Abstract

Digital textbooks replacing print textbooks is a new challenge entering the classroom. Digital course materials are being incorporated into the curriculum in small portions. Electronic reading devices are maturing to facilitate the adoption of all materials digital. This project outlines research investigating whether positive thinking leadership engages faculty, as curriculum developers, towards the change to adopting digital textbooks as integral components of their course. Using appreciative inquiry for discovery of faculty experiences, this project consisted of questionnaires and interviews with faculty in an attempt to capture both the learning and teaching experiences they found engaging. A key theme that emerged was that the change faculty are interested in is a digital textbook book that offers more than the print textbook.
LEADERSHIP UNBOUND: TRANSITIONS FROM PRINT TO DIGITAL TEXTBOOKS

by

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Chapter One – Introduction

Imagine having a library full of books for reading, references, or research contained within a single device weighing less than five hundred grams. Within this library are books for entertainment, work and education. These are available on demand, and searchable throughout the entire library. With affordable devices flooding the market, this vision is now within reach.

This project began by engaging Faculty members at the University of Northern British, and getting them thinking about changes and transitions from print to digital textbooks. Many Faculty members within academia develop course outlines, and eventually supporting their outlines by developing and implementing their curriculums. Morris-Babb and Henderson (2012) both agree when developing material to support course objectives, “the text must be of high academic quality” (p. 151). However, it is important to make note that the requirements for classroom learning and advancements in technology can enable or require change. This change can be the introduction to new methods of learning and instruction such as reading texts electronically. To enable change, leadership will need to play a significant role in classroom direction, motivation, innovation, and creativity. This is a beginning point for transformation.

To define the focus for this inquiry, the term book will be limiting the inquiry to academic reading requirements of higher education. A further narrowing of the term would be to limit the required materials for courses specifically, the required textbooks for courses. This definition for this project that limits books to be only those required textbooks for courses still leaves a large selection of high quality materials supporting all disciplines to be included within this inquiry.

Significance of the Project

This research project has a timely focus given the emerging transformation of the print world. In the modern era, digital materials are increasingly being used for information transfer
and examples are occurring all around. One example of digital information transfer currently occurs at the University of Northern British Columbia (UNBC). UNBC’s Board of Governors receives their meeting package in the form of electronic files on an iPad for viewing. Previously these meeting packages were presented in large binders and given to each member of the Board. Quick searching of the agenda and minutes are now possible when there are large quantities of information, and in addition, agenda updates or missed items can be distributed and inserted fast and efficiently.

There appears to be an issue affecting the electronic book adoption in course curriculum which is the availability of a common platform. This common platform would allow users to access digitally protected materials. While a common platform has not yet emerged to dominate the market there are a few devices have begun to lead with affordability and application integration. Within this competition to create a platform that becomes the market standard, the consumer has benefitted. The costs of these electronic devices are affordable and these devices are readily available. In addition, the technical support has expanded. The amount of material available has grown providing consumers with a variety of options and selections in digital reading. With the increased volume of books available in an electronic format, more consumers are becoming familiar with this medium. They are then selecting these new materials and are making it easy for whom are now adopting digital materials for reading. Studies by Shepperd, Grace and Koch (2008) advises faculty to use caution when adopting digital textbooks as they may not yield the same result conclusions as these devices become more usable. Since the publication of this study the availability of devices and software to view books of all configurations, including multimedia, have increased significantly. The common platforms that are available and are emerging as consumer preferred choices include; Apple’s operating systems
for iPod/iPad/iPhone, an Android operating system supported with interoperability with Google, and Microsoft's Windows. Each of these developed platforms has pros and cons to their adoption and use. For example, electronic books are distributed in a variety of formats that work on at least one of the present mainstream platforms. As mentioned earlier, consumers have the option to select a device that best suits them. With the options available, Faculty can select materials that support their learning outcomes and that are capable of running on different devices. Students are still allowed choice in this implementation as they are able to select the reading device that meets their specific needs and match the applications available to their reading and learning styles.

