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Assessment of E-textbook Usage in a Large Public Speaking Program

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The rising cost of textbooks and the move to a digital age are changing the textbook industry. The availability of more and more content in electronic formats along with the pressures to cut costs are driving many programs and institutions toward the adoption of electronic textbooks. The adoption of an electronic textbook package may be a logical choice for any basic communication course instructor. Consequently, assessing textbook usage and educational benefits of using electronic textbooks, also known as e-textbooks, can be especially pertinent to communication programs. This is especially important because many publishers are offering e-textbooks and accompanying electronic resources at equal or lower cost than their printed textbook counterparts.

It’s believed that e-textbooks are set to become a dominating force in universities and college classrooms. Supporters of e-textbooks cite the advantages as everything from interactivity and electronic supplemental materials to wide-spread accessibility and portability (Murray & Perez, 2011). For basic course instructors, it’s more than just these advantages that are important when deciding to adopt an e-textbook; assessing student learning and usability in the classroom are vital concerns.
The massive printed textbook is no longer the only option. The e-textbook continues to be a logical choice for academic publishers and instructors, but some students have not reported a preference for reading a textbook online (Woody, Daniel, Baker, 2010). As part of the yearly assessment process for a large public speaking program, this study examined student preferences for reading e-textbooks, preferences for e-textbook mobile applications, and the textbook reading habits of university students. The results of this study could build on previous e-textbooks research in higher education (Dwyer & Davidson, 2012) and could help communication programs and basic course instructors make decisions about adopting e-textbooks.

**LITERATURE REVIEW AND RATIONALE**

The innovation of electronic books and textbooks is changing the way we look at instruction in the classroom. E-book sales increased by 366% in 2011 (Guardian, 2012). According to a recent sales report from the Association of American Publishers, the adult e-book markets were up for 2013 by 36% to $1.06 billion, comprising nearly 20% of all sales (Greenfield, 2013a). It’s estimated that by the year 2015 higher/career education e-textbook sales in the United States will have reached the 26% mark and in 2017 e-textbooks will compose 44% of the United States textbook market (Reynolds, 2011).

Cost might be one of the primary reasons for the e-textbook revolution in higher education. The average price of a textbook increased approximately 185% between 1986 and 2005 (Young, 2010) and between 2007 and 2010, prices have increased an average of 7.5% per
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According to the College Board’s annual survey of trends in college pricing, the national average for textbooks in 2012-2013 was estimated at approximately $1,200 per year at a public four-year college, depending on the discipline (www.collegeboard.com). E-textbooks are generally cheaper to produce than printed textbooks (Baumann, 2010) and one study found that the cost of textbooks in the e-book format was 20% to 50% lower than printed textbooks (Buczynski, 2006) although not all reports indicate a decrease in cost.

E-textbooks have been available for more than a decade but not until recently have universities and publishers started to explore the use of e-textbooks, moving from occasional e-textbook usage to mainstream adoption. Miller, Nutting, and Baker-Eveleth (2012) reported that there is a steady growth in the introduction of e-textbooks into education, particularly among students who are younger undergraduate students and those who are taking technically-oriented college courses. The Simba Information report, E-textbook in Higher Education (2010) predicts that the e-textbook market will grow at a rate of 49% through 2013 when e-texts will account for 11% of all textbooks sold. The report indicated the sudden increase in e-textbook sales is due to the growth of e-reader devices and e-book apps for smaller computing devices (e.g., tablet PCs, Apple’s iPad). When considering the cost of textbooks as well as the new textbook formats available, the transition to e-textbooks becomes a reasonable choice for any public speaking or basic course program.

According to the Oxford dictionary, an electronic book or e-book is “an electronic version of a printed book that can be read on a computer or handheld device de-
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signed specifically for this purpose” (Oxford dictionary online, 2013) and Crestani, Landoni, and Melucci (2005) add that an e-book is the integration of a conventional printed book with additional useful features provided electronically. An e-textbook can then be defined as an e-book used for instructional or educational purposes. In its simplest form, an e-textbook is a digitalized copy of the printed text (Chesser, 2011). These e-texts function like the traditional book and navigate in a linear fashion, moving through pages sequentially and sometimes offering features such as bookmarking, searching, highlighting and note-taking. In the most complex form, e-textbooks can also offer applications that are designed to incorporate interactive features such as built-in dictionaries and pronunciation guides, embedded video-clips, embedded hyperlinks, interactive images, and animated graphics (Marczak, 2013).

