A Survey Of Professor Acceptance And Use Of E-Textbooks In Higher Education

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ABSTRACT

As electronic books (e-books) have continued to gain in popularity, more and more books are becoming available in electronic format. Textbooks are no exception. More and more publishers are making textbooks available in electronic format (e-textbooks). There have been many devices specifically designed to use e-books and e-textbooks with many more devices which utilize e-book apps to further increase the availability and ease of moving to e-books. Many professors are embracing the new technology, but others are somewhat (very, in many cases) resistant. This study discusses a recent study of professor acceptance and intention to use e-textbooks in the classroom and presents preliminary results and conclusions suggested by the survey.

Keywords: e-Books; e-Textbooks; e-Readers; Higher Education; Technology Acceptance

INTRODUCTION

*A*s e-readers and e-books have become more and more accepted, a move has begun to replace paper textbooks with e-textbooks (Rickman, Von Holzen, Klute, & Tobin, 2009; Steinle, 2006). This has met with mixed results with some successful (Donnelly & Connolly, 2009; Nie, Armellini, Witthaus, & Barklamb, 2011) and some not so successful (Barber, 2011; Gregory, 2008) studies or implementations of textbooks in higher education. Libraries seem to have better luck (Hapel, 2012; Nicholas, 2012), but even here, success is not universal (Harrell, 2012; Lonsdale & Armstrong, 2001).

There have been several studies about students and their acceptance of e-books as replacements for paper textbooks (Gregory, 2008; Walton, 2007) with mixed results. Some studies have included professors (Huang & Huang, 2004; Wilson, Landoni, & Gibb, 2002), but there are few, if any, that investigate whether professors will accept e-textbooks and their associated e-readers into the classroom. This is where the current study comes into play, will Professors accept e-textbooks and related technology?

There are studies about professors accepting new technologies (Park, Lee, & Cheong, 2007; Walton, 2007), with some suggesting a reluctance to adopt new technologies (Zhang & Xu, 2011). Theories utilized in these studies include behavioral (Kriek & Stols, 2010; Teo & Tan, 2012) and motivational (Ahmad, Madarsha, Zainuddin, Ismail, & Nordin, 2010; Chen & Tseng, 2012) theories, but the large majority focus on the Technology Acceptance Model (Park et al., 2007; Walker & Johnson, 2008). The Task-Technology Fit (TTF) Model (Goodhue & Thompson, 1995) should also be considered to make sure e-textbooks are really appropriate to the higher education classroom. McCarthy suggests that current e-textbooks and e-reader technology may not be appropriate (McCarthy, 2011).

RESEARCH METHOD

While many professors seem to be reluctant to accept new technology (Zhang & Xu, 2011), they still appear to be willing to accept the technology if appropriate (Kriek & Stols, 2010; Walker & Johnson, 2008), especially in the higher education classroom. There appear to be two parts to this question. The first is whether professor will accept the technology in general, leading to the Technology Acceptance Model (TAM) and its extensions (Davis, 1989; Venkatesh & Davis, 2000). The second is whether it is appropriate or not, hence the inclusion of the TTF (Goodhue & Thompson, 1995). Utilizing these two models and adding common comparison criteria on e-readers (Wikipedia), an electronic survey was developed to gather professor experiences and opinions

on e-readers, e-books, and their classroom uses as e-textbooks. A group of Information Systems professors examined the survey to ensure face validity of the questionnaire. After IRB approval, the survey was deployed online and approximately 450 professors and adjunct faculty were invited to participate, resulting in 47 usable responses - a bit over 10% response rate.

DATA ANALYSIS

An initial analysis of the data collected provides some interesting descriptive statistics. 30 of the 47 (64%) of the faculty members had used e-books and of those 30, only 8 (27%) indicated they would prefer e-books over paper books. None of them would always choose e-books. 13 (43%) of the 30 preferred paper over e-books. The remaining indicated no preference. The numbers were a bit lower, but with similar results when it came to the e-textbooks over paper textbooks. Only 13 faculty indicated they had experience with e-textbooks, and of those, three (3) stated a preference for e-textbooks – about 23%. Six of the 13 (46%) preferred paper textbooks. Interestingly, of the 34 who had not used e-textbooks, 3 (10%) suggested they would rather use e-textbooks.

CONCLUSION

As we press forward with implementing e-textbooks in higher education, we need to take time to see whether we are doing the right thing. Just because we can do something does not mean we should – especially when only a quarter of faculty with experience using e-textbooks would actually prefer them and nearly half want paper textbooks. We need much more research in this area before we jump in over our heads. The research presented here is only the beginning. Much more data was collected and will be analyzed to help determine not just the acceptance of e-textbook technology, but also the fit of e-textbooks into higher education.

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AUTHOR INFORMATION

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