

FACULTY PERCEPTIONS OF THE COREXTPLUS® PARADIGM

by

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B.A., University of Wisconsin Oshkosh, 2010

A REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

Department of Special Education, Counseling, and Student Affairs  
College of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

2012

Approved by:

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## **Abstract**

This master's report is a study of current textbook trends within higher education. The report looks at multiple methods of textbook delivery for faculty members within the higher education community. The report further investigates a new textbook paradigm created by faculty members at the University of Wisconsin Oshkosh. The author of this report has spent several years researching textbook trends and has presented on this topic on several occasions. By analyzing some qualitative data collected at the University of Wisconsin Oshkosh, the author will provide a partial evaluation of the CoreTxtPlus® paradigm and offer suggestions to future faculty members looking for an innovative way to provide course content to their students.

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## **Acknowledgements**

I would like to extend my gratitude and appreciation to the members of the University of Wisconsin Oshkosh CoreTxtPlus® project team, especially M. Ryan Haley, the principal author of the IBES e-text. It has been an absolute pleasure working with Ryan and his team throughout the planning and development stages of the project. In the end I have been extremely impressed by the level of collegial collaboration and vertical integration of course content that they created. Their work is evident in the student learning outcome results. I am encouraged to continue working with Ryan and his team as we look to move this project forward and share this pedagogical approach to other faculty members. I would also be remiss if I did not thank my committee members Dr. Fred Newton and Professor Dan Wilcox for their time and contributions to this report. Lastly, I would like to thank my major professor Dr. Christy Craft who has been instrumental in keeping this report moving forward.

## **Introduction to Topic**

The opening section of this report provides an overview of the textbook cost crisis and provides context to the larger textbook industry by exploring alternative textbook formats. It begins by putting this topic into context within the higher education landscape. I then provide an overview of my experience and background in working with the CoreTxtPlus® project and research in alternative textbook formats. It concludes by describing the context to which this report fits within the alternative textbook format market. In conclusion I hope that readers, primarily faculty members, can understand the importance of exploring alternative textbook formats before choosing their specific course delivery system.

### **Importance to Higher Education**

Compounded with higher tuition costs, traditional textbooks are beginning to price many potential students out of the opportunity to buy their traditional textbooks and even deter them from college attendance. It is well known that textbooks are a significant cost of post-secondary education. In a report entitled *Enhanced Offerings Appear to Drive Recent Price Increases*, the Government Accountability Office found the average price for textbooks in the 2003-2004 academic year to be roughly \$900, or about 26% of tuition and fees for a typical four-year public university. At the University of Wisconsin Oshkosh, where the study is being conducted the average cost for textbooks was about \$800 per year during the 2004-2007 academic years (Haley, 2012). While this only makes up between 12% and 15% of tuition, lower than the national average, there is still a need to reduce this financial burden on students. The price of traditional textbooks has risen by more than twice the amount of inflation since 1986, largely due to the proliferation of “extras” such as CDs, Microsoft PowerPoint® slides, websites, etc. Publishers cite a demand for these extras, especially among adjunct instructors; however, the controversial packaging practices of these extras with the textbook generally result in higher prices for all purchasers, and often negatively influence buy-back options for students.

Moreover, the value of these extras is questionable in many instances. According to Richard Baraniuk, co-founder of *Connexions*, one of the first web collections of free educational material, “It’s sort of like a perfect storm for making real, substantive change, there are more and

more cheaper options, with more and more credibility, as fewer and fewer students say they can afford traditional textbooks” (Young, 2010, p. 1). It is certain that price seems to be driving the move toward customization. These professor customizations and skipping textbook publishers altogether, can greatly reduce materials’ costs for students. This perfect storm has begun to force the hands of the “Big Five” publishing companies: Prentice Hall, Cengage Learning, McGraw-Hill, John Wiley & Sons, and Macmillan. The “Big Five” currently control the majority of the textbook market and now offer customizable textbooks and rental programs as a result.

Due to rising textbook costs, students and parents are experiencing sticker shock when it comes to college textbooks. After assessing family resources, applying for financial aid, and often taking out additional subsidized and unsubsidized loans, students enroll in college, select courses, and go about the process of purchasing required textbooks and other course materials. Students and parents often pay the textbook bill out of pocket. What they see is often out of line with the price of books in other venues. Since the textbook bill comes last, it can strain or exceed remaining financial resources. In such cases, textbook expenses can become the final barrier to college.

According to the results of the *Textbook Cost Study: How Much Does CoreTxtPlus® Save Students* (Haley, 2012), students at the University of Wisconsin Oshkosh who used the CoreTxtPlus® e-text saw an estimated savings of \$140,532 relative to new textbook costs. “If all students using this textbook format were to purchase used editions of the traditional IBES textbook, their estimated total savings would be about 75% of that figure, or about \$105,399” (Haley, 2012). It is important to note that these savings were only measured between the two-year grant window. By using CoreTxtPlus® e-text, the total savings for students in the future could total in the millions. These figures prove that goal one of the CoreTxtPlus® grant proposal has met and exceeded predicted savings. It is also important to note that the grant allowed for the text to be distributed to students at no cost. It is reasonable to assume that a similar text used elsewhere would have some financial value, yet to be determined.

State lawmakers have identified textbook prices as a significant concern for students and have initiated legislative efforts to address the problem. Although only a few of the proposed bills have passed, the effort is a clear indication that reducing textbook expense is a high priority for policymakers. “Over the last three years, 34 states have proposed a total of more than 100 bills related to textbook expenses” (GAO, 2005, p. 5). Proposed bills have included eliminating

state sales tax on textbooks, providing guidelines for stakeholders, recommending rental programs, and improving the process of financial aid distribution as it affects textbook purchase, among other initiatives.

## **Background**

The CoreTxtPlus® paradigm was developed through collaborative research by students, faculty and administrators at the University of Wisconsin Oshkosh and is currently being implemented as a supplement for instructional material (traditional textbooks). This master's report is a collaborative project between Alex Abendschein, current graduate student at Kansas State University and Professor M. Ryan Haley at the University of Wisconsin Oshkosh.

As a senior at the University of Wisconsin Oshkosh, I, Alex, was the chairperson for a university wide committee whose mission was to research and implement a cost saving solution for current undergraduate students in an effort to reduce the increasing costs of textbooks. Over the course of two years, the committee researched several solutions for reducing costs of textbooks as well as interviewing and consulting several experts in the field of textbooks to find the best possible solution for curtailing textbook costs. This introduction is a summary of the work done by the committee and the final report made to the Chancellor at the University of Wisconsin Oshkosh as well as the University of Wisconsin System Board of Regents.

One of the first steps taken by the committee was to gather as much information about the current market for traditional textbooks and the dissemination of these texts. As a result, the committee interviewed two leading textbook publishing companies with the help of University Books and More at the University of Wisconsin Oshkosh. These two companies were Cengage and Pearson publishing companies.

After hiring two leading textbook rental consultants and receiving our textbook rental feasibility report in addition to interviewing textbook publishing companies, the committee developed a series of questions for faculty to consider when adopting a particular traditional textbook. This report goes on to offer a more specific approach to alternative textbook format adoptions available to faculty members and can serve as a useful tool for faculty when considering a specific alternative textbook format.



## **Contribution to the Textbook Industry and Future Research**

Having an understanding of the impact created by the textbook cost crisis gives a strong framework for the importance of this report. While I served as a founding member of the CoreTxtPlus® paradigm at the University of Wisconsin Oshkosh, it is important to note that I played no role in the development and creation of the specific CoreTxtPlus® e-text created. More importantly, the creation team at the University of Wisconsin Oshkosh has done no research into other alternative textbook formats. Based on my past research and experience within the textbook industry, I provide this report as a way to summarize that research and experience. More importantly, it is my goal to use aspects of the CoreTxtPlus® paradigm in relation to several faculty members experiences in using this format to offer recommendations for faculty members and departments within higher education to consider when developing courses and course content.

The intent of this report is not to solely recommend the CoreTxtPlus® paradigm, but rather, to explore several aspects identified within the paradigm, all of which can be emulated by other faculty members and departments throughout higher education. While, the CoreTxtPlus® paradigm is explored in greater detail, it is important to understand how textbooks are transforming and changing the classroom experience throughout higher education. By exploring aspects of the CoreTxtPlus® paradigm within the context of alternative textbook formats, faculty members and departments can be better informed as on how to best create course content. The following section provides an overview of the evolution of traditional textbooks and explores the rising trends in alternative textbook formats.