Some textbook publishers are even offering course management software as well as e-book apps to support their electronic offerings. Other features include online quizzes, software that automatically grades assignments, and technology that allows students to submit assignments electronically and then allows instructors to give feedback using both video and audio recordings (Marczak, 2013). Some indicate these more collaborative and active features only offered with e-textbooks are enabling students to learn in a new way that is not possible with traditional printed textbooks (McFall, Dershem, & Davis, 2006).

Over the past decade several scholarly articles have been published on the use of e-books on campuses. However, much of the research has focused on the use of e-books in academic libraries only or in technology related
disciplines. A comprehensive examination of e-textbooks as a tool for learning does not exist. More recently there have been a few studies that move beyond libraries and into the classroom where there is still a discussion on how to assess the educational benefits of e-textbooks.

**E-textbooks in Academic Classrooms**

Universities and individual instructors are experimenting with e-textbook programs. For example, The University of Phoenix consolidated all course textbooks in an electronic library and students are charged $75 per semester to access any electronic textbook (Blumenstyk, 2008). Northwest Missouri State University ran a pilot program with 240 students who were loaned e-book reading devices and provided with electronic textbooks (Read, 2009). The University of Idaho has experimented with a system where teachers provide an electronic, custom textbook tailored to a specific course and charge for it with a course fee (Baker-Eveleth, Miller, & Tucker, 2011). In spite of the rapid growth and development of e-books and e-textbooks and claims that little research has been done, there is still evidence that the examination of e-textbooks in the college classroom has started.

McFall et al. (2006) examined the integration of an e-textbook into an upper level computer science course. Results showed that student perceptions were generally positive in terms of the usefulness of the e-textbook and specifically rated the collaborative features such as shared annotations as helpful. Students who spent more time reading the e-textbook performed better on the final exam. The instructor reported positive support of the e-textbook format and indicated that using the e-
textbook had “completely changed the way he taught the class” (McFall et al., 2006, p. 343).

Sheppard, Grace, and Koch (2008) examined grades and student perceptions in an introductory psychology course when students were given the choice to use an electronic version of the textbook on a CD or a printed textbook in the course. The researchers found that course grades did not differ between the two formats (Shepperd et al., 2008). Students using the e-textbook reported spending less time reading for class (only 2 hours compared to the 2.3 hours per week on average), that the text was easy to use but were unfavorable in their ratings of its convenience, and generally being neutral in their liking for the e-text but would not recommend it to a friend.

**Advantages of E-textbooks.** There are many reports of advantages to e-textbooks. E-textbooks allow an atmosphere where students can interact and engage with the material in a positive way. A study of undergraduate business law students found that all selected the e-textbook option because it was less expensive even though few had previous experience, and 85% of the class reported never previously using any electronic book (Nicholas & Lewis, 2009). Approximately 50% of students rated their e-textbook experience as positive or very positive and 50% rated the experience neutral or negative.

Another study queried students enrolled in a Systems Analysis course to provide feedback about their perceptions of the course e-textbook accessed via an iPad (Sloan, 2012). Students reported that the e-textbook made it easier for them to learn, and they preferred the e-textbook to a printed textbook. Students
found the iPad easy and enjoyable to use, specifically commenting that the most useful advantages included the portability, handiness, and light weightiness of the iPad. Final course grade point averages (GPAs) from the pilot study were compared to course grades of students who had taken the course the previous two semesters using a print textbook and the study found no significant difference in GPAs.

Some studies report that accessibility doesn’t seem to be affected by the fact that e-books and e-textbooks require the use of an e-reader device or computer (Davy, 2007). E-reading devices have become so popular that the manufacturers or distributors are encouraging potential readers to use e-books (Fowler & Baca, 2010). In 2012, reports showed an increasing number of college students who own e-readers and smaller computing devices, like tablets and mobile phones, that provide access to course material (DeSantis, 2012).

E-textbook advantages would seem to include portability, searchability, and readability as well as cost (Nicolas & Lewis, 2010). With e-textbooks, students no longer need to lug around large backpacks full of books but can use a laptop or electronic reading device that holds all of the textbooks they could need. E-textbooks make it easy to do a keyword search no matter how comprehensive the index. Some e-textbooks can also be highlighted, like a printed textbook, and often have comment boxes or annotation ability (Ravid, Kalman, & Rafaeli, 2008). E-textbooks are also easier to update and edit so when publishers find an error or need to make an update, they can do it quickly (Stewart, 2009). E-textbooks are also helpful for those with disabilities be-
cause e-textbooks can be enlarged and can easily be converted to audio format (Dillion, 2001).

