

Current Advantages and Disadvantages of Using E-Textbooks in Texas Higher Education

Darlene Waller

Doctoral Candidate

Texas A&M University-Commerce
Commerce, TX

Abstract

This study investigates the emergence of E-textbooks in higher education and looks at current advantages and disadvantages of E-textbooks. There are many names for textbooks that you can read online or from a portable device, such as: electronic textbooks, etextbooks, digital textbooks, e-texts, and ebooks, but for the purpose of clarification in this study, the reference will be E-textbooks.

Technology is rapidly becoming advanced to the point that hardly a day goes by when we are not engaged in some sort of interaction with technology. On a daily basis, most higher education students, faculty, educational administration, teachers and students in K-12, and business workers, use computers or a smart device, such as a smart phone or iPad, to check Email, go online for course updates, or to actually engage in online courses. For most schools and businesses, computers are used all day in some manner.

Technology in the education sense is encompassed by online courses, online libraries, and online communication such as, online registration, student information, student Email, grades, and degree information. Distant learning makes up a large chunk of course offerings at most community colleges and universities. Some universities offer solely online internet based degrees. When considering costs, time, and convenience, online courses seem to be beneficial for higher education and appear to be gaining in popularity among the way universities and colleges operate, and may be even more so in the near future.

E-textbooks seem to mirror distant learning in similarity of cost and convenience. In some instances for a college student, a printed textbook can cost as much as tuition. In terms of cost, E-textbooks are more affordable. The higher education library is conveniently located online and therefore the articles and books you are viewing online are electronic books. Although the traditional library still exists for most universities, there seems to be a big move for more technology including E-textbooks, more learning via live collaboration online, more distance learning, and a move away from printed textbooks.

The Emergence of E-textbooks

Technology is being incorporated into every aspect of our lives including home, education, socially, and business. Almost every home has a computer and access to the internet. Most individuals have cell phones, and a large majority of cell phones are smart phones, meaning they have internet capabilities. A majority of the business world is technology driven and automated, and businesses are looking to colleges and universities to send them technology educated workers. In the business world, training is most often offered on line. Instruction manuals are often on line, as is an employee's personal information. Email is usually the mode of communication for businesses therefore businesses are expect technology trained workers.

Hard copy textbooks have traditionally been furnished to students in Texas' public primary and secondary schools through state funding. However, in June of 2011 a law was passed by the Texas Senate, known as Senate Bill 6, which provides allotments (and incentives) for K-12 schools to provide instructional material (E-textbooks) for students. Senate Bill 6 also establishes a grant program to set up a technology lending program for equipment, such as laptops, that are needed by students to use electronic instructional materials, such as E-textbooks. This bill is part of a larger nationwide push for use and incorporation of technology in education (Shapiro, 2011). At the federal level, in September of 2011, the Secretary of Education announced that a new national center had been created known as Digital Promise. Digital Promise was created by Congress to assure technology is used by educators to better teach students and for students to reap the benefits technology has to offer. The Digital Promise center will work with educators and technology firms to develop educational technology to push education to the next plateau and to assure that America's educators and students are technologically savvy (Department of Education, 2011).

Effect on College Stores, Libraries, and Publishing Companies

According to a 2005 report conducted by the U.S. Government Accountability Office, the price of textbooks nearly tripled in cost from December 1986 through December 2004. The study was conducted at the request of Congress concerned about financial aid and keeping college affordable and accessible. Their interest was in knowing why college tuition and textbooks rates were soaring.

Publishers get three quarters of the amount of profit on each textbook, as seen in Figure 1. The breakdown from data collected by the National Association of College Stores in 2011, gives a clear picture of profit for publishers of printed textbooks.

