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**Christopher R. Cornwell, Kristin M. Frank** (kfrank@towson.edu) and **Nathan G. McNew\*** (nmcnew@towson.edu). *Using computing software in Calculus I: Replacing coding with dynamic visualizations.*

Many Calculus courses introduce a computer algebra system such as Mathematica, Maple, or MATLAB as a way to simultaneously develop students' understanding of calculus while also learning some basics of computer programming. Our institution has been using a sequence of labs written in Mathematica that were designed to teach both calculus and computer programming throughout our calculus sequence. After many years and many frustrated students, we learned that the programming aspects of these activities often hindered students' learning of the calculus concepts they were designed to explore. This led us to reconceptualize how to use software to help students understand these concepts while deemphasizing the coding aspects of the activities. In this talk, we will discuss our goals for using computing software in Calculus and why this led us to create a new sequence of web-based activities that leverage embedded dynamic visualizations created with SageMath. We describe the design and implementation of these activities. We report how these web-based activities supported students' learning about graphical representations of concepts like derivatives and Riemann sums and we compare student feedback on the old Mathematica labs to the new web-based activities and dynamic visualizations. (Received September 25, 2018)