Digital textbooks have the ability to provide value to education. If the electronic books are prepared in conformance with standards such as those defined by Universal Design for Learning (Center for Applied Special Technology CAST, 2011), then the book can be used with assistive technologies. This enables multiple ways of representation and can be tailored to the different needs and accommodations required by these individuals. Individualized student learning is becoming an expectation for classrooms to improve student engagement. By proactively selecting and building materials that can be used through the assistive technology standards, students can access already set course materials in a format they prefer — ie having the book read to them, versus reading the text. This proactive approach to embed accessibility functionality into materials removes or reduces the problem of providing material to identified disabled students on a special case basis. It enables all students to use their electronic devices to present the material in a fashion they have chosen. Electronic (e-Book) readers also provide the opportunity for end users to adjust font size. They also expand the capabilities of accommodation for students with physical or learning disabilities such as poor eyesight, dyslexia and restricted
dexterity that would be impeded by a traditional textbook. A unique feature of an e-Book reader is the ability to translate a digital textbook; this means that international students can easily have the course content translated into their first language and promotes the ease of learning. While this method of course content delivery does not overcome translation challenges, such as the interpretation of concepts, it may help provide options to alleviate language barrier gaps.

Portability is another feature available with digital textbooks. A full course load semester requires many print volumes of assigned course readings and by using an electronic device; students are able to reduce the impact of strenuous weight. The benefit of portability eases the volume of material a student needs to keep track of and even reduces the space needed to store the materials.

Background

The digital textbook initially began as an electronic version of a print textbook. Viewing the digital version on a computer tends to lack in familiarity and the known print reading experience. Bush and Cameron (2011) alluded to the lack of a well-designed portable reader as a contributing factor to the lack of interest in the use of electronic devices. As digital textbooks have developed, so have the devices for reading digital textbooks developed. There are now multimedia textbooks available for a variety of learning preferences. For example, the electronic versions of these textbooks can be searched for specific words, hyperlinks can be added within text to link to external resources, they can launch programs such as Excel spreadsheets, or they can contain short videos. Audio and video elements embedded into the digital content of the textbook provide the benefits of accessibility and expanded learning outcomes for auditory or visual learners. The potential to enhance the learning experience is improved with the multiple
deliveries and visual formats (Burgstahler, 2012; CAST, 2011; Chita-Tegmark, Gravel, Serpa, Domings & Rose, 2012).

Research shows that repetitive physical strain such as heavy lifting can be detrimental to the health and well-being of any individuals. A load of heavy textbooks lugged around by a student is a risk for back strain and injury (Rodriguez-Oviedo, Ruano-Ravina, Pérez-Rios, García, Gómez-Fernández, Fernández-Alonso, Carreira-Núñez, García-Pacios & Turiso, 2012). Reducing the risk of physical injury would involve reducing the load. The benefit of an electronic textbook in this case is the most weight carried by a student would be that of a single device. Data does not increase the weight of the device and the volume of data contained on the device can be equivalent to many bookshelves worth of textbooks. Another requirement for electronic devices is the ability to meet mandated functionality for disabled persons in terms of accessibility. This is another objective digital textbooks can fulfill. With the material presented in electronic form, screen readers can read, translate, or change the font size of text for increased viewing size.

As the world awareness of environmental issues increases, there is a greater effort made towards policies that embrace and promote environmental approaches. While there is much debate about digital versus print, those participating in this debate tend to highlight the cons which focus attention on negatives of each medium such as the harmful emissions required to create paper, the limited recycling opportunities for paperbacks (Carli, 2010; Romm, 2009), the precious metals required for electronics (Virginia Quarterly Review, 2010), and increasing power requirements for electronic readers (Mirns, n.d.). Another study would be needed to consider all factors and analyze the argument of digital versus print. For the purposes of this project, I present the electronic textbook as a green alternative to print.
Personal Location

Being an avid reader is a driving reason for my interest in the emerging area of digital textbooks and novels. My bookshelves are overflowing with books and I spend many of my leisure hours reading. Another reason I am interested in this area is the concept of portability. As a mother, trying to move my sons’ backpacks loaded with textbooks contributed to my interest in transition to digital textbooks from traditional paper printed mediums. I could barely lift the backpack so the idea of one device to carry the same volume, regardless of how many books are required, was much more appealing.

