Salve Regina University
Digital Commons @ Salve Regina

Faculty and Staff - Articles & Papers | Faculty and Staff

10-1-2010

Learning Enhancement or Headache: Faculty and E-textbooks

Arlene J. Nicholas
Salve Regina University, nicholaa@salve.edu

John K. Lewis
Salve Regina University, lewisj@salve.edu

Follow this and additional works at: http://digitalcommons.salve.edu/fac_staff_pub

Part of the Business Commons

Nicholas, Arlene J. and Lewis, John K., "Learning Enhancement or Headache: Faculty and E-textbooks" (2010). *Faculty and Staff - Articles & Papers.* Paper 29.
http://digitalcommons.salve.edu/fac_staff_pub/29

This Article is brought to you for free and open access by the Faculty and Staff at Digital Commons @ Salve Regina. It has been accepted for inclusion in Faculty and Staff - Articles & Papers by an authorized administrator of Digital Commons @ Salve Regina. For more information, please contact digitalcommons@salve.edu.

Learning Enhancement or Headache: Faculty and E-textbooks

Arlene J. Nicholas
Salve Regina University
100 Ochre Point Ave.
Newport, RI 02840 USA
(401)341-3280
nicholaa@salve.edu

John K. Lewis
Salve Regina University
100 Ochre Point Ave.
Newport, RI 02840 USA
(401)341-2687
lewisj@salve.edu

ABSTRACT
The availability of e-textbooks is increasing along with the variety of electronic readers. According to the "2010 Horizon Report," adoption of this technology will be widespread in academia in two to three years as it will "… reduce costs, save students from carrying pounds of textbooks and contribute to the environmental efforts…" (Johnson, Levine, Smith, & Stone, 2010, p.6). Will e-textbooks become favored by faculty in higher education? This paper will examine the benefits and limitations of e-textbooks and the attitudes of faculty and students towards using this radical alternative to the centuries-old standard of education. An exploratory case study of faculty attitudes and usages of e-textbooks at a small liberal arts university was performed.

KEYWORDS
E-textbooks, faculty, usage

Costly Learning

The growing cost of textbooks is an onerous burden for many students in the current economy (Rumsey, 2005). Students regularly voice their dismay at the high cost of required books and, at times, are unable to purchase them. Sharing textbooks and purchasing used textbooks is a common practice. College bookstores are trying to cope with their declining sales by stocking used versions and even offering rentals, especially for new texts. Book companies, faced with added costs for online resources, try to keep both faculty and students impressed with new features such as study guide web sites and clicker options for instant quizzing/polling of classes. Publishers may offer sales of chapters, loose-leaf bound editions, reduced priced e-textbooks and rentals from their own site.

Some responses to this course material challenge are emerging technologies that are predicted to become mainstream in the near future including mobile computing through cellular networks, open content with free online course material and electronic books (Johnson, et al, 2010).

Student Reactions

Students were early adapters of reduced cost books through online sites such as half.com, halfpricebooks.com for purchases and chegg.com which also offers rentals. Student organizations have been formed to protest the high costs and encourage other students and faculty to reduce this expense such as Student PIRGs (Public Interest Research Group http://www.studentpirgs.org/textbooks/?id2=14223). Their goal is for open access to free licensed online electronic textbooks - e-textbooks - with affordable printed versions (Allen, 2008).

E-Books

Electronic monographs have been exchanged between scholars since the early years of the Internet, before windows and a mouse became the norm. They evolved through UNIX, gopher, FTP (file transfer), and, finally, hypertext transfer (HTTP) protocols (Snowhill, 2001). Despite some negative reviews, e-books have several important advantages over their print counterparts. Most important is the off-campus, 24 X 7 availability of e-books. This is the single most distinct advantage e-books have over print titles.

At present, the future of the e-book is at a crossroads. Although e-book sales have steadily risen over the last five years, they have not met the expectations of publishers. According to the Association of American Publishers (AAP), e-books sales were estimated to be 123 million in 2004 and 179 million in 2005 ("E-books by the number," 2006). Sales were far below what had been forecasted in the late 1990's. Digitization projects by Google and other companies could have a big impact on e-book use. The Google Print Library Project is working with major libraries to digitize a large body of literature in the public domain.