As mentioned earlier, cost is becoming a large factor in transitioning to e-textbooks. Reports show that e-textbooks are generally cheaper to produce (Baumann, 2010) and some have reported that the cost of textbooks in the e-book format was lower than printed textbooks (Buczynski, 2006; Mulvihill, 2011).

Limitations of E-textbooks. Although there are many advantages of e-textbooks, not all studies of e-textbooks have been positive. One study found that only 18% of students preferred e-textbooks, while 67% preferred printed textbooks (Walton, 2007). Studies have found that e-textbooks are hard on the eyes, are not easy to read, and lack portability when they are tied to the computer’s location (Walton, 2007, Dwyer & Davidson, 2012).

A study investigating the use of an e-textbook in a graduate course found that 75% of students would have preferred a printed textbook (Vernon, 2006). Students indicated that instead of reading directly from the website, they often resorted to reading from printed copies of the website content. The negative comments focused on physical discomfort while the positive comments included convenience and accessibility (Vernon, 2006).

In another study involving a college general psychology course, students reported greater satisfaction using printed textbooks regardless of gender, comfort level with computers, or prior e-book usage (Woody et al., 2010). However, the study showed no difference between student usage of e-textbooks or printed textbooks and attainment of learning outcomes.
Faculty Use of and Attitude toward E-Textbooks

Even with the documented use of e-textbooks in the classroom attracting faculty to use e-textbooks can be a challenge. One study found that 92% of university faculty preferred print textbooks (Walton, 2007). Although e-books are not new, e-textbook usage by instructors is and there continues to be a learning curve, especially for the rapidly aging faculty at universities.

Nicholas and Lewis (2010) found that 13% of faculty had used e-textbooks but 83% had no plans to use an e-textbook within the next year. The cost of a textbook is often a very small factor that faculty consider when choosing a textbook while previous research has found that this is the most overriding factor for students when rating a textbook (Dwyer & Davidson, 2012; Nicholas & Lewis, 2009). Nicholas and Lewis (2010) also found that over 50% of faculty reported the electronic resources available from publishers, like online self-testing, online study guides, and PowerPoint slides are not important or of least importance when considering a textbook for their course (Nicholas & Lewis, 2010).

Another study showed that faculty attitudes toward e-textbooks significantly affect students’ use of them (Miller et al., 2012). When faculty exhibit a positive attitude toward e-textbooks to their students, students may be more likely to see the benefits of e-textbooks.

Student Use of E-Textbooks

E-textbooks in the classroom are relatively new for faculty as well as for students. Considering how students will use and interact with e-textbooks is vital. Features such as e-book design-layouts and student
comfort with technology can influence students’ use of e-textbooks. Even the placement of e-textbook features such as illustrations has been found to impact learning (Levin & Mayer, 1993; Mayer, Steinhoff, Bower, & Mars, 1995) and student preference (Marek, Griggs, & Christopher, 1999).

E-textbooks enable students to interact with the content through varied methods and provide textual content enhanced with various learning tools, including audio and visual multimedia (Hatipoglu & Toseun, 2012). These tools can foster individualization in the learning process as they enable learners to make use of their preferred learning styles.

There is a significant difference between the e-textbook of the previous decade which was a PDF version of the printed textbook to the contemporary counterpart read on a smaller portable computing device and offering interactive learning features. Even with these technological advances students report browsing e-textbooks more often than printed text (Rho & Gedeon, 2000) and reading e-textbooks by key term searching rather than thorough reading (Nielsen, 2006). The possibility that e-textbooks impact learning is a consideration that all instructors must think about before adopting e-textbooks.

In a survey by the Pew Research Center of almost 3,000 Americans, there are four times more people reading e-books on a typical day in 2012 as compared to 2010 (Rainie, Zickhur, Purcell, & Brenner, 2012). With these rapidly growing numbers and textbook publishers offering communication textbooks in more than only printed formats, basic communication course instructors need to consider the possibilities and challenges of
adopting an e-textbook. Only a few studies have in particular investigated the use of e-textbooks in the communication classroom, or specifically in the basic public speaking course (Dwyer & Davidson, 2012).

