Impact of Technology vs Traditional Teaching Methods for Math Instruction in an Elementary Setting

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Abstract

Seventy-five percent of homes in the United States have internet access and digital devices highlighting that technology is now accessible to an increasing number of families. The purpose of this study was to investigate the impact of mLearning or mobile device practice on the attention and accuracy of student's use of math concepts, specifically, telling time. Teachers and school districts are struggling to determine the best ways to take advantage of children's interest in technological devices for enhanced learning. A variety of digital technology (e.g., iPad, iPod touch, computer, smartphone) have been demonstrated to increase engagement and children learning. One such technology is mLearning, which refers to the use of mobile devices to aid in student learning. A single subject, alternating treatment design was used to compare mLearning to paper & pencil practice in four 3rd grade male students. Results indicated higher on-task behavior for students during the mLearning, as compared to the paper & pencil condition. However, students completed more problems during the paper & pencil practice, with mixed results on the number of problems correctly completed across students. Implications for classroom teachers would be that the use of an iPad does have students more engaged with work for practice of skills.

Keywords: *iPad app, mLearning, technology, math, elementary.*

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