E-book Usage Studies

There is surprisingly little literature in the area of e-books and their usage. There were a few studies at the turn of the century but very little follow up in more recent years. Almost every study has looked at the usage of pre-packaged Net Library collections. Studies of e-book collections from other vendors or single title purchases are almost nonexistent. Lonsdale and Armstrong (2001) looked at e-book publication in the United Kingdom. Of the 80 UK publishers identified, only 29% were publishing e-books in 1998; by 2000, this number had risen to 35%. Another interesting feature of this study was its look at undergraduate research habits. When performing research undergraduates utilized search engines 74% of the time, the library Online Public Access Catalog (OPAC) 30%, email 28%, online databases 2%, and e-journals 1% (Ibid.). The numbers for postgraduate students, while higher, were also low.

In a small study of 27 library school graduate students, Chu (2003) looked at e-book usage and preferences. One third of respondents had used e-books in the past. The two main reasons for lack of e-book use were "hard to read and browse" and "need special equipment" respondents also complained of cost, lack of title availability, and safety concerns (Ibid., p. 342). The biggest reasons for using e-books included "around the clock availability" and searchability (Ibid., p. 343). Users also liked space considerations, timely access to new titles, conservation features, and bookmarking capabilities. Chu concluded that the future for e-books was not encouraging although he did acknowledge the limitations of his non-random survey.

E-textbooks

One of the few early adopters of e-textbooks has been online for-profit universities such as the University of Phoenix (Nelson, 2008). Some textbooks are available in online, or electronic, versions from publishers at a reduced cost from the hardcopy version. For example, Managing Human Resources by Bohlander and Snell is offered for $187.99 as a hardcopy and $104.49 as an e-text book (Management, 2010). Although the switch over from print textbooks to e-textbooks has long been predicted (Future of…, 2008), it has yet to occur. While many professors are adopting supplementary materials such as textbook websites that provide online quizzes, slides and other networked materials, few have made the jump to an online textbook. The acceptance of new technologies by Net Generation students was supposed to fuel this revolution. They learn through media, such as video clips and other technologies (Nicholas, 2008). They grew up with the Internet so online textbooks should be preferred. So far, that has yet to be the case (Nicholas & Lewis, 2009).

Publishers still foresee the future market of these e-textbooks. There is competition among them for the format of publications in hopes of acquiring business from college professors. Macmillan Publishers' system is *DyamicBooks*, McGraw-Hill has *Connect* and John Wiley & Sons uses *Wiley Plus*. Macmillan, like the upstart publisher Flat World Knowledge, offers professors one dollar for each sale of a customized edition (Young, 2010a). The rivalry for sales of e-textbooks is an indication of the anticipated increase in usage. This coincides with the promotion of Amazon's Kindle, the Palm Reader, Adobe E-Book reader and Microsoft Reader for downloading various e-books.

E-textbook advantages

One advantage of e-textbooks is portability. A laptop or e-book reader can easily hold all the textbooks students need for their classes. The need to tote around five or six large textbooks in the omnipresent backpack would be eliminated. E-textbooks also have the advantage of complete keyword searchability. No matter how comprehensive the index of a print textbook, it cannot compete with the keyword searching provided by a digital textbook. E-textbooks can also be helpful for those with disabilities. "Digital text can be enlarged, read via specialized devices, or easily converted into audio format" (Dillon, 2001, p.123).

Another of the advantages of e-textbooks was supposed to be lower prices. A report by the United States Government Accounting Office found that textbook prices have increased at over twice the rate of inflation in the last two decades (Rumsey, 2005). The average student spends between $700 and $1,000 per year on textbooks (ACSFA, 2007). However, the promised savings have failed to materialize although one study found the price of e-textbooks to be 20% to 50% lower than print textbooks (Buczynski, 2006). Public interest organizations have found the promised e-textbook savings to be lacking. New e-textbooks surveyed by the Student PIRG cost on average exactly the same as a new hard copy and twice the cost of a used hard copy (Allen, 2008).

