initial and future plans to study app effectiveness when testing specific concepts. (Received September 21, 2015)