Dwyer and Davidson (2012) examined student preferences for reading and learning in a basic communication course that fulfilled the general education requirement. They found that neither reading the print textbook nor the e-textbook was a predictor of grade, but comfort in accessing an e-textbook online was associated with grade. Additional results found that 40% of students reported learning from the e-textbook even though they didn’t read it on a regular basis and tended to list several difficulties with reading an e-textbook. The findings suggest that students weren’t embracing e-textbooks yet and were relying on the printed books to attain course material, but they still preferred the lower cost of e-textbooks. The authors suggest that new technological advances will allow e-textbooks to catch up with students’ needs, and they recommend that future research focus on e-textbook usage in several college courses, e-textbook reading habits, student ownership of technology to read e-textbooks, and students’ preferences for e-textbooks.

**Background**

At a large Midwestern university, where oral communication assessment is mandated, the assessment process recently focused on e-textbook student usage and preferences. An e-textbook package had been adopted for the public speaking program due to the increasing costs of printed textbooks. The paper package, including textbook and custom workbook, increased to
over $150 and many students mentioned that they could no longer afford the package and were trying to “get by” without buying it. A new e-textbook, a concise printed textbook outlining very similar public speaking course material, and a custom workbook package became available from a different publisher and could be purchased for approximately one-half the cost of the printed textbook package. The e-textbook package covered the same content and included similar materials as the expensive hard copy package. After careful consideration, the faculty at the large Midwestern University chose to adopt the e-textbook package.

Therefore, this study was designed to address the continuing call for e-textbook research by querying university students on their perceptions and usage of e-textbooks in a large multi-section public speaking course and to discover their preferences for reading applications (Dwyer and Davidson, 2012). The following research questions guided this assessment study:

RQ 1: Are students using e-textbooks in other classes across the university?

RQ 2: How do student preferences compare for using an e-textbook to a print textbook?

RQ 3: What advantages do students perceive for using an e-textbook and/or a print textbook?

RQ 4: What e-textbook reading devices and applications do students use and prefer?

RQ 5: How does previous experience with an e-book affect preference for using an e-textbook?

RQ 6: How often are students reading the course e-textbook versus the print textbook?
**Methodology**

**Participants**

Participants in this study were 598 undergraduate students (264 men, 317 women, 17 unknown) enrolled at a large Midwestern university. The participants were enrolled in 38 sections of the basic public speaking course, with a maximum enrollment of 26 students per section. Since the course fulfills an oral communication general education requirement, a wide variety of majors were represented and their ages ranged from 17 to 41 with a mean age of 21.3. Respondents also represented a cross-section of class rankings (349 freshmen, 125 sophomores, 82 juniors, 42 seniors, 18 unknown).

The course used a standard syllabus and the same-textbook package in all sections. The package included the e-textbook online code, a concise printed textbook that covered the same material as the e-textbook, but with fewer examples, charts and activities, plus the student workbook. As part of the course, all students were required to deliver at least four formal speeches, engage in classroom activities, and take two exams. Instructors included trained GTAs, adjuncts, and full-time faculty. All instructors were given the master syllabus, weekly lesson plans, class policies, and instructional training materials.

**Procedures and Instrumentation**

As part of this oral communication assessment of the e-textbook package, the public speaking course faculty created items for an online survey tool to answer the research questions. The survey consisted of three demographic items (e.g., age, year in college, sex) and 11
questions that covered 17 survey items designed to answer the research questions. Types of items included dichotomous questions (e.g., “Have you ever used an e-textbook in a previous course?” (1) Yes (2) No), multiple-choice questions (e.g., “Do you own or have access to read an e-textbook via the following.” Check all that apply. (1) Computer (2) iPad or other electronic tablet (3) iPod (4) iPhone or other phone with internet access (5) Kindle (6) Nook) and Likert-type scales (e.g., Please use the following scale to answer these questions. (1) Always (2) Frequently (3) Occasionally (4) Rarely (5) Never. “In general, I found the e-textbook to be useful.”)

The public speaking course director invited all public speaking course instructors to participate in the e-textbook assessment process. Participating instructors (21 out of 23, representing 38 sections) invited their students during the last month of a spring semester to complete an online course assessment survey that would help instructors make decisions about course materials. Some instructors offered extra credit points for completing the survey. Students were assured that the survey would be tabulated by an outside person who would inform each instructor of the students’ names who had completed the survey so each student could receive extra-credit points. The final results of the assessment study were reported to the public speaking course instructors at their monthly meeting and used in the assessment of textbook usage and decisions for future adoptions.
RESULTS

Research Question One asked if students are widely using e-textbooks in other classes across the university. Using the IBM SPSS-19 report summaries, results showed that the majority of students, over 73% (n = 423), had not used an e-textbook in a previous course while approximately 27% reported they had used an e-textbook in a previous course (n = 156).