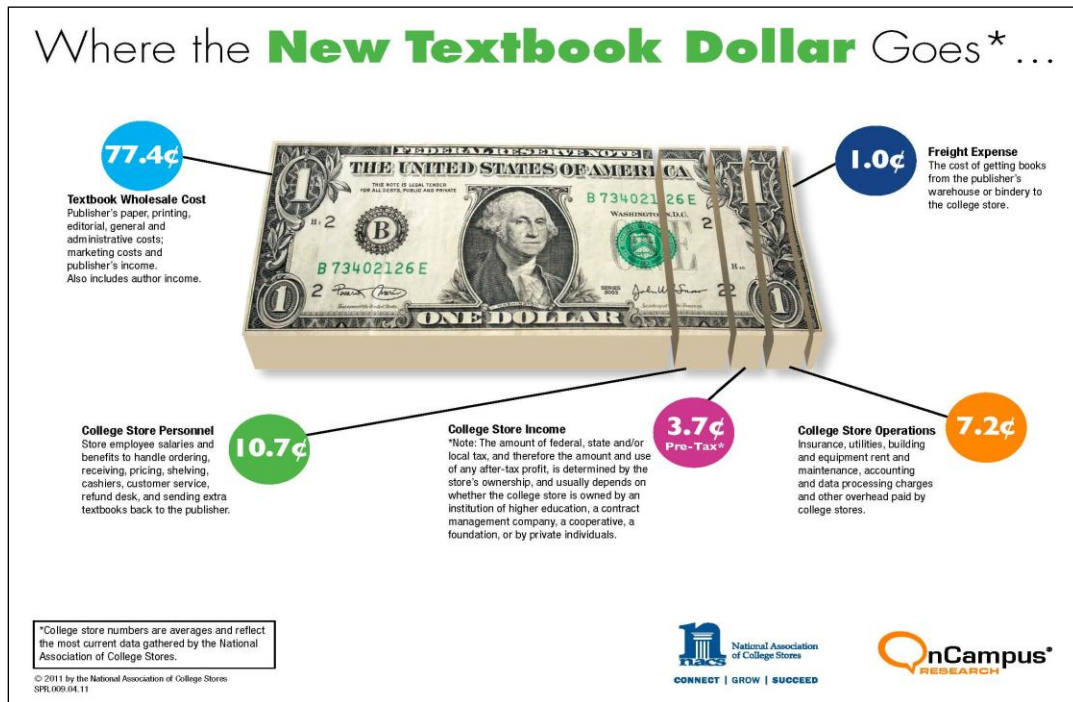


Figure 1. National Association of College stores.

It is not yet clear what effect a majority E-textbook using college would have, but considering the cost associated with printed textbooks, the advantage may be in E-textbooks, when weighing the high cost of paper, printing, editorial, publisher's income, marketing cost, and delivery to the college (National Association of College Stores, 2012).

College libraries house large offerings of printed books, and coordinate finding, ordering, and loaning printed books. However, technology has made possible for students to find books, order books, and conduct research through the universities website. With E-textbooks the library would still function as a way for students to find, order, and request a loan of a book, with the advantage of an instructor approved E-textbook, an electronic book that has been easily updated and is within reach and does not have to be ordered. Electronic books still will need to be housed and managed and may become easier to deal with than printed books. The addition of E-textbooks to the university library may have a positive effect.

Realizing the backing of state, federal governments, and higher education associations, publishing companies are in the process of offering more electronic books to save their companies. For example, 5 Publishers went in together to form CourseSmart, which is an E-textbook company offering only E-Textbooks. However, they have a lot of competition from new companies formed from technology sources such as Kindle, Amazon, and others.

Advantages

The emergence of EReaders such as Kindle, Nook, iPad, and others, has boosted the use of electronic books. If a book is in electronic form, you can download it fairly easy. Some electronic books are free and some are for purchase. Most people don't mind paying because the

cost of an electronic book is usually a fraction of the cost of a printed book, and then you consider the convenience of carrying and storing the book, and the advantage of having many books on your reading device and at your fingertips. With E-textbooks, you can perform a word or phrase search easily with a screen touch, and some readers have the capability of highlighting and ability to take notes. Another advantage of E-textbooks is that they update more easily than traditional paper textbooks which have to be reprinted, making E-textbooks more environmentally friendly. Technology keeps improving E-Readers and E-textbooks, and now there are linking capabilities to educational websites, and interactive websites for student participation, collaboration, and engagement.

Students may find E-textbooks easier to use than faculty, since the majority of students have been brought up in the technology age and use some form of technology every day. Most students have a cell phone and most of their cell phones have internet. Students are also used to being linked to the internet through social sites such as Facebook, Twitter, and other social sites.