## **Literature Review**

The rapidly rising prices of college textbooks are a symptom of a complex underlying problem in the market for textbooks and learning materials. To accurately define the full dimensions of this problem, it is essential to start with an examination of the perspectives of the individual stakeholders. While often in conflict, these points of view include valid concerns and legitimate interests that must be addressed if comprehensive solutions are to be found. It is especially important to include in this assessment any actions that are already underway to solve

rising textbook costs and the efforts that can become models for other stakeholders to emulate. The following section will provide a look into several alternative textbook formats underway that are aimed at solving the increase in textbook prices.

## **Traditional Textbooks**

In order to understand the growing and rapidly changing textbook industry, one must first learn more about traditional textbooks. Understanding the context in which traditional textbooks fit will be important when comparing them to the new industry solutions and alternative textbook formats.

### ***Background***

Since the beginning of the higher education system, traditional textbooks have been the foundation for instructional delivery for faculty members. For many, traditional textbooks were thought to be prized possessions and used to establish personal and professional libraries; however, today's higher education setting is much different. In the 2005 Government Accountability Report, the contributors stated that as teaching and learning have changed with increasing reliance on technology, the college textbook has evolved from a standalone text to include a variety of ancillary products designed to enhance the educational experience for instructors and students. "By and large, students do not retain traditional textbooks as reference resources as was the case with previous generations" (McElroy, Leonard & Beckerman, 2007, p. 6). More importantly as McElroy and colleagues (2007) point out, "Over the past generation, the textbook has transitioned from a valued durable good to the equivalent of a consumable good like a magazine or newspaper" (p. 8).

Even with these innovations in technology, many faculty members still cling to their traditional textbooks as a part of their teaching pedagogy. While many faculty members still use these traditional textbooks there is a demand for current and accurate information within the traditional textbook itself. According to the Association of American Publishers (AAP), 80 percent of those polled [faculty] think it is important that the material in the traditional textbook be as current as possible. However, this may not be universal across disciplines. For example, mathematics, physics and hard science material has not changed significantly in recent years. Publishers admit, "While not every revision results in substantial content changes, revisions must also be made for other reasons, such as changing teaching methods" (Government

Accountability Report, 2005). Nevertheless, several subjects, such as accounting, business law and ethics courses or political science textbooks, require frequent revisions. These revisions do not fit with current revision cycles. The revision cycle for many traditional textbooks is 3 to 4 years, compared with 4 to 5 years that were standard 10 to 20 years ago (GAO, pp. 3, 2005).

### ***Challenges***

While the traditional textbook remains the most commonly used textbook format, several factors in addition to increases in technology are changing the future for traditional textbooks. Other factors that are affecting traditional textbook price include: production costs, availability of used books, and the demand for textbooks. These increases in cost have become additional financial burdens for many students within higher education. Due to these price increases, many students have begun to look for alternative formats for their textbooks. McElroy and colleagues (2007) found that, “used book purchases now account for one third of college bookstore textbook sales. Students [now] believe that textbooks are strictly a means to an end, necessary to pass the class before it is resold at the end of the semester” (p. 9). By all indications, it seems that the one size fits all traditional textbook is becoming more and more irrelevant. As technology advances, so does the challenge to improve the core delivery mechanisms originally reserved solely for traditional textbooks.

In order to fully understand the current costs of traditional textbooks, one must also understand the raw material costs associated with printing a traditional textbook. The textbook cost-working group at the University of Wisconsin Oshkosh interviewed two major publishing companies: Cengage and Pearson. In our investigation, we found that the publishers discussed the impacts of rising fuel prices and transportation costs for raw materials as a major contributor to increased production costs and overall cost of traditional textbooks. Additionally, raw material costs such as that for paper and ink for traditional textbooks are also increasing and subsequently raising the costs of printed materials. Publishers also explained that royalty rates paid to contributing authors of traditional textbooks, and the increases in costs associated with protecting intellectual property rights are driving the prices higher as well. Together these factors have greatly increased the printing costs and final sales costs to universities across the country. The unfortunate reality is that there is no conceivable end to these increased raw material costs;

subsequently, consumers can expect to see continued price increases in their traditional textbooks.

Students are not the only ones losing value in traditional textbooks. As McElroy and colleagues point out in their report, *A Generational Opportunity* (2007), “Many instructors [are finding] textbooks less important as a learning tool in a digital age where rich resources in a variety of alternative formats are available to help students learn in their own way.” Faculty members also continue to be challenged by selecting traditional textbooks to fit their course pedagogy. While this has been a standard challenge for faculty members for centuries, it has become a burdensome process. Today’s faculty members continue to be bombarded by textbook sales representatives, who often push the products created by their companies upon many faculty members and departments.

Unfortunately, sales representatives are no longer selling just traditional textbooks, but also other ancillary and supplemental materials that compliment the traditional textbook. While many of these products do enhance the educational experience for students and faculty alike, they come at an increased cost to the students. Many students report paying considerable amounts of money for these products with little return on their investments. These products often have little to no buy back value.

Even as traditional textbooks fade from mainstream educational practices, there will always be some intrinsic value to print materials. According to an article in *The Chronicle of Higher Education*, “80 percent of students using an online textbook will choose to order the printed version of their professor’s textbook” (Campbell, 2011, p. 2). While traditional textbooks remain the current trend within higher education, the increased use of emerging technologies will inevitably leave the traditional textbook behind. However, there will always be a market for traditional textbooks as a significant amount of people enjoy the original touch and feel of a book. Nevertheless, it is important to remember that today’s students learn differently than previous generations, and the traditional textbook may be the least desirable mode of content delivery for these intuitive, experiential learners.

## **Customizable Textbooks**

While traditional textbooks remain the current trend, a new and simpler solution is now available to many faculty members. This section explores the rising trend of customizable

textbooks, the benefits to customizing your traditional textbook, as well as some of the challenges currently facing publishers offering customizable textbooks as well as faculty members.

### ***Background***

As McElroy and colleagues stated in their report (2007), technology is playing a critical role in the development of course materials. As a result, the customizable textbook has increased in popularity, primarily by faculty members. For several years, publishing companies have been able to offer faculty members a textbook, which provide customizable course material for faculty by adding or deleting chapters from a single textbook or multiple textbooks. The chosen chapters can be compiled by the faculty member and can be adjusted to fit the course pedagogy. For example, if a faculty members feels he/she will only get through 20 out of the 25 chapters of his/her textbook, then he/she can select the chapters which will not be covered and have them removed from the final print of the textbook. This option provides a lower cost to students who are purchasing the final product with less material.

Bedford, Freeman, and Worth Publishing Group offers a new program called *Bedford Select*, a database of course materials that allows faculty to select content for a custom textbook that can sell for as little as \$20. In addition, other Bedford, Freeman, and Worth custom publishing programs enable faculty members to integrate their own material into the custom book. Furthermore, Bedford's Portable Series offers numerous smaller, less expensive volumes of anthologies, as well as "split" editions that enable students to purchase only needed portions. The portable series, which incorporates professor specific content, is similar to other alternative textbook formats and produced at significantly lower costs. Theses lower costs are typically associated with copyright material, intellectual property rights for contributing authors, and the development of open sourced material.

A perceived benefit of customizable textbooks, as noted by the Government Accountability Report (2005) is that "it [customizable textbooks] provides students with good value because instructors are more likely to use all of the material they select." Publishers also admit that instructors are more committed to using all of the material.

These are two very significant factors that are a major benefit to the customizable textbook. As noted in the traditional textbook section, many students are losing the sense of value in their traditional textbooks when chapters and content are not covered, yet they have

purchased the entire textbook. Customizable textbooks address these factors directly by adding or removing chapters, which will and will not be covered, all at a lower cost to the student.

### ***Challenges***

Custom textbooks seem to be the most rapidly growing alternative textbook format within the textbook industry. Nevertheless, buyback costs and content gathering issues present the greatest challenges to customizable textbooks. Despite the perceived value that is added by this type of text, students may lose out on the ability to save money by buying used books and selling them back at the end of the term. These texts are often specific to an individual university or individual professor with little to no national resale value. Creating this limited used book market may limit students' ability to purchase used textbooks at cheaper costs and force them to buy higher priced new textbooks, even in the customizable format.

Additionally, such books can only be created currently from the materials of one publisher, rather than from multiple publishers. This limits the ability of faculty members to pull from multiple published materials, which would provide more professorial control over the course content and material.

In the end, there are several ways to combat these challenges, one of which is the following: publishers can produce low-price options by altering either the format or content of a textbook and selling those for 20% of the new book price. While at the same time, institutions and bookstores can work collaboratively to form buying consortiums for custom texts in an effort to provide buyback options for students at the end of each semester.