Research Question Two asked how student preferences compare for using an e-textbook to a printed textbook. The results indicated that if students had a choice to purchase the textbook again, 77.8% (n = 441) would prefer a print version and 22.2% (n = 126) would prefer an e-textbook. When students were asked if an e-textbook option would ever affect their selection of a course, 35.1% (n = 195) indicated they would be more likely to take a particular class if it offered an e-textbook option while 64.9% (n = 360) reported they would be more likely to take a particular class if it offered only a print version of the textbook.

Research Question Three asked what students perceive as advantages for using an e-textbook and/or a printed textbook. Results showed that students consider the advantages of an e-textbook over a printed textbook to include cost (70.4%, n = 385), weight (62.0%, n = 339), ability to quickly find topics (45.3%, n = 248), and convenience (44.8%, n = 245). Students consider the advantages of a printed textbook over an e-textbook to include ability to highlight and take notes (73.2%, n = 412), ease of reading (71.8%, n = 404), ability to keep it as a reference book for future reference (60.7%, n = 342) and convenience (51.7%, n = 290).
Research Question Four asked what e-textbook reading applications students use and prefer. The results showed that students have access to read an e-book via a computer (96.8%, n = 550), an iPad or other electronic tablet (8.8%, n = 50), an iPod (31.9%, n = 181), an iPhone or other mobile smart phone (27.1%, n = 154), a Kindle (3.9%, n = 22), and a Nook (1.9%, n = 11). Students reported that they would prefer to read an e-textbook using the following: computer (86.9%, n = 471), iPad or other electronic tablet (17.9%, n = 97), iPod (18.1%, n = 98), iPhone or other mobile smart phone (20.5%, n = 111), Kindle (11.3%, n = 61), and Nook (4.8%, n = 26).

When it comes to preferences, 39.9% (n = 232) of students reported that they would have read the e-textbook using a mobile application format if it were available for the course, while 60.1% (n = 349) said they would not read the textbook using a mobile application. For those that said “yes” to using a mobile application format, students were asked which mobile application format they would prefer and they indicated an Android, Blackberry, Droid, or other mobile smart phone (n = 60), iPad or other portable electronic tablet (n = 41), iPhone (n = 52), iPod (n = 35), and e-reader (i.e., Nook, Kindle, Sony eReader; n = 9).

Research Question Five asked how previous experience with an e-book would affect preference for using an e-textbook. A one-way MANOVA was calculated to examine the effect of reading an e-book for any other reason on satisfaction with reading the e-textbook, usefulness of the e-textbook, recommendations for using an e-textbook to friends, and wishes other courses offered e-textbook options. A significant effect was found (Ho-
telling’s $T(4,569) = .027, p < .01$). Follow-up univariate ANOVAs indicted that previous e-book reading significantly affected being satisfied with reading the e-textbook ($F(1,572) = 6.07, p < .01$), perceived usefulness of the e-textbook ($F(1,572) = 6.65, p < .01$), recommendations for using an e-textbook to friends ($F(1,572) = 10.70, p < .01$), and wishes that other courses offered e-textbook ($F(1,572) = 14.43, p < .01$).

In addition, a one-way MANOVA was calculated to examine what the effect of reading an e-textbook in another course could have on student satisfaction with reading the e-textbook, usefulness of the e-textbook, recommendations for using an e-textbook to friends, and wishes that other courses offered e-textbook options. A significant effect was found (Hotelling’s $T(4,566) = .026, p < .01$). Follow-up univariate ANOVAs indicted that previous e-textbook reading in another course significantly affected being satisfied with reading the e-textbook ($F(1,569) = 10.45, p < .01$), perceived usefulness of the e-textbook ($F(1,572) = 7.53, p < .01$), recommendations for using an e-textbook to friends ($F(1,572) = 10.98, p < .01$), and wishes that other courses offered e-textbook ($F(1,572) = 813.98, p < .01$).