E-textbook limitations

One of the reasons for the slow development of the e-textbooks is fear of technical problems by professors. Professors fear multiple students coming to them with technical problems that would affect their ability to study or do homework (Carlock & Perry, 2008). "Another 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" (Ibid., p. 250). An additional problem is that e-textbooks require the student own either a computer or e-book reader (Shepperd, Grace & Koch, 2008). "Unless students have laptops, electronic texts also can be inconvenient for students accustomed to bringing their textbook to class or reading from it during breaks between classes" (Ibid., p. 2). Other problems include eyestrain from computer monitors, lack of portability due to battery limitations, and general reluctance to read or study digital text. It can also be difficult and in some cases expensive to print from e-textbooks. E-textbooks can also be difficult to access. Use of e-textbooks is heavily regulated and access usually expires after a set time period (Allen, 2008).

Government initiatives and free courseware

Senator Richard Durbin of Illinois introduced the Open College Textbook Act of 2009 to the Senate in September of 2009 (Bill S1714 http://www.govtrack.us/congress/billtext.xpd?bill=s111-1714) that would make e-textbooks free to the general public and provide grants to faculty who publish open access textbooks. Representative David Wu of Oregon introduced the Open College Textbook Act of 2010 to the House of Representatives in May of 2010 (Bill HR4575 http://www.govtrack.us/congress/bill.xpd?bill=h111-4575) with the same provisions. Both bills are in committee reviews.

The University of Wisconsin Oshkosh professors are writing and editing 'e-texts' that will be offered at a reduced cost for students. This two-year program is funded by a grant from

the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) which was written and proposed by faculty and students. The project aims to enhance student learning, reduce the cost of texts and support the university's sustainable practices (Williams, 2009).

California State University is also campaigning for affordable solutions through pilot testing of e-textbooks (Hanley, 2010). Other organizations and commercial productions are enticing faculty and students to use their products such as Textbookfree.org (www.textbooksfree.org) and FlatWorldKnowledge (www.flatworldknowldege.com). Professors are offered authoring options and students would pay for study aids and printed versions.

Faculty Usage of E-textbooks

Enticing faculty to use e-textbooks is a challenge. A study that included e-textbooks at Southwest Baptist University found that faculty overwhelmingly (92%) preferred print textbooks (Walton, 2007). This new media may have to prove its reliability and will have a learning curve. Another consideration is whether the rapidly aging professoriate is a factor in the adoption of e-textbooks. According to the National Education Association, in 2004, higher education, full-time instructional faculty and staff included 74.6 % who were 45 and over. Of this number, 42.1% were 55 and over (Conley, 2007). Older faculty members may be uncomfortable with the idea of utilizing e-textbooks due to their technological demands.

E-textbook studies

There have been unexpectedly few studies that measured either student or instructor satisfaction with e-textbooks. One study, conducted over three semesters in a Biology course at Fordham College, measured student satisfaction with a required e-textbook (Simon, 2001). Students were overwhelmingly positive in their satisfaction as all of them would recommend using an e-textbook to their friends, while 95% wished other faculty would offer an e-textbook option with the e-textbook (Ibid.). Another study of core medical textbooks in a medical library found much higher usage of e-textbooks (Ugaz, 2008). Other studies have not been as positive. A Southwest Baptist University study found that 67% of students preferred print textbooks, while only 18% preferred e-textbooks (Walton, 2007). Another study, which actually utilized a web site as the primary text, found that 75% of the students would have preferred a print textbook (Vernon, 2006). In a surprising aside, two students preferred the electronic version because they could read it at work and not get caught (Ibid.).

Only one study of electronic textbooks has actually measured student performance with print textbooks and e-textbooks. In an introductory psychology course, students were offered the choice of a print textbook or one on a CD-ROM. There was no measurable difference in course grade between those who used the print textbook versus those who used the e-textbook (Shepperd et al., 2008). However, while most students found the e-textbook easy to use, they were generally neutral in their liking for the e-textbook, and unfavorable in rating its convenience or their willingness to use one in the future (Ibid.).

