Monika Kiss* (monika.kiss@saintleo.edu), Brian Camp, Doris Van Kampen-Breit and Shawn Weatherford. *Are graphing skills a thing of the past?

The influence of technology as part of classroom instruction, homework, and assessment has increased dramatically in the last decade. Students and faculty prefer instantaneous feedback, so that students can immediately correct any misconceptions they have regarding the topic presented, and faculty can quickly adjust content and instruction to address those misconceptions. However, we also want students to be able to think critically when working with mathematical concepts, something which may be interfered with or diminished if the solution is always instantaneously available. It is also important for students to be able to identify and sketch functions graphically as well as understand them algebraically.

In this paper, the authors investigate the differences between using online-only homework assignments verses traditional, paper-based homework to assess students’ graphing abilities, critical thinking skills, and matching abilities. The eventual goal of this work is to find a hybrid method of engaging students about graphs and their properties that will incorporate the best results from both traditional and online methods of homework delivery. (Received September 15, 2016)