Research Question Six asked how often students are reading the course e-textbook versus the printed textbook. The results showed that 59.4% of students are reading the e-textbook less than 1 hour per week ($n = 344$), 23.5% of students are reading the e-textbook one hour per week ($n = 136$), 9.7% of students are reading the e-textbook two hours per week ($n = 56$), and 7.4% of students are reading the e-textbook three or more hours per week ($n = 43$). Results also showed that 48.3% of students are reading the printed textbook less than one
hour per week (n = 278), 30.0% of students are reading the printed textbook one hour per week (n = 173), 12.8% of students are reading the printed textbook two hour per week (n = 74), and 8.8% of students are reading the printed textbook three or more hour per week (n = 51). A paired samples t-test was calculated to compare the means for the amount of time spent reading the e-textbook (M =1.69, SD = 1.06) and the amount of time spent reading the printed textbook (M = 1.91, SD = 1.22). Results showed a significant difference (t(574), 5.288, p <.001) between the two groups. Thus, students reported spending more time reading the printed textbook than reading the e-textbook, but the time for reading either one was only one hour or less than one hour per week.

**DISCUSSION**

This assessment study examined students’ perceptions of e-textbook usage in a large multi-section public speaking course that fulfills the university general education oral communication requirement. The ultimate goal of the research was to extend previous e-textbook research and help instructors make decisions about adopting e-textbook packages for their courses, as well as help them understand the challenges students may face in reading e-textbooks.

The findings from this study showed that the majority of students reported they have not used an e-textbook in previous courses. This seems to indicate that although there is a growth in the availability of textbooks in electronic formats, many professors are not offering their students the option to use e-textbooks. This
finding may suggest some professors are not comfortable using an e-textbook themselves or incorporating it into the course as previous research has reported (Nicholas & Lewis, 2010). They may fear students will come to them with technical problems they cannot answer and it could affect their ability to be successful in the course (Carlock & Perry, 2008). In another study of university faculty perceptions and electronic resources, one professor said she “would never suggest an e-book as a textbook for her large undergraduate class because ‘if it didn’t work out it would be mass chaos’” (Carlock & Perry, 2008, p. 250). We suggest that more faculty consider taking the next step and welcoming the new technology and supplemental electronic resources or at least giving students the choice of e-textbook or printed textbook as many publishers now make both available. If faculty are not using e-textbooks, students will not be able to reap the benefits from using them.

The majority of students further reported they preferred a printed version of the textbook and that the selection of an e-textbook for a class would alter their decision to take a class. In fact, most students said they would be more likely to take a course if a printed version of the textbook was offered. Again, these findings indicate the educational culture has not completely embraced e-textbook adoption yet. This may be coming, but until students and their instructors use e-textbooks in courses or e-books in general, they will prefer the comfortable printed textbooks they used in their previous educational experiences.

Students reported the advantages of an e-textbook included cost, weight, ability to quickly find topics, and convenience. On the other hand, students considered
the advantages of a printed textbook to include highlighting and taking notes, ease of reading, ability to keep the book for future reference, and convenience. It seems students still perceive e-textbooks to be too much of a challenge. Previous research found that the reason for not using e-books and/or e-textbooks was that they were hard to read and browse and they needed special equipment to use them (Chu, 2003; Levin-Clark, 2006). In this study, only 22.2% of the students reported wanting to use electronic textbooks. With the growing popularity of laptops, e-readers, and smart phones (Mulvihill, 2011) preferences for using e-textbooks will change. Most students have a computer and now at least one-third of students have some kind of portable tablet computer, which is double the percentage from only one year ago (Greenfield, 2013b). There are indications that e-textbooks are looking more useful and as technology progresses and continues to become more available, e-textbooks will become more convenient and accessible for students.

This study further found that student access to mobile devices enabling students to read their e-textbooks from anywhere was still rather limited at the time. Students tend to have cell phones and iPods but less than 15% of students in this study reported having the capability to access an e-textbook on an electronic tablet or e-reader device, such as an iPad, Kindle, or Nook. On the other hand, at least 71% of students who had access to mobile devices reported they would prefer to read the e-textbook on them and 20% reported they would prefer to read the e-textbook on their cell phone if that format was available. It should be noted that since this study was conducted there has been a steady growth in the
The widespread use of mobile devices (Mulvihill, 2011). The ability for students to access e-textbooks on mobile devices and other portable electronic devices is dependent on publishers developing electronic/mobile applications that include the same tools and resources that are already available to students on traditional computers. Recent reports show that publishers have already begun addressing this need and are now offering these additional features to their consumers (Mulvihill, 2011). The next question is whether students will actually access e-textbooks on these mobile devices.