A small study of a class of fourteen undergraduate business law students found that all selected the e-textbook option because it was less expensive. Few of the students had previous experience with 85% of the class reporting that they had never previously used any electronic book. This is an even higher percentage than a previous study at the same university when 48.5% of 74 students reported no use of e-books (Nicholas & Lewis, 2007). Seventy-eight percent of the students reported it was easy or very easy to use and 92% found the e-textbook helpful or very helpful in preparing for the quizzes. The students were about evenly split on their overall experience 50% positive or very positive and 50% neutral or negative toward the e-textbook (Nicholas, & Lewis, 2009).

Survey of faculty results

Professors from a small liberal arts university were surveyed through an online instrument delivered through university e-mail. Of the 127 faculty invited, a response rate of 23.6%, 30 participants, was attained. The majority of respondents were female at 54.8%, while male respondents were at 45.2%. Most of the respondents had a great deal of teaching experience, 45.2% had over twenty-five years of experience. As a result, most of the respondents ranged in age from 40 through 69 years old - this group making up 83.9% of the study group. Most of the faculty respondents did make use of textbooks when teaching classes, 83.3% utilized a textbook for their courses. Faculty teaching in a variety of majors participated. The largest area of faculty response was in business and economics which made up 22.6% of the response group.

Findings included the importance of factors for textbook selection (see Table 1). When rating textbook selection factors, the professors listed as Important or Very important: 1. definition of concepts - 90%, 2. format of material - 83.3%, 3. latest publication date - 76.7% , 4. theory based - 76.6%, 5. case examples - 70% 6. visuals and pictures – 60%, and 7. cost of textbook - 56.7%. When Important and Very important were collapsed with Somewhat important, the order changed to: 1. latest publication date - 96.7%, 2. theory based - 96.6%, 3. definition of concepts - 93.3%, 4. format of material- 90%, 5. case examples - 86.7%, 6. cost of textbook - 83.4%. 7. visuals and pictures - 80%. Least or not important were weight of textbook, 73.3%, size 53.3%, power point slides - 53.3%, online study guides - 50% and instructor test bank - 43.4%.

Table 1. Textbook selection factors

	Not important	Least important	Somewhat important	Important	Very important
theory based	3.3% (1)	0.0% (0)	20.0% (6)	33.3% (10)	**43.3% (13)**
case examples	13.3% (4)	0.0% (0)	16.7% (5)	33.3% (10)	**36.7% (11)**
definition of concepts	3.3% (1)	3.3% (1)	3.3% (1)	**46.7% (14)**	43.3% (13)
format of material	3.3% (1)	6.7% (2)	6.7% (2)	**60.0% (18)**	23.3% (7)
visuals/pictures	6.7% (2)	13.3% (4)	20.0% (6)	**36.7% (11)**	23.3% (7)
online self tests included	**40.0% (12)**	13.3% (4)	23.3% (7)	20.0% (6)	3.3% (1)
online study guides included	**36.7% (11)**	13.3% (4)	26.7% (8)	20.0% (6)	3.3% (1)
PowerPoint slides included	**40.0% (12)**	13.3% (4)	13.3% (4)	10.0% (3)	23.3% (7)
size of textbook	**40.0% (12)**	23.3% (7)	26.7% (8)	6.7% (2)	3.3% (1)
weight of textbook	**50.0% (15)**	23.3% (7)	26.7% (8)	0.0% (0)	0.0% (0)
cost of textbook	6.7% (2)	9.7% (3)	26.7% (8)	**36.7% (11)**	20.0% (6)
latest publication date of textbook	3.3% (1)	0.0% (0)	20.0% (6)	**40.0% (12)**	36.7% (11)
instructor test bank included	**36.7% (11)**	6.7% (2)	13.3% (4)	20.0% (6)	23.3% (7)

Only one-third or less than a third (30%) responded as never affected by online teacher resources or student resources respectively, when selecting a text. Forty percent never advised students of less expensive options but the other 60% did advise sometimes, most of the time or always. Over 86% had never used an e-book for a course and 60% had never assigned any library e-book database readings (see Table 2).