### **Independent Supplemental Material**

Traditional textbooks have often been paired with supplemental material that adds value to the material. Publishers have been providing these options to faculty members for years with varying results. Due to changes in post-secondary education "Publishers are becoming more involved with the development of instructional aids and assuming roles that have traditionally belonged to postsecondary institutions" (GAO, 2005, p. 25). Today, these supplemental materials include workbooks, CDs, lecture notes, test templates and study guides. However, this section is devoted to independent supplemental material that may be compiled by faculty members, independent of the textbook publishers.

## ***Background***

The Internet now provides an overwhelming amount of information that can, under the right context, be extremely valuable to instructors and students alike. “Instructors can now select from a much wider variety of supplements to tailor their courses to the needs of their students” (GAO, 2005 p. 25). According to the report conducted by McElroy and colleagues (2007), online mix-and-match companies like Academic Pub, Connexions and growing libraries of open educational resources allow faculty members to assemble textbooks or course materials from spare parts rather than simply assigning an existing traditional textbook.

To develop these textbooks from spare parts faculty members are in need of resources to do so. “Open educational resources (OER) are the sharing of digital learning resources at no charge over the Internet, primarily by faculty engaged in course development and collaborative teaching and research” (McElroy, et al., 2007, p. 22). OER can be used and adapted for non-commercial purposes by teachers, educational institutions, and students. These resources rely on open source applications, which are software programs that can be shared or distributed. OER has become increasingly popular among faculty, students, and institutions both within the United States and internationally.

These companies also provide the necessary royalties to content contributors, which were previously left to the “Big Five” publishing companies. “These companies also find scholars willing to build peer-reviewed textbooks published under a creative commons license, which lets others edit and customize the books and allows students free online access to them” (Campbell, 2011, p. 2). These readily available materials significantly lessen the value of the traditional textbook as a one-size fits all solution.

These technologies are also changing many faculty members. “Like their old school predecessors, today’s instructors assume their role is at the center of their students’ instructional process. Whereas old school instructors tended to use the traditional textbook as the course foundation supplemented with other materials, many of today’s new school instructors do not” (McElroy, et al., 2007). Many of these younger faculty members would most likely welcome an environment in which they could easily gather and assemble a variety of quality learning content from a wide range of resources to adapt to their teaching pedagogy.

## ***Challenges***

While technology has created these solutions, technology has also held many faculty members back. One of the greatest challenges facing independent supplemental materials is the

lack of technological skill sets necessary for many faculty members to use this alternative textbook format. While new faculty have been exposed to these types of learning materials, many older faculty members are learning how to create them and implement them into their classroom pedagogy. Despite the fact that OERs provide faculty members with a tremendous amount of resources, the OER databases are not all encompassing. Many faculty members may seem overwhelmed with finding content suitable for their classrooms.

Nevertheless, faculty members who spend time searching for alternative textbook formats to deliver course content will see the benefits in their students learning. Whether these faculty members are selecting online journal articles, database searches, YouTube or TED talk videos, the capabilities are endless to developing new and innovative independent supplemental materials.

## **E-Textbooks**

This subsection, will explore the growing trend of E-Textbooks or E-Books as they are more commonly referred to. In addition to exploring the trends, I will explore the developments in technology, which are making it easier for students to access and use E-Book technology.

### ***Background***

Electronic textbooks or E-Books now provide a low-cost, tech-savvy solution for students. With electronic textbooks, students may pay about half of the price of a new textbook. Currently, most E-Books are distributed through major publishing companies and can be accessed through the sale of an access code. Students can access these E-Books as often as they wish until the password expires. E-Books provide students with the opportunity to access material online or print a hard copy. These options are often available at considerably lower costs.

As newer and newer technologies are developed, so are the possibilities for online or e-textbooks. “Internet and Web-based technologies have influenced how, when and where students learn. Students are no longer solely the linear learners of the boomer generation; they are very often tech-savvy, multi-tasking, self-directed experiential learners” (McElroy, et al., 2007, p. 5).

With this in mind publishers and faculty alike are searching for new and innovative ways to engage their students in the classroom. As McElroy and colleagues point out, “A key characteristic of digital native learners is that many are more experiential and intuitive learners



compared to the linear learning behavior of older digital immigrants” (2007, p. 8). It is also helpful to understand that, “Today’s average college graduate has spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games (not to mention 20,000 hours watching TV)” (McElroy, et al., 2007, p. 8). Today’s students do not read the directions for a new program or game; they jump in and click through the options until they figure out how to make the program function or the game work. These characteristics can be seen when it comes to student learning as well. This does not suggest that all students are digital natives, but rather, “they exhibit a continuum of technology skill acquisition and comfort levels with technology based on their life experiences” (McElroy, et al., 2007, p. 9). Today’s students have changed, faculty are changing, and technology is ubiquitous. As stated in a 2006 ECAR study, *Students and Information Technology*, “The interesting question is no longer can (information technology) contribute to learning, but how do we activate interest and skill in (information technology) in more of our students and their instructors” (McElroy, et al., 2007, p. 9)?

As noted within the traditional textbook section, “By and large, students do not retain textbooks as reference resources as was the case with previous generations” (McElroy, et al., 2007). Devices such as handheld tablets (Kindle, iPad, Sony eReader and countless other tablets) are changing the way people are reading books, whether it is for casual reading or professional and scholastic purposes. Students no longer have the option of buying a new or used traditional textbook; this growing market is changing education across all levels.

### ***Challenges***

Even though the growing trends within the textbook industry are E-Book technologies, publishing companies are still faced with numerous challenges. These challenges include those of accessibility, consumer purchases, and the used textbook market.

One of the major concerns with E-Books is the ability of students to access their E-Book. Technical difficulties may arise while students try to access material, as they rely solely on access to the Internet. This must also be considered when students try to access their E-Books from locations not on campus.

Also, as E-Book developers and publishers began to promote and sell E-Book technology, convincing purchasers to read text on a computer screen for extended periods of time was something new and difficult for many to fully grasp. This challenge is relevant for new digital native learners as well as for older generations, generally faculty members. Additionally,

“Publishers’ first generation digital format ventures were not successful in part because only the publisher’s own content was available, in a proprietary format, and usually at price points that continued to subsidize their textbook business model” (McElroy, et al., 2007, p. 6).

These challenges will determine the ultimate future of the E-Book. Current business models, which subsidize traditional textbook models, cannot support the growing E-Book industry. Compounded by financial constraints associated with E-Books, publishers are getting tremendous pressure from the independent markets currently creating E-Books. As is written in the Government Accountability Report, “As publishers continue to invest in technology, the cost to produce a traditional textbook is likely to continue to increase in the future” (2005).

To address these issues, several publishing companies and universities have joined forces to develop E-Book material. In 2005, “Ten institutions, including Princeton, Utah and Oregon, began to use the textbook wholesaler, MBS, to offer electronic versions of some textbooks at about two-thirds of the price of print copies” (Koch, 2006, p. 17). Other companies, such as Pearson, launched *SafariX Textbooks Online*, consisting of 300 online texts available on the Internet at approximately one-half the price of new print versions. *McGraw-Hill Higher Education* currently sells more than 800 different types of E-Books and plans to increase the number of electronic books. Thomson Learning's site, *iChapters.com*, makes available for student purchase individual chapters of textbooks in digital form. Altogether publishers now offer more than 3,000 E-Books and new titles are added regularly.

Independent from the “Big Five” publishing companies, institutions have the technology capable of providing similar options to students in the form of online libraries, but it comes with a cost. In an effort to create these online libraries, institutions would have to purchase the right to access the material, much in the same fashion of computer software licenses. It is because of these reasons that online libraries have never taken off.

“Electronic textbooks appear to be more attractive in theory than in practice” (Kock, 2006). However, electronic scholarly journals appear to hold greater promise than electronic books. I contend that, as younger and younger generations grow up in elementary, middle and high school using educational technologies, the use of E-Books and eReaders will increase as a result of common use. While today’s college students can be categorized as digital native learners, the reality is that E-Books and eReaders are new technologies. Despite the advances in

E-Book technology publishers say, “Electronic textbooks have not caught on with students, and sales of these products have been unsuccessful” (GAO, 2005, p. 21).

## **CoreTxtPlus® Paradigm**

To evaluate and provide context to the CoreTxtPlus® paradigm, I will provide a summary of two separate studies conducted by the University of Wisconsin Oshkosh: *Textbook Cost Study: How Much Does CoreTxtPlus® Save Students?* (Haley, 2012) and *Pre- and Post-Test Analysis: Do Students Learn Using the CoreTxtPlus® E-Text?* (Haley, 2012). Both of these reports have been submitted to the Department of Education’s Fund for the Improvement of Post-Secondary Education (FIPSE) as per the guidelines established by the grant.

