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EDU 6700

June, 2013

Annotated Bibliography

Acker, S. R. (2011). Chapter 6: Digital textbooks. *Library Technology Reports, 47*(8), 41-51.

Convinced that the market shift from print textbooks to digital textbooks is nearing its tipping point, the author presents a compelling article for pressing ahead towards solid strategies for affordable, quality textbooks. Acker traces the journey of textbook development from the 1980's to the present, followed by a healthy spread of current practices. Acknowledging the unavoidable chaos of transition, Acker seems to applaud the variety of experimentation in hopes for an outcome of enduring practices. He believes that all the players, including publishers, educators, and learners, are ultimately interested in good educational tools; digital textbooks will take their rightful place if the process remains incremental instead of predetermined with a master plan. Acker's bent towards affordability without suffering pedagogy comes from his background as a librarian who manages repositories of content and as a longterm researcher in the field of technology in education.

Felvégi, E., & Matthew, K. I. (2012). eBooks and literacy in K–12 schools. *Computers in the Schools, 29*(1-2), 40-52. doi:10.1080/07380569.2012.651421

While they agree with both Acker and Lim's viewpoints that the world of digital text is yet evolving, Felvegi and Matthew imply that twenty years of accumulated research and rapidly increasing learner access to eBooks is plenty of fodder for reestablishing good reading pedagogy. These authors' main concern is that the reading skills required for paper literacy are not precisely like the skills needed for digital text, so students will suffer without direct instruction. Their summary of others' research points to the clear need for learners to navigate text differently, develop different strategies for comprehension, and build a new relationship with narrative and the reading process. In contrast to many articles which track the technology of digital textbooks, Felvegi and Matthew push for a reexamination of educators' pedagogy in reading, from early readers up through higher education across the curriculum. Just because a learner is from a particular generation, the authors note, does not necessarily imply that he is digital literate. This practical synopsis of research is particularly relevant to university departments of education and teachers in the field.

Kim, J. H., & Jung, H. (2010). South Korean digital textbook project. *Computers in the Schools, 27*(3), 247-265. doi:10.1080/07380569.2010.523887

The authors explain the robust, aggressive implementation of digital textbooks in certain South Korean schools from 2007-2011, illuminating a very credible attempt at field research. They found compelling advantages for using digital textbooks, including

technology's ability to flex per student, to welcome ownership and self-regulation into the learning process, and to link students to real-world problems. The authors also note the frustrations, including unrealistically comprehensive parameters that make digital textbooks difficult to maintain, unclear boundaries between the Web and the textbook, and a mismatch with current classroom structures for collaborative learning. The authors confusingly present the research as both insignificant in altering academic achievement and yet impressive in helping low-achievers do better in school. It is also important to note that Korea's digital changes contrast far more starkly with their traditional Korean educational system than a similar implementation would in the USA where the article is published. The authors' findings would most affect school systems considering widespread adoption of digital textbooks.

Kirk, C. P. (2010). New media books: Can innovation pay? *The International Journal of Technology, Knowledge & Society, 6*(3), 83-97.

An expert in technology marketing and an educator, Kirk authoritatively prods the publishing community to deliver media-rich textbooks to a digital-textbook-deficient, increasingly eager education market. Pitting print against digital, she contends that digital wins on every area tested in a study of 800 university students. Pitting electronic reproductions against media-rich textbook experiences, the media texts prevail in sales potential. Unlike Felvegi, Kirk places no emphasis on the customer's academic needs from the textbooks; rather, she names customer perception of quality as the key sales strategy for

reaching the market of the learning community. Her blunt acknowledgment of the publishers' seat at the discussion table surrounding digital textbooks adds refreshing balance from the business side. Her article is primarily aimed at publishers.

Lim, C., Song, H., & Lee, Y. (2012). Improving the usability of the user interface for a digital textbook platform for elementary-school students. *Educational Technology Research & Development, 60*(1), 159-173. doi:10.1007/s11423-011-9222-5

Based on the same Korean textbook project examined in Kim and Jung's article, Lim and his colleagues scrutinize the interface issues of a digital textbook. The authors systematically identified design elements that can be manipulated on an interface to directly improve learner satisfaction. Although their iterative research supplies a critical step for future progress toward increased student learning while using a digital textbook, it fails to measure actual learning outcomes. Extended research is necessary to prove the authors' premise: following excellent interface design principles should improve learning. The authors' findings target technology designers instead of publishers; they also imply that the beneficiary of digital textbook research should be the learners, concurring with Acker and Felvegi/Matthew.

Morris-Babb, M., & Henderson, S. (2012). An experiment in open-access textbook publishing: Changing the world one textbook at a time. *Journal of Scholarly Publishing, 43*(2), 148-155. doi:10.3138/jsp.43.2.148

One alternative to high-priced print textbooks is the open access digital textbook. The authors set the tone of their article with a call for solutions to high cost university textbooks, and delve quickly into describing the open access option as displayed in some basic Florida studies of students and faculty, plus the forces that bear upon the debate. Careful reading unveils two messages: a straightforward conclusion that open access textbooks, for all their marketing push as "free," in fact require capital, and secondly, a subtle implication that the financial burden for digital textbooks might circle back to students anyway. The authors do not explicitly question the redistribution of textbook costs in higher education, either in their evaluation of faculty motivations for authoring digital textbooks or their appraisals of student needs, which raises the question of actual target audience for this article.

Weisberg, M. (2011). Student attitudes and behaviors towards digital textbooks. *Publishing Research Quarterly, 27*(2), 188-196. doi:10.1007/s12109-011-9217-4

The author, a business professor, reports data from his ongoing research project investigating student attitudes towards digital textbooks, particularly in regards to cost and impact on learning. Initial results show a strong correlation between students' attitudes and their user behaviors when the cost of the textbook plus a device is not a factor -- a notable finding for the publishers of eTextbooks and consistent with Acker's article in calling for affordable options. In the Digital vs. Print debate, Weisberg's university student research shows not a change in academic achievement but rather increased satisfaction with the efficiency of digital textbooks. Not surprisingly, students appear less concerned about

pedagogy and more concerned with access to the content. While not a rigorously formal study, its findings reinforce what most researchers claim: students are both the market for and the impetus behind the digital textbook's existence.

Young, J. R. (2013). The object formerly known as the textbook. *Chronicle of Higher Education, 59*(21), A16-A17.

This article scrutinizes the recent large scale activities of publishing companies in the USA. They have poured hundreds of millions of dollars into acquiring software companies and building digital divisions with a clear expectation to expand their role in the electronic learning realms. The author questions how much control they might potentially wield over curriculum and the whole teaching process. Coupled with the onset of widespread online education, Young points out that students could eventually be teaching themselves while educators take a role more akin to auto-piloting with occasional intervention. Furthermore, universities themselves may be building another version of digital textbooks over time through MOOC processes and flipped classrooms. Old lines are blurring and new relationships forming in the education realms. Young's audience includes researchers and educators interested in staying abreast of the shift.