

Chapter 20

iPads in the Classroom: Benefits and Challenges

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ABSTRACT

Handheld digital devices, especially iPads, have become increasingly popular in educational institutions surrounded by debates between advocates and skeptics. This chapter examines the perceptions of middle school teachers on the use of iPads in the classroom. A review of the existing literature on the digital devices and on iPads use in the classroom was conducted. The participants, 53 teachers, responded to a Likert scale type online survey asking them questions about how they felt about the 1:1 iPad initiative at their school. Data analysis included open and axial coding for identification of themes and patterns. The findings showed mixed findings, although the majority of teachers believed that the iPads played a significant role in the teaching-learning process to engage students in the classroom. Some participants, however, responded with concerns that iPads caused student distraction and allowed off-task behaviors in the classroom. The findings also suggest that teachers need targeted professional development training on pedagogical and practical use of iPad to be able to successfully integrate the iPad into their practice. Implications for educators, app designers, and for future research are discussed.

INTRODUCTION

In schools today, there is a massive push to integrate technology throughout the educational process to enhance learning. The integration of technology has led to a major shift in K-12 teaching and learning process. While the iPad itself is relatively new technology (the first edition was released in 2010), interactive digital devices and applications have been around for decades (Harrison & Lee, 2018). While there are research studies which have shown inconclusive results of the impact of the use of iPads and other tablet devices in education (Falloon, 2015), a review of literature overwhelmingly stated that iPads have a positive impact on students' engagements in learning (Hargis, Cavanaugh, Kamali & Soto, 2014).

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Administrators and policy makers are hoping that introducing iPads into their schools will increase student engagement and improve learning. Many educators they rave about the iPads versatility, interactivity, connectivity, mobility as well as the potential benefits of thousands of educational applications (*apps*) (Gupta & Koo, 2010; Falloon, 2015; Mango, 2015). The mobility of the iPad makes it an ideal classroom tool for the integration of technology into the classroom teaching. In a survey of over 2,000 teachers across the United States, 92% of teachers responded that digital technology is crucial to teaching and has an impact on learning (Brudno, 2013). There seems to be a lot of “hype” for this new learning tool. Most claim that the iPad allows for more student-driven work, more collaboration and an exciting, different way to learn (Hoffman, 2013). However, some educators maintain that instead of enhancing learning, iPads and other tablet devices are causing students to be distracted from work they should be doing (Miller, 2012; Hu, 2011).). Nonetheless, in this mixed atmosphere of anticipation and skepticism, the number of K-12 schools that have launched iPad pilot studies or/and adopted 1:1 iPad programs (where all students are given an iPad) is on the rise (Diemer, Fernandez & Streepey, 2012; Hu, 2011).

Currently there has been a surge on 1:1 iPad usage and implementation in many school districts across the nation (Riley, 2013) and is touted as a means to increase student engagement in the learning process. Recommendations from the Common Core standards (National Governors Association Center for Best Practice, 2010) and the International Society for Technology in Education (ISTE, 2015) standards call for the use of technology tools in the classroom instruction to support high order critical thinking and collaboration. Integration of diverse learning tools such as iPads in classroom teaching can help educators achieve this goal. When educators’ perceptions and attitudes are not examined, implementation of new technology initiative may fail (Hord & Roussin, 2013). By using the strategies developed by Hord & Hord (2006), it is possible to evaluate the degree to which teachers are using the new innovations in their classrooms. Such evaluations should result in additional support for the teachers to help them implement the innovation more effectively. This research examined teachers’ perceptions of the use of iPad in classroom, as well as the associated benefits and challenges. In this study, student engagement refers to “the extent to which [students] take part in educationally effective practices,” (Kuh, as cited in Axelson and Flick, 2011, p. 40) in the classroom. The teachers in the study reported that the iPads use had a positive impact on student learning and engagement. The teachers’ perspectives were based on improvements they noted in their students’ quality of work and their time on class task.

RESEARCH QUESTION

The purpose of this study was to investigate middle school teachers’ perceptions of use of iPads in the classroom and effects on students learning. The following research questions were asked:

1. What are the teachers’ perceptions of the impact of iPads use in their classroom?
2. Do teachers feel that the 1:1 iPad initiative has an impact on student engagement?

LITERATURE REVIEW

Before conducting this study, an extensive review of literature on the use of iPads in K-12 education was conducted. The literature revealed that because the iPad has only recently appeared in schools, there is

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