Table 2. Online textbook options

	Never	Sometimes	Most of the time	Always
Do online student resources affect your textbook selection?	30.0% (9)	**36.7% (11)**	26.7% (8)	6.7% (2)
Do online teacher resources affect your textbook selection?	**33.3% (10)**	26.7% (8)	26.7% (8)	13.3% (4)
Do you advise students of textbook options such as lower cost at half.com or rental at Chegg.com?	**40.0% (12)**	26.7% (8)	16.7% (5)	16.7% (5)
Have you used an e-book for a course?	**86.7% (26)**	10.0% (3)	0.0% (0)	3.3% (1)
Do you assign any readings using Ebrary or other library E-book databases?	**60.0% (18)**	33.3% (10)	6.7% (2)	3.3% (1)

Although the majority of the participants had been contacted by a publisher about e-textbooks and were familiar with them, the majority also claimed to have never used and had no plans to use an e-textbook but expressed no concern over technology issues for student and faculty. Using an open courseware textbook would be considered by 73.3% (see Table 3).

Table 3. E-textbook usage

	yes	no
Have you ever used an e-textbook?	13.3% (4)	**86.7% (26)**
Have you been contacted by publisher about e-textbooks?	**70.0% (21)**	30.0% (9)
Are you familiar with e-textbooks?	**73.3% (22)**	26.7% (8)
Do you plan to use an e-textbook during the next academic year?	13.3% (4)	**86.7% (26)**
Are you concerned with technology issues when students use and e-textbook?	43.3% (13)	**60.0% (18)**
Are you concerned with technology issues on your part if you use an e-textbook?	30.0% (9)	**70.0% (21)**
Would you consider using an open courseware e-textbook that provides free student access?	**73.3% (22)**	26.7% (8)
Would you consider using an open courseware e-textbook that was more affordable than those offered by most publishers?	**73.3% (22)**	26.7% (8)
Do you use textbooks?	**83.3% (25)**	16.7% (5)

Only 13.3% (4) of the faculty had heard of the Open College Textbook Act of 2009.

Discussion

This small case study showed limited usage, 13.3 %, of e-textbooks and very little interest in implementing the technology in the near future, 83.3% of the respondents have no plans to use an e-textbook in the next year. It is quite apparent that, at least with this small sample, e-textbooks are barely on their radar. It is difficult to pinpoint exactly why the respondents are so disinterested. Technology does not seem to be a concern by either the faculty or in student usage of an e-textbook.

Perhaps the answer can be surmised through the differing opinions among faculty and students as to the most important factors in textbook selection. Probably the most interesting result of this study is the completely contrary viewpoints faculty and students have toward textbooks. Cost of textbook is only one small factor that faculty considered when choosing a textbook. However, previous research has determined that this is the most overriding factor for students when rating a textbook (Nicholas & Lewis, 2009). As previous studies of the textbook market have pointed out, the area is somewhat unique in that the person making the selection has little incentive to keep costs down. In fact, those faculty that write their own textbooks or collect some type of royalty from a publisher for using a particular textbook are actually motivated to keep costs high. "The economic underpinnings of the college textbook market have long been flawed. In a typical market, the buyer chooses which product to buy based on considerations of cost and quality. But in the textbook market, the person who chooses the product, the faculty member, is not motivated by the incentive of cost" (Troop, 2010).

It also appears that the extra bells and whistles which publishers have frequently added to textbooks over the past decade are not that important to professors. Embellishments such as online self-testing, online study guides and PowerPoint slides have driven up the cost of textbooks significantly, but over 50% of the respondents found these to be of no importance or of least importance in textbook selection factors.

Although 73.3% of the respondents claimed they would be willing to consider using an open courseware textbook, this number seems to be high when over 60% of the respondents could not identify even one open courseware publisher! It would seem most faculty members have done little research into the world of textbook options. As publishers have frequently pointed out when discussing the lack of textbook customization by professors, most faculty don't want to invest the time necessary in textbook selection. Although customization has been available for quite a while, the vast majority of professors don't customize. It is hoped that with the increased use of e-textbooks more professors will want to take advantage of customization options (Young, 2010b).