This study shows, the more that a student has used an e-book or e-textbook, the more likely they are to find it useful. It seems that the disadvantages students perceive with using e-textbooks are related to low familiarity with the e-textbook format and the tools they offer. As students are introduced to e-textbooks, albeit ever so slowly, they may likely become more satisfied with using them. E-textbooks becoming more accessible and offering more capabilities like interactive resources may help e-textbooks tip the scales and make them the more preferred format. According to a study from the Book Industry Study Group, which surveyed a nationally representative sample of college students during fall 2012 for its Student Attitudes Toward Content in Higher Education, 14% of students are using the supplemental interactive resources provided by publishers, also called integrated learning systems (ILS), and include online learning platforms for course materials, study groups, and other interactive features (Greenfield, 2013b). Students reported that ILS helps them improve their grades more than both printed textbooks and e-textbooks. Options seem to be the key.
tions and instructors give students the option of purchasing e-textbooks that include interactive features like ILS, the more likely students are going to learn the advantages of an e-textbook.

Finally, this study found that students reported reading the print textbook more often than the e-textbook. However, students reported reading a textbook, electronic or print, only about one hour per week or less on average. Format, electronic or print, may not make a difference for students. The bigger question might focus on how to motivate students to read more in general. Anecdotal evidence from textbook sellers suggests that at least 20% of students skip buying textbooks (Boyd, n.d.). They think they can “get by” without the textbook. Thus, instructors may need to emphasize textbook reading at the beginning of the course.

All instructors should consider guiding their students on the use of all course materials during the first few days of class. This would include showing students where to find chapter objectives, charts, key terms, study questions, and examples, as well as how to look for quiz ideas under the subheadings. Instructors could even incorporate an exam during the first few weeks that covers the required materials, including the syllabus, textbook, and workbook. Students could use all materials they brought to class in an open-book test (Boyd, n.d). Of course, those who do not have their materials will find that they will likely earn a lower grade.

When instructors assign readings, they should explain why the readings are important and how they will be used in future assignments, such as upcoming presentations (Hobson, 2004; Nilson, 2003). When instructors want to motivate students to use their e-textbooks,
they could assign electronic quizzes and interactive activities based on the e-textbook material. E-textbooks, with their new technology tools foster reflections, journaling and quiz-taking over the readings by making them more assessable to students at the click of a finger. Instructors should take special care to assign these activities to make sure the students are exposed to using the e-technologies.

**RECOMMENDATIONS**

One of the goals for using the e-textbook is to move to the place where student materials are assessable, helpful, and affordable. Students seem to want greater efficiency in studying—they want help with absorbing more material in the least amount of time. At present the e-textbooks are attractive to students because they are less expensive. However, students do not want to spend hours reading at their computers or laptops. It is likely that when electronic textbooks become more available through mobile smart phones, electronic tablets, and e-readers, students will favor them over printed books. Also, there may be an adjustment time for students to get used to reading with technology—beyond using it for Facebook, Twitter, email, etc. They will likely slide into reading e-textbooks when the e-formats offer the amenities of printed textbooks. For now, the present findings suggest that basic speech course instructors and directors should consider their students and their preferences, as well as options available, in the adoption of electronic textbooks. The best option might be to offer both print textbooks and e-textbooks for students with different learning styles.
Some publishers are even offering packages where students can purchase a print copy of the textbook and receive access to the e-textbook, resources, and e-tools as well. This would enable students to benefit from both formats.

We suggest that faculty consider adopting e-textbooks in their classrooms and becoming more familiar with the tools and resources available so they can integrate them into their courses. If students are being asked to read e-textbooks and use all of the available resources/e-tools, but faculty are not helping to make it a successful experience, students will not see or reap the benefits.

When it comes to textbook selection, basic speech course directors will want to foster a selection not only based upon student preference but also upon their faculty’s willingness to incorporate the e-textbook into the classroom experience. Basic course directors should consider offering workshops for their instructors, adjuncts, and graduate teaching assistants that provide opportunities for them to learn how to use and take advantage of the benefits of e-textbooks with the e-tools and resources.

Limitations and Future Research

This study does have some limitations. For example, the data was collected from one large multi-section public speaking course at one large Midwestern university so more research needs to be collected in order to make generalizations. In addition, the survey instrument in this study represented an attempt at assessing e-textbook usage in a basic public speaking course. As is the case with most assessment efforts, survey questions of-
ten need to be refined, edited, and expanded. Future studies might inquire as to what electronic resources students are using with the e-textbook and what motivates them to read the e-textbook. Also, future research should address not only what mobile devices students are using to access e-textbooks but if students who have access to mobile smart phones and other portable electronic devices are actually using them to read e-textbook.

