Chapter 8
Evaluating iPad Applications: Are They Readable?

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ABSTRACT

Traditional classrooms based solely on textbooks and print-based reading material no longer fit ways students gain knowledge. Advances and innovations in technology are changing the way students of all ages learn. The latest innovation, smaller tablet style computers such as iPads, is further changing the way technology is used in schoolrooms. Popularity of these devices and the ability to download applications to them opens a world of uses for such devices in classrooms. The appropriate use of these devices and choice of appropriate applications for educational purposes provides a new realm of research opportunities for scholars. Educators and administrators need to feel confident capital expenditures on tablet devices will fulfill the promise of a positive impact in classrooms. This chapter explores the readability of one of the more popular applications for iPads in an attempt to discover whether reading levels of the application are appropriate for students in elementary, middle, and high school.

INTRODUCTION

Classrooms are changing. New technologies are emerging more rapidly than ever and expectations by parents and students are that they will be integrated into classrooms just as quickly. School districts are spending large sums of money to purchase the latest technological devices and applications necessary to allow computers to become primary tools for learner-centered activities. Innovations in computer technology and applications downloaded onto them are changing K-12 learning. The latest trend relates to the integration of tablet and hand-held devices.

The iPad was launched onto the market approximately two years ago and nearly three million devices were purchased within the first weeks of its debut (Murray & Olcese, 2011). Other tablet devices have since made it to markets to compete with the iPad, but it is the iPad that continues to
set standards in such devices (Fredette, 2012). The
popularity of the iPad, and tablets like it, has piqued
the interest of educators and is causing schools to
implement pilot projects to see how they can be
integrated into curricula (Waters, 2010).

Tablet computers are quickly becoming more
preferred than laptop computers and laptop carts.
Tablet computers are easy to transport, are less
expensive, and have a much longer battery life
than laptop computers (Electronic Education
Report, 2011). In addition, tablets are customiz-
able and highly portable. They are also smaller
and lighter than laptop computers, which makes
the tablet easier to handle than unwieldy laptops.
Tablets can be made to recognize handwriting for
students who do not know the keyboard, and tablet
keyboards are smaller which is more accommod-
dating to tinier hands of elementary and middle
school students (Millard, 2005). In addition to
these features, a broad range of content is avail-
able through downloadable applications. Apple
is leading the field in applications for tablets,
claiming that more than one million apps and
250,000 books have been downloaded since the
release of the devices (Waters, 2010).

Another factor speeding up the adoption of
tablet devices is the rapid growth of wireless
networks in schools and communities across
the nation. While wireless technology requires a
significant outlay budget for initial implementa-
tion, wireless networks allow for easy expansion
without additional cost of running wires, cables,
or construction costs (Millard, 2005). The 2010
National Center for Education Statistics (2010)
report stated in 2008, 39% of our nation’s public
schools had wireless technology throughout the
building. This is up from approximately 15% in
allows for greater mobility within classrooms be-
cause students are not tied to cables and desktop
computers.

Due to an increasingly large-scale use of
computers in classrooms and overwhelming ad-
vances in speed and capacity, scholars are faced
with large-scale availability of such devices and
applications aiding in the process of teaching
and learning. Tablet devices can further enhance
and complement computers currently in use in
classrooms. There is plenty of publicity about
potential for iPads and other tablets that download
applications to improve student literacy. Because
of the recent emergence of tablet technologies,
this is a vastly untapped area of research (Murray
& Olcese, 2011).

The tablet devices are extremely customiz-
able through the use of various apps. The Apple
(2012) iTunes App Store boasts a large selection
of education-specific titles. Educators can down-
load apps to meet the needs of specific students.
However, most of the currently available apps are
focused on lower-level thinking skills, which is
inappropriate to use with older and higher-level
thinking students. Very little research has been
conducted regarding instructional design of ap-
plications and ensuring they are appropriately
developed for their targeted age groups. Therefore,
finding the best applications to meet reading and
writing needs of students is imperative. Because
teachers in all disciplines are now considered
reading teachers, matching reading materials
used in classrooms to student’s reading abilities
is important for student success. This is just as
critical for technology applications as it is for
text-based resources. If the reading level of the
app is too difficult, students become frustrated
and will not understand what they are reading. If
the reading level is too easy for students to read,
those materials are not promoting and improving
students’ reading abilities (Kirk & Kiekel, 2010).

The new definition of literacy now means
students must have an ability to decode all forms
of visual and textual information (Frascara,
2004). Much of the currently available literature
regarding readability ignores the fact that images
are a large part of the readability puzzle. Readers
must be able to comprehend all visual elements,
including images and words, in order to success-
fully understand all aspects of the reading process.