### ***Background***

Developed by Professor M. Ryan Haley, CoreTxtPlus® is an in-house authored electronic textbook with professor-specific appendices. The CoreTxtPlus® paradigm was developed based on a series of eight goals, which were developed to meet a higher standard in quality than traditional textbooks. This paradigm serves as a comprehensive approach to teaching, which incorporates several aspects of the classroom environment. Professor Haley, throughout the development of the CoreTxtPlus® paradigm, identified the following eight goals.

### **Project Goals**

- G1: Save students money.**
- G2: Avoid the difficulties of choosing and using a common text.**
- G3: Preserve professor control over course content and structure.**
- G4: Tighten the connection between lower- and upper-level courses.**
- G5: Incentivize cross-discipline awareness to improve curricular uniformity.**
- G6: Encourage faculty collaboration in education research.**
- G7: Make our university more attractive to potential students.**
- G8: Create a disseminable rental model for other colleges and universities.**

In an attempt to measure the success or failure rate of the CoreTxtPlus® paradigm, members of the CoreTxtPlus® project team needed to identify the methods by which they would

measure change within students and evaluate whether or not they achieved each goal listed above. To that end, the faculty members created pre- and post-test assessment materials to measure this change. The assessment materials consisted of “twenty questions agreed upon by the Economics department as covering the core areas of aptitude most germane to the Introductory Business Economics Statistics (IBES) course and AACB [Association to Advance Collegiate Schools of Business] expectations” (Haley, 2012). They used these assessments for all sections of IBES during each semester it was offered, including those IBES courses that did not use the CoreTxtPlus® e-text. By having several courses using the CoreTxtPlus® e-text and others that did not, the researchers were able to compare the differences in their pre- and post-test scores. They then used the data to answer the following questions:

- Do students accumulate knowledge during the semester while using the e-text as the required text for the IBES course?
- How do aggregate pre- and post-test results from semesters prior to the e-text compare to aggregate pre- and post-results from more recent semesters when the e-text was used?
- Do students taught by professors using the e-text learn more than students taught by professors using traditional textbooks within the same semester?

What their research found was that there was significant evidence to support the use of the CoreTxtPlus® paradigm. Within a two-year window, the data demonstrated significant improvements in student learning outcomes as a result of an instructor using the IBES CoreTxtPlus® paradigm as compared to students who learned from a faculty member using a traditional textbook. What is important to note is that “The results [pre- and post-test analysis] clearly indicate that students learned in all sections of IBES, both in sections with and without the e-text” (Haley, 2012). Nevertheless, “the level of learning (improvement) was generally higher in sections that used the e-text [CoreTxtPlus®] format” (Haley, 2012).

Furthermore, the data comparing student learning (improvement) between faculty who used the CoreTxtPlus® e-text and those who did not suggest that, on average, students who learned from faculty using the CoreTxtPlus® e-text showed an improvement in learning higher than their peers. This suggests students using the CoreTxtPlus® e-text learned more than students not using the traditional textbook (Haley, 2012). Their research continues on for the

two-years as the e-text is being used, and the data continue to show drastic improvement in student learning outcomes.

It is also important to note the significant improvements measured in student learning as a result of a faculty member switching to the CoreTxtPlus® e-text format within his/her classroom. The research showed significant improvement between semesters where individual faculty members did not use the e-text format to the semesters where their students were taught using the CoreTxtPlus® e-text. According to the project leaders, “This reaffirms that the [CoreTxtPlus®] e-text is efficacious to traditional textbooks, and that the improvement results were not an aberration” (Haley, 2012).

Another positive quality to the CoreTxtPlus® paradigm is the cost savings for students. Currently, as a result of the parameters set by the grant, the e-text is being offered at no cost to students. By comparing the traditional IBES textbook cost to the new IBES CoreTxtPlus® e-text, the total estimated cost savings experienced by students would be \$140,532 during the three-semester grant window period. Realistic estimations of using this CoreTxtPlus® e-text after the grant window expires prices the book at around \$15-\$20 per semester. This cost is merely for administrative purposes and faculty compensation for the time it takes to develop and edit this e-text. In comparison to their previous traditional textbook that retailed for \$192, the students would be saving more than \$150 per semester, per student, if they chose the CoreTxtPlus® e-text format. “Taken together these [cost and learning outcomes] result in a better, more vertically integrated IBES experience for students all at a lower cost than traditional textbooks” (Haley, 2012).

Another quality which makes the CoreTxtPlus® paradigm so viable is the opportunity for faculty members to create their own professor-specific appendices. These appendices are created to complement the core material that has been agreed upon by the college department. Typically, college departments will base their core content on national accreditation standards set forth by the national accreditation bureaus. This capability allows the faculty member the opportunity to infuse his or her own teaching pedagogy into the CoreTxtPlus® e-text in a way not seen by any other alternative textbook format. Overall, the students get a more integrated experience with their textbook, which is frequently displayed during their classroom experience. Furthermore, these appendices are not placed at the end of the CoreTxtPlus® e-text as a supplemental material, but rather infused throughout the chapters to provide a more integrated and seamless

experience. Later in this report, I will review the faculty's perceptions of these appendices and address some of the challenges related to them.

Additionally, the CoreTxtPlus® e-text can be edited on demand by the professor. This allows for faculty members to adjust content on the go and to improve the flow of the material based on student feedback and experiences. This capability also allows for the text to be adapted to specific hiring standards of many local, regional, state and national employer standards. Overall, students and faculty are finding this alternative textbook format to be completely valuable for them as they progress through the College of Business and into the eventual job market.

With all of these qualities in mind, it is reasonable to suggest that the CoreTxtPlus® paradigm is a useful method to improving student learning outcomes while also providing a low-cost affordable solution to the growing textbook crisis. Furthermore, as pointed out in the Government Accountability Report (2007), even publishers are saying, "Instructors are requesting more supplements, such as web-based tutorials and self-assessment tools, to enhance student learning." The CoreTxtPlus® paradigm addresses each of these growing demands.

### ***Challenges***

Despite the numerous benefits to the CoreTxtPlus® paradigm, there are several considerable challenges facing the future of the CoreTxtPlus® paradigm. These challenges consist of cost of creation, faculty time needed to create such e-texts, faculty collaboration, identifying the core material, and learning the technology needed to create the e-text.

Of considerable concern for this type of alternative textbook format is the cost associated with its creation. During the development stages of this e-text, the project team needed to develop a compensation package that was appropriate for the time needed to create a CoreTxtPlus® e-text. This compensation had to include all contributing members of the creation team, which included multiple faculty members, students and community business leaders. Fortunately, this project was funded by a grant in the amount of \$275,000. A significant amount of this money was used to pay for authors, contributing faculty members and student evaluators. For this to be a viable solution for other universities, alternative-funding sources would have to be attained in order to fund their faculty, students, and area businesses to create a similar CoreTxtPlus® e-text. This is seemingly the largest obstacle standing in the way of similar e-text projects.

Included with the cost of production, faculty member's time away from their everyday work is crucial to consider. Most of the faculty working on this project have reported working substantial amounts of hours to produce the core content as well as the professor-specific appendices. Universities would need to consider how much time they could allow their faculty members to work on this type of project as well as consider the financial return for their time. Without time and money, the CoreTxtPlus® project would not have been successful. Future CoreTxtPlus® projects not funded by grant monies would need to be funded by other sources, especially during a time when financial resources are dwindling.

Not only do universities need to consider time and money, but also they need to consider the creation of a team that is willing to take on a project of this magnitude. In order for a project like this to be successful, faculty members must have a strong collegial working environment that is supportive and challenging at the same time. Fortunately, for the project at the University of Wisconsin Oshkosh, they had a team that was well balanced, professional, collegial and motivated to find a solution to the textbook crisis. Not only does it take a faculty team, but it also requires a strong leader who is willing to write a majority of the CoreTxtPlus® text. Additionally, upper-level faculty and faculty across multiple disciplines need to be considered as a part of the creation team. Without these people working together, the quality of a CoreTxtPlus® e-text would be significantly tarnished.

Of great importance to the overall concept of CoreTxtPlus® is the development of the “core” material. As the name suggests, the foundation for a great CoreTxtPlus® text is its core content. For many disciplines, identifying the core subject matter is somewhat easy. Most colleges have accreditation standards, which often outline basic student learning outcomes. Typically, the hard sciences such as math, science, physics, statistics, business, and chemistry lend themselves well to identifying core material. Other disciplines such as literature, education, sociology or criminal justice present a somewhat more difficult challenge when identifying core content, as it is typically more theory-based. Nevertheless, the importance of core content cannot be overlooked. Often faculty members have already determined the core content for their courses when selecting a traditional textbook. Traditional textbooks are often sold from publishers and selected by faculty members based on the core content these traditional textbooks already cover.

