EDUCATIONAL IMPACTS OF 1-1 TABLET PROJECTS IN CANADIAN SCHOOLS

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Abstract

Introduction: In a few short years, tablets have made unprecedented inroads into elementary and high schools around the world. Today, over 400,000 students in Canada are using an iPad in class every day, and in the United States that number has exceeded 7 million (Etherington, 2013). The aim of this study was to understand both the benefits and challenges of 1-1 tablet projects in both elementary and secondary Canadian schools.

Method: In all, 26,044 students (from grades 3 to 11) and 802 teachers participated in this study. We used six main instruments to collect the data for this study:

1. Online surveys for teachers (n = 802)
2. Online surveys for students (n = 26,044)
3. Semi-directed individual interviews with teachers (n = 18)
4. Semi-directed group interviews with students (n = 44)
5. Semi-directed group interviews with teachers (n = 16)
6. Videotaped classroom observations (n = 18 60–90-minute periods).

In this presentation, we will focus mainly on the data obtained from the online questionnaires completed by students (26,044) and teachers (802). To illustrate some of the findings, we also present some extracts from the individual and group interviews. The questionnaires were designed following an exhaustive review of the literature on technologies in education, particularly educational uses of the tablet, and in relation to the research objectives. The questionnaires were validated on three different occasions in subgroups of teachers and students. Both teachers and students responded to the online questionnaires. However, to maximize the number of respondents, students were asked to complete the questionnaire in class, online, using their tablets under their teacher’s guidance and supervision. Teachers were given a choice of either responding in class while the students were completing their questionnaires or responding later online.

The protocol for the semi-directed individual and group interviews with students and teachers revisited the topics covered in the questionnaires, with the aim of gaining more insight into the main trends and their interrelationships. From the individual interviews, we gathered the students’ and teachers’ perceptions of the research objectives. The group interviews were particularly useful for deepening our understanding of how the tablets were used in class and the benefits and challenges of daily use of the tablet.

Main findings: The results reveal that 1-1 tablet projects have had a major impact on the students, particularly on their motivation to learn. Besides the substantial impacts on motivation, the results also show more than 40 main benefits of using tablets in the classroom, as underscored by the teachers and students: access to extensive information, a wide variety of available resources, to name only a few.

However, 1-1 tablet projects in education come with challenges, such as classroom management. Based on the results of this study, we may propose that tablets have enormous educational potential—as demonstrated by the list of benefits reported by students and teachers—but that, contrary to what many believe, their advent in schools will not be problem-free. In fact, this new technology may pose challenges that teachers will find difficult to overcome, especially if they are poorly prepared. The key to successful integration of tablets in the classroom, and arguably for all newly introduced technologies, is to provide teachers with adequate training.

Keywords: Tablets, iPads, education, impacts.