An idea of having students pay a small course materials fee which would cover whatever E-textbook the professor chooses would be an advantage for publishers, universities, and students. This would assure the publishers E-textbook was not copied illegally, and that the university was not bogged down with unused, not purchased printed textbooks. This would then enable the university to buy the E-textbooks in bulk, and that the student for a small fee would have a required E-textbook for their courses. For the student wanting a hard copy of the textbook, a solution would be to print out the section needed. Of course buying an old fashioned textbook is always an option, but considering price, convenience, and a technology future, E-textbooks appear to have the advantage (Young, 2010).

Faculty could ultimately benefit from E-textbooks because there may be a way for them to customize the E-textbook to their course, to include lecture notes, practice tests, and links to relevant websites to enhance the course material (Alkadi & Johnson, 2009). Most faculty are technology advantaged in the area of online courses, and the addition of E-textbooks could prove to be an easy switch from the traditional printed textbook, or at least some incorporation of E-textbooks to ease into the change.

One very important reason to incorporate E-textbooks is the inevitable change to a more technologically driven educational environment. Keeping an open mind and learning about technology will keep higher education institutions, faculty, and students' current on new technologies and will assure they remain cutting edge and not left behind in this technology driven age.

Disadvantages

E-textbooks only work if you have a device to use them. The reader device has limited battery life and has to be charged. The reader device may have technical problems and the user would not have access to the E-textbook. Some people complain of eye strain after reading for long periods of time. Probably the biggest disadvantage is the reluctance by faculty and some students to make the switch from printed books to E-textbooks. Students in some for-profit universities have been using E-textbooks for a long time. Most students in traditional universities have not been required to use E-textbooks, and have not had exposure and this may affect their willingness to accept E-textbooks. Although faculty at some for-profit colleges are used to E-

textbooks, faculty at traditional colleges, particularly older faculty may not be as onboard with E-textbooks due to the technology requirements thought to be connected to E-textbooks (Nicholas & Lewis, 2010).

Conclusions/Recommendations

The more comfortable higher education administration and faculty become with technology and its benefits and advantages, the sooner E-textbooks will become predominant and even exclusive for use in higher education. Keep in mind that new college students will be used to technology and E-textbooks and with more online courses offerings and degrees, E-textbooks may be expected. The transition is likely to take a long time but can be made easier with training for faculty and administrators and reinforcement of E-textbooks benefits and advantages. As E-textbooks become more widely used in Higher Education, devices used for reading E-textbooks, such as Kindle, Nook, and others, are likely to become more plentiful and more affordable. As with all other technology, E-textbooks will constantly be updated and become more efficient and indispensable. For now, E-textbooks are offered at the student's choice. Students have a variety of ways to access the E-textbooks using their personal electronic reader, personal computer, or the college library computers, if they are interested in using or trying out E-textbooks.

Students and faculty need to ease into E-textbook use because they are not yet sold and comfortable with the idea of the sole use of E-textbooks. Although there is a federal backed technology push going on now for students to become more technology savvy, there still needs to be room for a choice. A gentle force and lots of support may be the incentive that makes students and faculty open up to E-textbooks. With an abundance of online courses, some requiring or not requiring a textbook, introducing the E-textbook in the online course environment may be an avenue for a gentle push toward implementation of E-textbooks, taking advantage of the fact that they are already in the technology environment. Initial guidance and training to use E-textbooks and having on site troubleshooting support may persuade students and faculty to use E-textbooks. A plus for faculty when won over to the advantages of E-textbooks would be to create their own instruction aids into the E-textbooks, or rearrange the chapters, or leave out chapters that did not apply.

Little things go a long way in aiding the transition to E-textbooks, since a small downside to the E-textbook is that the electronic reader has a battery life of roughly 6 hours, although there have been recent breakthroughs in creating better batteries with longer life. It may help encourage E-textbook usage if there are charging stations in libraries, student union buildings, and in classrooms.

The switch to E-textbooks may be inevitable but may also take time and struggle, and may be met with resistance, as all changes do. There is housekeeping to be done in clarifying issues such as who owns the E-textbooks, access issues, updating the text, costs, and finding an affordable medium for the electronic reading devices. Students and faculty seem loyal to paper textbooks now, but hopefully cost effectiveness, convenience and the many advantages of using E-textbooks will sway their preference. The advantages do seem to outweigh the disadvantages, and with globalization and technology paving the way for the future and with state, federal, and

economic backing higher education's implementation of E-textbooks may be in place sooner than later.

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