Lastly, with changing technology comes an ever-growing learning curve for many generations of faculty members. The CoreTxtPlus® project team used a free software system

called LaTeX to create their e-text. However, this is a far more complicated software program than Windows Word processor. Several of the faculty members associated with the project contend that this was the greatest challenge they faced through the process. With that understanding, it is important that a member of the team has knowledge of the software program being used. This person will be extremely beneficial in maintaining efficiency throughout the creation stages.

Despite these challenges, the outcomes identified through the evaluation stages of the CoreTxtPlus® project offer great incentives for other faculty members. If a team can overcome the challenges, then a CoreTxtPlus® e-text can be created to enhance the experience of both professors and students, while at the same time saving students money.

This section was intended to give readers a better understanding of the evolution of traditional textbooks, learning styles and alternative formats. Understanding the background for each of these formats provides great perspective on the aspects of each format, which can be emulated in other alternative formats. Furthermore, understanding the challenges associated with each format provides context as to practices, which may not be effective for today's digital native learners. With a greater understanding of the evolution of traditional textbooks and the background and challenges associated with each alternative format, we can explore how faculty members' perceptions of one particular alternative format can be utilized in the development of other course materials.

## **Summary of Faculty Perceptions**

To better understand how other faculty members throughout higher education can emulate certain practices within their courses, I will explore the perceptions of faculty members who actively participated in the CoreTxtPlus® e-text project. By summarizing their perceptions, I have identified several key aspects to the CoreTxtPlus® paradigm which can be emulated in other practices of adopting alternative textbook formats by faculty members and departments.

### ***Methodology***

This is a summary of a qualitative survey created and disseminated by the principal investigators of the CoreTxtPlus® project. The 20-question survey was distributed to seven participants in the CoreTxtPlus® project. The participants included the primary author, the



contributing authors, and the contributing faculty members within the College of Business at the University of Wisconsin Oshkosh. Once all of the surveys had been collected, I was sent the surveys in electronic format. I have selected six specific questions from this survey to summarize and evaluate. These questions aim to capture the perceptions of faculty members who have used or participated in the CoreTxtPlus® project at the University of Wisconsin Oshkosh.

Question #1 of the survey served as a basic demographic question, which identified the level of involvement of the respondents. From these responses, I developed two distinct groups of respondents: contributing authors and faculty who provided sample questions and solutions. Contributing authors consisted of the principal author and authors who created their own professor specific appendices. The other faculty group contributed sample questions and solutions, as well as other supporting material and content.

After identifying the groups in which the respondents fit, I listed out all the responses to the corresponding question. Once I listed out all of the responses for each of the questions, I was able to identify themes that readily emerged. These themes provided a structure for each section and a summary for each subsequent question. An example of this is found within the following section (Question #6) in which the two main themes presented included: utilizing the CoreTxtPlus® e-text consistently throughout the classroom experience and the importance of developing consistent terminology throughout the e-text and most importantly across disciplines. These themes will be presented throughout the section. Identifying the themes also allowed me to differentiate between positive responses and negative responses. Most of the responses were generally positive, I also included all of the negative responses reported. The following sections will identify these themes and present the positive results and conclude with any negative responses reported.

### **Question #6 Adapting classroom pedagogy to fit CoreTxtPlus® paradigm**

*If you taught using the CoreTxtPlus® text how have you had to adapt your classroom pedagogy?*

The responses for those faculty members who only contributed sample questions and solutions have been removed, as this question was not applicable to their experience with the CoreTxtPlus® e-text. This left only three respondents who have utilized the CoreTxtPlus® e-text

within their classroom. From the three respondents utilizing the CoreTxtPlus® e-text, there were two distinct changes to the pedagogy of these faculty members.

The first change was the ability to have the CoreTxtPlus® e-text open and visible throughout the classroom experience. One faculty wrote, “The text adapted to me, in large part, rather than the other way around, with the exception of being able to use the online version on the overhead in class, rather than having to bring hard copies of tables and such” (R. Haley, survey, February 01, 2012). Another faculty member commented that the ability to refer to the text as needed was a great improvement within his classroom. The ability to interact with the textbook within the classroom setting is only available with the CoreTxtPlus® paradigm, E-Books, and some independent supplemental materials in digital formats.

The second change for one faculty member was the terminology changes used throughout the CoreTxtPlus® e-text. This faculty member had previously used terminology within his/her classes that was inconsistent with his/her colleagues. This faculty member provided an example of this terminology change “Using *nominal* variable rather than *categorical* variable” (R. Haley, survey, February 01, 2012).

These two changes provide an added value to the classroom pedagogy for each of the responding faculty members. Moreover, the students might also gain from these additional values, as the course terminology stays consistent across faculty members and provides direct interaction with the CoreTxtPlus® e-text throughout the classroom experience.

## **Question #7 Experience throughout the creation of the CoreTxtPlus® project**

*What has been your experience in the internal review process of the CoreTxtPlus® project? (Please describe experience with working with colleagues, other faculty members and students)*

This question provided relevant responses from all respondents whether they were positive or negative experiences. It is important to note that the respondents contributed to this team in various ways throughout the development of the CoreTxtPlus® e-text. Four of the respondents wrote sample problems and questions for the textbook, while the remaining three contributed to the development of content. Of the seven responses, only one faculty member identified a negative experience, while the other six described positive experiences. The six

positive responses identified two fundamental experiences for students and faculty members respectively.

Those who supplied sample problems and solutions reported having enjoyed the ability to work with other faculty members who are not directly within their department or who teach other courses in the College of Business. Their most consistent response highlighted the experience of working together as a team to develop the CoreTxtPlus® e-text content. One faculty member reported, “I felt that I learned quite a bit writing questions and getting feedback from my colleagues. I was able to review content that I don’t deal with on a regular basis” (R. Haley, survey, February 01, 2012). Another faculty member added, “I worked with a colleague in HR [Human Resources] to write the HR-related statistics questions. We independently wrote our problems and then ‘swapped’ problems to review each other’s work. The process worked very well as we were able to help each other to improve examples and explanations” (R. Haley, survey, February 01, 2012). These faculty members commented on the professional development associated with working together with other colleagues within their college. Another faculty member discussed how the creation of the CoreTxtPlus® e-text permeated the work environment, “After establishing the core and soliciting feedback, there was a lot of ‘hallway’ discussion of the text, even amongst professors from different disciplines in creating the CoreTxtPlus® text” (R. Haley, survey, February 01, 2012). The level of professional development reported by the faculty members on the CoreTxtPlus® project appears to be a major benefit both personally and professionally and unique to this type of alternative textbook format.

Those faculty members who were contributing authors also reported similar experiences in working with their colleagues. One faculty member reported, “The process was very thorough, and very collegial, many people had an opportunity to edit or review the text; the minor differences of opinions that arose were well handled; I believe everyone is very happy with the final product” (R. Haley, survey, February 01, 2012). Another contributing author explained, “It [collaborative development] has opened some potential points of research collaboration as well” (R. Haley, survey, February 01, 2012). The environment of collegial collaboration appeared to create a positive experience for most of the faculty members regardless of their level of participation.

Additionally, contributing authors reported the benefits of working alongside students throughout the development of the text. One faculty member described, “It was very helpful to get the feedback from students who now serve as tutors, which also helps them be more effective tutors [IBES]” (R. Haley, survey, February 01, 2012). Another faculty reported how beneficial it was to be working with students as they learned from the text and with other faculty members as they began their own journey with using the text. That same faculty member also mentioned how helpful students could be in finding unclear passages and typos throughout the text. It should be noted that the CoreTxtPlus® paradigm allows faculty members to make instant changes to the text throughout the semester. All in all, faculty members reported the benefits for both students and faculty members as positive and developmental both academically and professionally.

While several of these faculty members reported positive experiences, there was one faculty member who commented, “I wrote the problems and solutions, and submitted them, [and then] I was not consulted as to whether and/or how they were incorporated into the project” (R. Haley, survey, February 01, 2012). It is important to note this faculty member’s experience, as not everyone within the project development team reported a positive experience. This brings to light the importance of recognizing and incorporating all contributing authors throughout the process of developing, creating and disseminating the CoreTxtPlus® text.

Whether it was the collaboration between faculty and students or that between faculty and other faculty, most of the participants commented on the tremendous value that was added through this collaboration. Students might also comment on the value added in the collaboration with their faculty members throughout the creation of the CoreTxtPlus® e-text. The following question expands on the professional development experience particularly for faculty members.