Limitations and future research

The number of faculty surveyed was small and limited to an exclusive liberal arts centric university in the Northeast United States. Future research at larger universities, state schools, etc. may yield differing experiences with textbook selection factors and e-textbook adoption.

Recently, Amazon reported that e-books sold three times more than the previous year (Paul, 2010). Does this predict a trend that will increase usage of e-textbooks?

Two variables which are rife for further research are the effects of gender and age. Is there any difference among males and females with either faculty or students in their preference for a print or e-textbook? More importantly, considering the rapidly aging professoriate, is there reluctance among older professors to adopt the new technology of e-textbooks? The stereotypical view that older professors are less likely to embrace e-textbooks may be faulty. Perhaps some other factor, such as personality type, is the key variable rather than age. The sample size in the present study was too small to make such a determination.

It would also be of interest to study the experiences of faculty early adopters who have utilized e-textbooks. Do they see an improvement in student learning, engagement, study habits, or grades? The answers are likely to come from further studies as e-texts become more widespread with both students and professors.

Future of e-textbooks

This extension of usage is happening. A Flat World Knowledge digital site license was purchased this year by Virginia State University for students in eight core business courses. The cost of $20 per student will include Web, PDF, audio, and e-reader versions. The switch to e-textbooks is to increase retention rates as, according to the dean, the majority of students cannot afford textbooks, which hinders their learning. The cost will eventually be paid by students who are still expected to save $900 or more a year on textbooks (Schaffhauser, 2010).

Daytona State College in Florida is also planning to test e-textbooks. College officials saw students drop out because the continuing increase in textbooks was unaffordable. The average prices rose 186 % between 1986 and 2005 and are still rising. Executive vice president Rand S. Spiwak plans "to bring the cost of textbooks down by 75 to 80%" (Young, 2010b).

Indiana University at Bloomington has tested Courseload's online system which includes content from McGraw-Hill, Pearson and John Wiley publishers for the past year and a half. Students were not charged in those semesters, but this spring, a pilot program will have students pay about $35 per course for the e-textbooks (Ibid.).

The future of e-textbooks will certainly grow and possibly be encouraged through federal legislation. It will be interesting to see if faculty will, eventually, embrace this new educational tool.

References

ACSFA College Textbook Cost Study. (2006). http://www.maketextbooksaffordable.org/PIRG%20response%20to%20ACSFA%20proposed%20college%20textbooks%20student%20plan%209.13.06.doc. Retrieved March, 2009.

Allen, N. (2008). Course Correction: How digital textbooks are off track and how to set them straight. 1-21. http://cram.whitematter.ca/images/uploads/PIRGS_Course_Correction.pdf

Buczynski, J. A. (2006). Faculty begin to replace textbooks with freely accessible online resources. *Internet Reference Services Quarterly* 11(4), 169-179.

Carlock, D.M. & Perry, A.M. (2008). Exploring faculty experiences with e-books: a focus group. *Library Hi Tech, 26*(2), 244-254.

Chu, H. (2003). Electronic books: viewpoints from users and potential users. *Library Hi Tech*, *21*(3), 340-346.

Conley, V.M. (2007) Retirement and benefits: Expectations and realities. *The NEA 2007 Almanac of Higher Education. http://www.nea.org/assets/img/PubAlmanac/ALM_07_09.pdf*

Dillon, D. (2001). E-Books: The University of Texas Experience, Part 1. *Library Hi Tech 19*(2), 113-124.

"E-books by the numbers." (October 2, 2006). *Publishers Weekly*, Retrieved October, 2007, from Library, Information Science & Technology Abstracts database

The Future of Textbooks: How Technology is Changing Classroom Texts. (2008). *Wired Educator,* Retrieved June, 2010. http://wirededucator.wordpress.com/2008/07/11/the-future-of-text-books-how-technology-may-change-classroom-textsa/)

Hanley, G. L., (2/10/2010). The CSU'S Affordable Learning Solutions Campaign *Campus Technology.*

Johnson, L., Levine, A. Smith, R. & Stone, S. (2010). *The 2010 Horizon Report.* Austin, Texas: The New Media Consortium.