In conclusion, the results from this study were especially useful to instructors at the university where the assessment data was collected. All public speaking instructors were presented with the results of this study, and instructors recommended that the program continue to use the e-textbook package with a full print textbook, giving students more options. Students can now choose to use the e-textbook or the printed textbook, depending on their preferences, and instructors can specifically assign the e-textbook chapter quizzes and other ancillaries to encourage e-textbook usage for everyone at the Midwestern university.

Public speaking course instructors concluded that e-textbooks are the future and the future is now. When students experience being able to highlight, take notes, and avoid eye strain with such enhanced technology, they will likely learn to appreciate using e-textbooks even more.

Instructors need to help keep the costs of materials down for financially strapped students. As new e-textbook formats emerge, they may help with cutting costs and increasing motivation for students with diverse learning preferences. Faculties need to find ways to grow with the changes in technology and learn
from interactive e-textbook benefits. E-textbook technologies may positively impact the readership of our next generation of students who are familiar with newer technologies and are willing to give up carrying heavy books and backpacks.

REFERENCES


Assessment of e-Textbook Usage


Assessment of e-Textbook Usage


Assessment of e-Textbook Usage

Journal of Human-Computer Interaction, 12, 219-240.


Assessment of e-Textbook Usage


**APPENDIX A**

1. Have you ever read an e-book for any other reason than for this class? (1) Yes (2) No

2. Have you ever used an e-textbook in a previous course? (1) Yes (2) No

3. If you could have read the e-textbook in a mobile application format (e.g., iPhone, iPad, etc.), would you have used it for this e-textbook in this course? (1) Yes (2) No If yes, which mobile application format would you prefer?

4. Do you own or have access to read an e-textbook via the following. (Consider that an app is another available option.) Check all that apply. (1) Computer (2) iPad or other electronic tablet (3) iPod (4) iPhone or other phone with internet access (5) Kindle (6) Nook

5. I would prefer to read an e-textbook via the following. (Consider that an app is another available option.) Check all that apply. (1) Computer (2) iPad or other electronic tablet (3) iPod (4) iPhone or other phone with internet access (5) Kindle (6) Nook

6. Approximately, how much time EACH WEEK do you spend on the following? (1) less than one hour per week (2) 1 hour per week (3) 2 hours per week, 3 hours per week (4) 4 hours per week, 5 hours
Assessment of e-Textbook Usage

per week (5) 6 hours per week (6) 7 to 10 hours per week (7) more than 10 hours per week

a. Reading the e-textbook for your speech course?
b. Reading the (concise) paper textbook?

7. Please use the following scale to answer these questions. Always (2) Frequently (3) Occasionally (4) Rarely (5) Never

a. In general, I found the e-textbook to be useful.
b. I am satisfied with my experience of reading the e-textbook.
c. I would recommend using an e-textbook for a class to other a friends or fellow students.
d. I wish other courses offered the e-textbook options.

8. If you had a choice to purchase the textbook again, would you purchase a paper textbook (print) or electronic version (e-textbook)? (1) Paper Version (print) (2) Electronic Version (e-textbook)

9. What do you consider advantages of an e-textbook over a paper (print) textbook? Check all that apply.
(1) Cost (2) Ease of reading (3) Weight (4) Convenience (5) Ability to highlight and take notes (6) Ability to quickly find topics (7) Keep it as a reference book for future use

10. What do you consider advantages of a paper (print) textbook? Check all that apply: (1) Cost (2) Ease of reading (3) Weight (4) Convenience (5) Ability to highlight and take notes (6) Ability to quickly find topics (7) Keep it as a reference book for future use

11. Would an e-textbook option ever affect your selection of a course? (i.e., would you ever be more inclined to take a particular class if it offered an e-textbook
option)? (1) I would be more likely to take a particular class or section if it offered an e-textbook option (2) I would be more likely to take a particular class or section if it offered only a paper (print) version of the textbook

12. Gender—What is your gender? (1) Male (2) Female

13. Age—What is your age? (1) 17 or younger (2) 18 years (3) 19 years (4) 20 years (5) 21 years (6) 22 years (7) 23 years (8) 24 years (9) 25 years (10) 26-30 years (11) 31-35 years (12) 36-40 years (13) 41 years or older

14. Education—Please select your year in college. (1) College Freshman (2) College Sophomore (3) College Junior (4) College Senior (5) College Graduate