### **Question #8 Level and value of professional development experienced through the cross-discipline interaction amongst professors of different disciplines**

*Describe the level and value of professional development experienced through the cross-discipline interaction amongst professors from different disciplines in creating the CoreTxtPlus® e-text.*

Again, two groups of respondents provided two different perspectives on the professional development experienced. Those faculty members who supplied sample problems and solutions once again described the personal benefits of working collaboratively with other cross-discipline

faculty members. Contributing faculty members also share similar experiences as their colleagues.

The most consistent response from these faculty members was the improvement in communication and clarity of terminology. One faculty member stated, “I feel like I will have an easier time communicating with others outside of my discipline about statistics as a result of my participation in this project” (R. Haley, survey, February 01, 2012). Another faculty member expanded this idea by saying, “Reading the other professors’ problems and reviewing their responses was important for demonstrating differences in how we are using statistics. It also pointed out some important language/terminology differences between disciplines” (R. Haley, survey, February 01, 2012). Identifying these differences has been crucial to the success of the CoreTxtPlus® paradigm. It is also important to note that unless faculty members are encouraged to select similar traditional textbooks together, the opportunity to develop cross-discipline terminology consistency is not present. A faculty member identified this importance: “It [cross-discipline communication] provided an opportunity to bring the prerequisite courses in synch with the disciplinary courses and vice versa” (R. Haley, survey, February 01, 2012). This is one of the most important and beneficial aspects of this paradigm.

Contributing faculty members echoed the sentiments of their colleagues about the benefits of improved communication and the opportunity to synchronize the entire academic program. One faculty member reported his/her biggest personal gain as “observing how statistics is used in other business disciplines, in the range of textbook problems developed by the many non-Econ professors, which gives me a much wider range of examples to draw upon in class” (R. Haley, survey, February 01, 2012). This faculty member shared how his/her new perspective on statistics “better helps me impress upon my students that there is actually a good reason for me to be torturing them with this subject matter” (R. Haley, survey, February 01, 2012).

Another faculty member supported this argument by stating, “From my personal experience, I have learned a great deal. From the most mundane of new skills acquired with the word processing program LaTeX to the larger experience of integrating with other College of Business faculty as we developed the interdisciplinary content... That has meant a lot for the interest level and involvement of our students with the material” (R. Haley, survey, February 01, 2012).

Despite the faculty members' roles and level of participation in the CoreTxtPlus® project, they all described the benefits to working collaboratively towards a common goal. While they all agreed that the overall collaboration resulted in a quality final product, they also commented on the personal and professional growth experienced throughout the process.

## **Question #10 What factors needed to be considered in determining content of text**

### ***In creating the CoreTxtPlus® e-text what factors needed to be considered in determining content of the text?***

This question did not identify any differences between contributing authors or faculty members who created sample questions and solutions. Rather, the perspective of each faculty member was taken into account in this question. Overall the faculty members emphasized the importance of utilizing consistent terminology and content amongst faculty members and across disciplines.

One faculty member emphasized the importance of using similar terminology when teaching students across disciplines. Another faculty member expressed the importance of “adequately covering multiple discipline topics with explanations that are simple enough for students to grasp” (R. Haley, survey, February 01, 2012). Still, others emphasized the importance of identifying the core subject matter. Fortunately, for this project, the Economics department had already identified this core material a few years prior to implementing the CoreTxtPlus® paradigm. One faculty member stated, “Once that core was established, it was easy to then identify the small instructor-specific variations that would be needed” (R. Haley, survey, February 01, 2012). Yet another faculty member emphasized the importance of identifying the core subject matter:

Besides being accurate, the core needs to be just that, something that everyone agrees need to be covered. This helps ensure all students are learning the same basic concepts; then, professors down the line can reinforce that learning and connect it to their subject matter. (R. Haley, survey, February 01, 2012)

Another important idea to note as well is that once the material has been created, it becomes very easy for faculty in the future to adjust the subject matter to fit their needs without the need for new editions to the text. The CoreTxtPlus® paradigm allows faculty members to

adjust the text to their needs rather than needing to select a single text. “Some instructors have become increasingly disenchanted with the choice of a single textbook for a particular course, and have expressed a desire to assemble modular materials from multiple sources, thus allowing them to pick the best of available resources for each topic a course will cover” (Advisory Committee, 2007).

Two other faculty members emphasized the importance of evaluating the CoreTxtPlus® e-text throughout the implementation process. One faculty member felt to do this best “surveys of faculty that received IBES students, as well as content the IBES instructors consider to be essential” (R. Haley, survey, February 01, 2012) need to be regularly assessed. In the assessment process, it is important to include all contributing faculty members, students, cross-discipline instructors and other exterior constituents to the university. Another faculty member finished by saying, “As this project was done with experienced instructors, who are current in their field, this became more a question of survey and consensus” (R. Haley, survey, February 01, 2012). This statement is crucial when developing a CoreTxtPlus® e-text, because without a strong team of contributing faculty members and supporting authors, this process can be very difficult.

Overall, faculty response’s emphasized the importance of consistency in course content and terminology, identifying the core material early in the process, making timely and adequate adjustments to the content and the evaluation stages.

## **Question #11 Perception of professor specific appendices**

*If you contributed to the creation of CoreTxtPlus® did you include professor specific appendices? (Please describe your experience).*

As previously mentioned, paramount to the CoreTxtPlus® project is the professor specific appendices. These appendices provide an important aspect identified throughout the literature review of professorial control over course content. Of the responses collected, the three contributing authors to the CoreTxtPlus® project provided the most germane responses. The other contributors of the text did not have the opportunity to create their own professor specific appendices. This section will only look at the experiences had by the contributing authors of the text with regard to integrating the professor-specific appendices within the CoreTxtPlus® e-text.

During the project, the contributing faculty members were asked to create their own professor-specific appendices to incorporate their own style of teaching and to maintain professorial control over the text. This aspect of the CoreTxtPlus® paradigm is the single most

important aspect to the uniqueness of this alternative textbook format. One faculty member responded to this question by stating, “This is the best part of the e-text [CoreTxtPlus®] process. Each professor gets to assert their own identity without compromising the core coverage” (R. Haley, survey, February 01, 2012). Another faculty member responded, “I sincerely enjoyed the creation of those appendices” (R. Haley, survey, February 01, 2012). After expressing delight in the creation of the appendices, the faculty member went on to say, “For the first time, I was able to really formulate carefully how I would want the material presented on paper (rather than in a classroom setting) and bring to life the approaches and topics that are unique to my own course” (R. Haley, survey, February 01, 2012). The last contributing author responded, “Since I was heavily involved in the initial edits of the core text, writing my own sections [appendices] in a reasonably similar style was relatively easy” (R. Haley, survey, February 01, 2012). In addition this faculty member spoke about the importance of the review process when he/she said, “The feedback I got on my sections [appendices] was very good and definitely improved those sections” (R. Haley, survey, February 01, 2012). In the end, all of the faculty members who contributed to the creation of professor-specific appendices reported being extremely pleased with the process and the overall product that was produced. None of these faculty members had any negative feedback about this aspect of the CoreTxtPlus® project.

## **Question #12 Challenges**

*What were some of the challenges experienced throughout the process of creating the CoreTxtPlus® e-text?*

While the faculty members reported no negative feedback, they did provide feedback on some challenges that needed to be overcome throughout the process. These challenges included the following: learning the LaTeX format and word processor, identifying a project leader, and determining the core content.

The first challenge experienced by all of the contributing faculty members was learning the LaTeX word processor. The CoreTxtPlus® project researched and found the LaTeX word processing system to be most user friendly, and it is downloadable for free educational uses. LaTeX is known for its ability to format standard word documents into readable textbook formats. The program also allows faculty the ability to insert their appendices as needed throughout the text, rather than at the end of the text. Learning the LaTeX format and how to



incorporate his/her professor specific appendices took some time for several contributing faculty members to learn. One faculty member wrote, “Coding into LaTeX was a ton of work, especially in figuring out how to create some of the graphs (e.g. Chi Squared distributions)” (R. Haley, survey, February 01, 2012). This faculty member went on to say, “The results easily justified that work!” Other faculty members shared similar comments about learning the LaTeX program and mentioned that it is continually a learning process.

An important finding was that the principal author, M. Ryan Haley, was the key to helping his colleagues learn and understand the use of the LaTeX system. One faculty member wrote, “Ryan Haley was so proficient in the esoterica necessary to bring the chapters together into a seamless whole” (R. Haley, survey, February 01, 2012). This statement identifies the importance of identifying principal authors and team leaders like M. Ryan Haley for the future development of other CoreTxtPlus® paradigm. Another faculty member continued on this theme by stating how few challenges actually presented themselves throughout the creation of this project. Their faculty member went on to say, “[There were] surprisingly few [challenges] in our case, but I suspect that we had an especially good and well-rounded team. Personality and/or administrative disarray could result in an inconsistent product” (R. Haley, survey, February 01, 2012). This would suggest that not only does the CoreTxtPlus® paradigm need a competent and well rounded leader, but that leader must also have a strong supporting cast of colleagues that can substantially contribute to the end product.