Lonsdale, R. & Armstrong, C. (2001). Electronic books: challenges for academic libraries. *Library Hi Tech, 19*(4), 332-339.

Management, South-Western Cengage Learning, Managing Human Resources 15th ed. http://www.cengage.com/cengage/student.do?disciplinenumber=416&product_isbn=9780324593310&courseid=MN08&codeid=2A1A&instructorFlag=true Retrieved February, 2010.

Nelson, M.R. (2008). E-books in higher education: Nearing the end of the era of hype? *Educause Review, 43*(2), 40-56.

Nicholas, A. J. (2008). Preferred learning methods of the millennial generation. *The International Journal of Learning*, *15*(6), 27-34.

Nicholas, A.J. & Lewis, J.K., (2007). Millennial attitudes toward books and e-books. *The International Journal of the Book*, *5*(2), 81-92.

Nicholas, A.J. & Lewis, J.K., (2009). Net-generation and e-textbooks. *Salve Regina University collection*. http://escholar.salve.edu/cgi/viewcontent.cgi?article=1016&context=fac_staff_pub

Paul, I. (2010). Amazon's e-book sales up 80%: Hardcovers not dead yet. PCWorld.com. Retrieved July 20. http://www.pcworld.com/article/201470/amazons_ebook_sales_up_80_hardcovers_not_dead_yet.html?tk=hp_blg

Rumsey, K. (2005). "GAO report finds textbook prices skyrocketing." PIRGIM. http://www.pirgim.org/news-releases/higher-education/higher-education/gao-report-finds-textbook-prices-skyrocketing. Retrieved April, 2009.

Schaffhauser, D. (09/10/10). Virginia State moves to digital textbooks in business program. *Campus Technology.* http://campustechnology.com/Articles/2010/09/10/Virginia-State-Moves-to-Digital-Textbooks-in-Business-Program.aspx?Page=1 Retrieved September, 2010.

Shepperd, J.A., Grace, J.L. & Koch, E.J. (2008). Evaluating the electronic textbook: Is it time to dispense with the paper text? *Teaching of Psychology, 35*(1), 2-5.

Simon, E J. (2001). Electronic textbooks: a pilot study of student e-reading habits. http://www.futureprint.kent.edu/articles/simon/01.htm.

Snowhill, L. (2001). E-books and their future in academic libraries: An overview. *D-Lib Magazine*. 7(7/8). http://www.dlib.org/dlib/july01/snowhill/07snowhill.html.

Troop, D. (06/06/10)/ Will a new federal rule do the trick? *The Chronicle of Higher Education.* http://chronicle.com/article/New-Rule-to-Curb-Textbook/65788/ Retrieved September, 2010.

Ugaz, A.G., & Resnick, T. (2008). Assessing print and electronic use of reference/core medical textbooks. *Journal of the Medical Library Association, 96*(2), 145-147.

Vernon, R.F. (2006). Paper of pixels? An inquiry into how students adapt to online textbooks. *Journal of Social Work Education, 42*(2), 417-427.

Walton, E. W. (2007). From the ACRL 13th National Conference: E-book use versus users' perspective. *College & Undergraduate Libraries, 14*(4), 19-35.

Williams, D. (10/19/2009). Revolutionary e-textbook program will enhance quality, increase affordability of higher education. *Campus News.* http://www.uwosh.edu/news/?p=2268 Retrieved February, 2010.

Young, J. R. (2/22/2010a). Format war heats up among publishers of electronic textbooks. *Chronicle of Higher Education*. http://chronicle.com/article/Format-War-Heats-Up-Among/64323/ Retrieved February, 2010.

Young, J. R. (10/24/2010b). To save students money, colleges may force a switch to e-textbooks. *The Chronicle of Higher Education.* http://chronicle.com/article/article-content/125044/ Retrieved September, 2010.