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Krista L Lucas and **Timothy A Lucas*** (timothy.lucas@pepperdine.edu). *Using Mobile Apps to Enhance Learning in Differential Equations.*

It is increasingly important for mathematics students to engage in active learning along with discussion of material with their peers. A key for these students to understand mathematical models that incorporate differential equations is visualizing slopefields, phase planes and solutions. *Slopes* is a mobile application with an intuitive interface, designed to visualize solutions to differential equations and support active learning in the classroom. *Slopes* is currently available for iPad, iPhone and Android phones, which are highly portable and feature larger touch screens that allow students to view and manipulate content easily. To study the possible benefits of the app, we implemented group activities using *Slopes* into an ordinary differential equations class, conducted observations and focus groups, and examined final poster projects on modeling topics. We found that students used *Slopes* to visualize solutions, aid in discussion and cooperation, and demonstrate understanding of differential equations concepts. (Received September 07, 2020)