The other challenge that presented itself was surprisingly brought up from a faculty member who only provided supporting sample questions and solutions. This faculty member wrote, “I think the biggest hurdle was determining the core. While in statistics there is substantial agreement as to what should be covered in class, expanding the process to areas that are less defined will be more difficult” (R. Haley, survey, February 01, 2012). It is important to note this challenge, because it is one of the most difficult aspects of the CoreTxtPlus® paradigm. This faculty member is correct in stating this as a difficult aspect for other disciplines including statistics. However, as previously noted, one faculty member mentioned the ease of this process because his/her department had determined the core material a few years prior to the creation of the IBES CoreTxtPlus® text. Nevertheless, this is an important aspect of the CoreTxtPlus® paradigm that must be addressed.

While the faculty identified three distinct challenges encountered throughout the process, it is important to remember that none of these challenges were identified as negative experiences. The faculty member associated these challenges as aspects that are crucial for the successful development of the CoreTxtPlus® paradigm.

## **Conclusion**

This report has provided a literature review, which provided an overview and the evolution of traditional textbooks and alternative textbook formats currently available to faculty members within higher education. Certainly, this report has not included all options available but has provided several viable options including the CoreTxtPlus® paradigm. With the current trends in technology, new alternative textbook formats are being created everyday. Publishers are continually changing their business practices to actively captivate their customers. Additionally, faculty members are challenged to change their teaching pedagogies to include technologies consistent with the digital native learners of today's higher education setting.

I have also provided a summary of faculty members experiences at the University of Wisconsin Oshkosh who participated in the production of the CoreTxtPlus® paradigm. Their perceptions are important when considering the creation of a CoreTxtPlus® e-text at other universities. It is important to remember that while faculty members' responses were generally positive, the challenges and negative responses must be considered when adopting similar textbook formats. At this point, I would like to offer some final thoughts about the future trends I see coming for alternative textbook formats as well as offer some recommendations for faculty members to consider when selecting their next method to delivering their course content.

## **Discussion**

Over the past four years I have worked with the University of Wisconsin Oshkosh, the CoreTxtPlus® project development team, bookstore owners and textbook purchasers and have conducted extensive research concerning the changing face of traditional textbooks and alternative textbook formats. It is with these experiences that I provide this discussion section and provide my opinion about the future of traditional textbooks and what the future may hold for faculty members when considering alternative textbook formats within their classrooms. I

believe this report is important to consider, as the changes to alternative textbook formats will have a significant impact on the higher education system. I believe that as textbooks change and technologies improve, students will begin to learn in a new fashion, and faculty members will have to adapt their classroom pedagogy and textbook formats to fit the new digital native learner of tomorrow's higher education classroom.

I believe that traditional textbooks are on their way out as the textbook format of choice by faculty members. With all the current financial challenges facing the higher education system today and the increase demand for newer ways of learning, faculty members have no choice but to adapt their pedagogy and to bring new alternative textbook formats into their classrooms.

Based on the current financial state of higher education, there has never been a more important time to begin adopting new alternative textbook formats. As McElroy and colleagues point out "A growing cadre of instructors value technology-based learning resources as an important part of their students' learning experience, and are increasingly vocal about the need for a variety of learning materials in a range of formats" (2007, p. 7). This basic understanding compounded by the increased college student population who are tech-savvy, digital learners lends well to the future development of the CoreTxtPlus® paradigm and to other technology-based textbook formats. While there is certainly a cadre of alternative textbook formats available on the market today, very few, if any, address the major concerns associated with textbook costs and changing teaching pedagogies.

Low-tech alternative formats like customizable textbooks not only reduce price but also allow for selectivity allowing students to pay only for the materials they need. Customizable textbooks also provide faculty greater latitude to develop appropriate course materials that fits their teaching pedagogy:

This latitude allows faculty to develop materials that are up-to-date and of the highest quality possible, with less compromise than can be achieved by relying on a single traditional textbook. As noted above, however, low-tech alternatives are still tied to the rising price index of traditional textbooks. (GOA, 2005, p. 36)

The customizable textbook has now become a simple, yet viable alternative format for faculty members and one that many students appreciate, especially at the reduced price.

High-tech alternatives present a different model than their low-tech counterparts. E-Books, the CoreTxtPlus® paradigm and other digital and online resources, such as OER, do not

have publishing, printing, and inventory costs as high as traditional textbooks, making their price index much lower. This price index is currently a major contributor to the changing trends in alternative textbook formats. In addition high-tech digital solutions can be more easily combined, produced, and accessed than their physical counterparts. Today's students can now carry an entire library with them in their phone, tablet, or eReader at much lower costs. "A lower industry price index and access the top quality instructional materials in formats that are increasingly convenient to ever-more technologically savvy students benefit the entire student population" (GOA, 2005). I contend that these changes will also be advantageous to faculty members as they look to adapt their teaching pedagogy and to improve student-learning outcomes.

The increasing use of digital technology has broader implications for higher education than simply reducing textbook prices. Today's students are the most technologically savvy and knowledgeable of all consumer groups. Meeting their demand for high-tech solutions is paramount. In response, colleges and universities are increasingly providing computer access to even the lowest income students, making it more and more practical to offer high-tech solutions to traditional textbooks. Flash drives, for example, enable students to digitize and make portable papers, course materials, and even textbooks. While many publishing groups restrict access to their e-Books, others may allow students to download copies in PDF format directly to their computer desktops or flash drives. This same principle can also be applied to the CoreTxtPlus® paradigm. Even the poorest students, and those with the most limited computer access, can still benefit from digital educational materials if they are available in print-on-demand format, which currently remains a common trend.

It is also important to recognize the growing development of OERs and other online resources available to faculty members. These online resources now provide a considerable amount of information, which faculty can infuse into their classroom pedagogy. More and more faculty members have begun to adopt this format into their classrooms as they become familiar with the resources available to them. Faculty should investigate these resources as a means to improve the educational experience for their students.

In the end, it is important to remember that changing behavior takes time. The culture of higher education has granted professors with enormous power over the instructional process. While this varies somewhat by segment, instructors, either individually or collectively by department, have virtually complete control over which learning materials will be assigned to

students. The only way to effect the desirable transformation in the instructional process is to provide an environment that enables those instructors who are predisposed to use alternative learning materials to do so. As indicated by the faculty perceptions, the development of technology-based textbook formats may be challenging, but the end results more than justify the learning needed to implement these types of formats effectively.

## **Recommendations**

Based on several years of experience working alongside the University of Wisconsin Oshkosh and the College of Business, it gives me great pleasure to provide this report as a culmination of my work with textbooks. I believe the two of greatest challenges facing today's higher education system include reducing the cost of higher education and improving learning outcomes. These challenges will require learning materials that are appropriate and effective for all of today's students at costs that reflect the efficiencies of digital production and distribution. Moreover, higher education institutions face organizational and financial challenges responding to the digital transformation of content, and should address this challenge collectively and collaboratively in order to adopt common standards and achieve economies of scale.

As a result, I support the creation and continued development of Open Educational Records (OER) throughout the higher education system. It is common practice for faculty members to continually produce content, which can be used within their own classrooms or disseminated to other colleagues around the world. It is important that universities encourage faculty members to patronize creative commons licenses and publish them in the OERs available today. Creative commons licenses allow faculty to publish course materials and entire textbooks at virtually no cost to students. Creative common practices also provides content for other faculty members around the world to use for their courses or in the creation of their own CoreTxtPlus® text.

Below I have listed several OERs which I recommend to faculty members looking to create their own independent supplemental material or who are looking for material and literature to supplement their own research:

- ***MERLOT***                      <http://www.merlot.org/merlot/index.htm>
- ***OpenCourseWare***        <http://ocw.mit.edu/index.htm>

- *Connexions*            <http://cnx.org/>
- *Academic Pub*            <http://academicpub.sharedbook.com/academicpub/>

These growing open sourced markets provide a laboratory or virtual library for faculty members to develop course content and materials that will help improve their classroom pedagogy, while also improving student learning outcomes. The material that is generated on these sites is credible, reliable, and educational and can be implemented in multiple disciplines.

Another major concern associated with any material not provided by textbook publishers is preserving the intellectual property rights of contributing authors. This preservation ensures that the creator still maintains and owns the intellectual property rights of the content being used. As with any research or sharing of information, other faculty members must be sure to cite appropriately as to preserve the content in its original format.

In addition to preserving the intellectual property rights, there has been great concern and debate over appropriate distribution of course materials. Distribution models much like iTunes and Amazon may become the wave of the future turning anyone's digital device into a virtual bookstore. This change in distribution models presents a tremendous challenge for the publishing companies who currently control the distribution and dissemination of textbook content. Currently, Amazon and iTunes provide users the opportunity to purchase textbooks on their digital readers, iPads, iPhones, e-Readers and Kindles. This lose of control has challenged publishers to develop new ways of distribution, while continuing to pay royalty rates to authors and managing intellectual property rights.

Fortunately, the CoreTxtPlus® project has been protected by the University of Wisconsin System Technology Foundation called WiSys. WiSys is currently operating as the agency which protects the intellectual property rights of the contributing authors and the developers of the CoreTxtPlus® paradigm. WiSys will continue to serve in this capacity even past the grant window provided by FIPSE. This will allow the CoreTxtPlus® project team the opportunity to disseminate the paradigm to other colleagues and colleges throughout the world. I have also engaged with companies throughout the world who are developing similar textbook technologies and software programs that provide a similar text as the CoreTxtPlus® text. I believe that technologies will certainly change the interfacing technologies of CoreTxtPlus®, but the paradigm itself will maintain its originality.

Upon review of the research conducted by the CoreTxtPlus® project team, it is reasonable to be pleased with the positive level of student learning being measured. Even though data have only been collected for the past three semesters, the data demonstrate statistically significant growth in Introductory Business Economics and Statistics (IBES) student's learning. The data also suggest that as faculty members become more accustomed to using this type of alternative textbook format, the student learning outcomes will continue to increase. In addition to improved student learning outcomes, I believe there are several other positive characteristics of the CoreTxtPlus® paradigm.

The first aspect that I believe to be incredibly helpful for improving student learning is the vertical integration of lower-level to upper-level courses. As a student, it is encouraging to think that the actual book that I am using in my classroom was developed by my current faculty member and that the faculty that I will have in the future also contributed to the content. There are several benefits to this type of integration. The first benefit is the development of common terminology throughout an academic program, and the second benefit is the integration of learning outcomes that will be helpful for me in future classes.

Creating common terminology across the discipline ensures that students are receiving the same information within the same context. Often students will complain about not understanding certain ideas or terms, mainly due to faculty using different terminology to explain the same thing. This can create confusion not only for students, but also for faculty members whose goal is to teach the same content. This confusion can also affect pre- and post-test scores and teacher evaluations as students compare the work they are doing within the same course, but with different faculty members.

In regards to the integration of learning outcomes, it is reassuring to think that my future faculty members in my upper-level courses created these practice problems for me because they want me to understand these concepts when I am a student in their class. Admittedly, this is the aim of traditional textbooks and E-Books alike; however, I suggest that as students understand who created the content of their CoreTxtPlus® e-text, they may take more careful consideration when reading and utilizing this alternative textbook format. I would also suggest that students would be more apt to complete practice problems provided throughout the CoreTxtPlus® e-text.

Associated with the vertical integration is the professional development amongst faculty members. Several faculty members reported the tremendous amount of professional development

and personal enrichment experienced throughout the process. I believe that it is crucial for departments to increase support for improved communication between faculty and students on the course material requirements. This improved communication and collaboration can lead to tremendous growth for all participants. When faculty members select different alternative textbook formats, they do not experience the professional and personal enrichment as was the experience noted by the faculty members involved in the CoreTxtPlus® project. I would add that faculty members who develop their own independent supplemental materials might also receive some personal and professional development from the creation of these documents.

While I believe in the CoreTxtPlus® paradigm, I do have several suggestions for other faculty members and universities looking to create their own CoreTxtPlus® e-text or to develop alternative textbook formats:

- Determine funding source to compensate faculty members for their time. As noted in the report, the experimental CoreTxtPlus® e-text at the University of Wisconsin Oshkosh was funded by a federal grant. Universities would need to make a conscience effort to financially support their faculty members who take on a similar project. I would also encourage faculty members and department staffs to look for other research grants which may provide additional funding to the development of the CoreTxtPlus® text.
- Identify your principal author and supporting authors early, and develop a team. As pointed out in the report, the development of the production team is crucial for the project to be successful. This team must consist of faculty members who are current and well-published within their academic disciplines, faculty members from cross-discipline courses, upper-level faculty members, student editors, department and college personnel, and finally, potential business leaders within the field of study. Together this team should have the ability to implement the most current trends within the field.
- Identify the “core” subject matter. Most often this can be done by evaluating the accreditation standards set forth by the accrediting agencies. Often these standards identify common student learning outcomes, which can be used to determine the core content. I contend that regardless of academic discipline, there will always be some common practices; it simply becomes a challenge to identify



this core subject matter. It is also important to keep in mind that not everyone needs to agree on the core content, but rather, to develop the core and add appendices as he/she see fit. This is the value of the professor-specific appendices. It is important to remember that each contributing faculty member will have the opportunity to develop his/her own pedagogy within the text.

- Determine the amount of merit to be awarded to contributing faculty members. It is common knowledge that for faculty members to progress through their careers towards tenure, they must be well published within their field. I contend that if a faculty member were to develop such a text as CoreTxtPlus®, then this most certainly should be considered as part of his/her tenure process. I would express this early, as it needs to be decided on prior to the development of the text.
- Another aspect that faculty must take into consideration is selecting the appropriate software technology. The CoreTxtPlus® project team selected LaTeX as their word processor. However, there are several other word processing systems designed to develop similar alternative textbook formats. Additionally, it is important that a member of the team needs to become proficient in the use of this technology so that he/she can assist the rest of the team throughout the content development stage.
- As a final recommendation, I would encourage all faculty members to make careful considerations when selecting their traditional textbook or alternative textbook format. While the CoreTxtPlus® paradigm is an ambitious endeavor, I do recognize the opportunities and alternatives available to faculty members as well. While I believe that price should not drive the decision of the faculty member, it should be taken into consideration. Moreover, I encourage faculty members to truly think about their classroom pedagogy and to develop course materials that complement that pedagogy more fully. I believe that this is no longer an option for faculty members. As students continue to grow and become more tech-savvy, so do the faculty members as they look to provide innovative ways of teaching.

If faculty members and universities were to take this all into consideration, I believe they would find a truly worthwhile project that will benefit their students as well as their faculty

members. I believe that as the CoreTxtPlus® project develops so will the capabilities for other faculty members and universities to utilize the CoreTxtPlus® paradigm. I am excited to see what the future holds for the CoreTxtPlus® project and the future of textbook methodologies.

In conclusion, this report has provided some context into the world of alternative textbook formats and the evolution of the traditional textbook. There is certainly a lot to consider when selecting a textbook for your next course. I would encourage faculty members to be proactive in their pursuit for traditional or alternative textbook formats. While the CoreTxtPlus® paradigm is my recommendation, I support the use of other cost effective alternative textbook formats and practices, which can have a significant impact on student learning.

## References

- Advisory Committee on Student Financial Assistance. (2007, May). Turn the page: Making college textbooks more affordable. In Department of Education. Retrieved February 13, 2012, from <http://www2.ed.gov/about/bdscomm/list/acsfa/edlite-txtbkstudy.html>
- Government Accountability Office. (2005, July). *Enhanced offerings appear to drive recent price increases*. In United State Government Accountability Office. Retrieved February 13, 2012, from <http://www.gao.gov/new.items/d05806.pdf>
- Haley, R. M. (2012, January). Pre- and post-test analysis: do students learn using the CoreTxtPlus e-text? In PR/Award #P116Y090041. Retrieved February 13, 2012.
- Haley, R. M. (2012, January). Textbook cost study: how much does CoreTxtPlus save students? In PR/Award #P116Y090041. Retrieved February 13, 2012.
- McElroy, P., Leonard, J., & Beckerman, B. (2007, May). *A generational opportunity: a 21st century learning content delivery system*. Retrieved January 6, 2012, from <http://www2.ed.gov/about/bdscomm/list/acsfa/mcelroypapermay2007.pdf>
- Office of Operations Review and Audit. (2007, July). Textbook Costs in Higher Education . In U.S. Department of Education. Retrieved February 13, 2012, from <http://www2.ed.gov/about/bdscomm/list/acsfa/edlite-txtbkstudy.html>
- Young, J. R. (2010, October 24). To save students money, colleges may force a switch to e-textbooks. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/The-End-of-the-Textbook-as-We-Know-it/125044/.org>