Leadership is a field of personal interest along with the impact of positive visioning. This project has provided me with an opportunity to combine my professional and educational background, plus my interests in reading, leadership, positive thinking, and my Masters’ studies together. It is my hope this information will provide some insight and contribute further to the transition from print to digital textbooks in higher education. As both an employee and a student, my viewpoint is blended with practical and idealistic stances. It is through my employee role in providing technology support, which I can see value in this technology and the enormity of what is involved in the seemingly simple task of transitioning from print to digital textbooks. As a student studying leadership, I envision and wish to explore further how to utilize leadership to maximize the opportunity in this transition process. Leadership requires engagement on many levels, not simply as a leader in a hierarchical organization. A leadership stance demonstrates integrity and results in trust from faculty. This type of leadership is important for enabling successful transition and change. Another element in leadership that I am particularly committed to is the focus on the positive outcomes that can come from leadership. In my opinion, the energy of a team when focused together in a positive collective fashion is a strong measure of
success for a leader. I have been in technology support roles for seventeen years at the University of Northern British Columbia (UNBC). This research may be the ideal opportunity to effectively contribute to new processes here and may build upon my thirty years of experience in information technology. I draw upon my roles as both, an information technology support personnel and as a graduate student incorporating my own values and embedding them into this research process.

**Overview of the Project**

This project focuses on Faculty and their views to transition from print to digital textbooks in their courses. The overall process of moving UNBC forward as an institution that selects to adopt electronic textbooks is an enormous effort. I can quickly identify some of many areas that would be impacted. First, the UNBC Administration would need to support and embrace such a change. Second, the internal Departments of Finance, the Bookstore and Library Acquisitions would need to negotiate new contracts for electronic formats, in addition to, agreements on intellectual property restriction. Third, information technology resources would be required to support the new formats and ensure their time would need to be allocated to train and act as a technical support to faculty, students, and staff. Concurrently, UNBC Faculty would need to adopt and change their course materials, students need to be willing to adopt new material delivery formats, and the textbook publishers must provide new delivery methods. UNBC Information and Telecommunication Services (ITS) requires awareness on what support will be required to ensure that their staff have the skills necessary to provide support. Additional resources such as the Center for Teaching and Learning (CTL) are needed to educate faculty on ways to alter their teaching to maximize the benefits of digital textbooks. The CTL would also need to inform faculty as to issues to consider during the evaluation and selection of electronic
resources, providing enough knowledge to enable faculty to make suitable choices for their own course requirement.

These are just a few of the changes necessary to transition to digital textbooks at UNBC. There are many details in this possible adoption process and too many to cover in detail within the parameters of this project. A study of all these issues affecting the successful adoption of electronic textbooks at a post-secondary institution is beyond the scope of a single project; as a result of this multiplicity, I have chosen to focus on the process that faculty uses when adopting electronic media. If digital textbooks are to become common delivery format for students, it is faculty who make that selection, leading to my belief that this was a reasonable research question to investigate. As it is not reasonable to expect faculty to implement a change this significant impacting their courses in the short window of time a project covers, this project was intended to be a format to start a positive conversation with faculty about this future direction. Seeking to understand what issues faculty perceives as significant, this project was based on a plan to identify factors that facilitate faculty support in adopting digital textbooks and describes the findings. The research method used in this project focuses on Appreciative Inquiry interview accompanied by questionnaires to mark the progress of the project.

Research Question

This project evolved from the research question, “What role does leadership play in transitioning course materials from print to digital textbooks?” This question was seeking to understand how a non-positional leadership role can impact faculty engagement toward a change to move from print to digital textbooks. A secondary question was “Does positive visioning improve the favourability towards digital books?”
The History of Digital Textbooks

The literature used to capture the history of digital textbooks stems from a variety of scholarly works of authors and some periodicals due to the short span of some technology products. Electronic text has existed for decades. In 1971, Michael Hart created the first electronic book (Chrystal, 2010). This started Project Gutenberg which is still operational and capturing existing books into electronic format. The most rapid growth in availability of digital books has occurred within the last decade as technology and distribution of technology has enabled access. Issues pertaining to the transferability and copyright are still being addressed in the evolution of digital books. As Acker (2011) noted, a high percent of IT leaders perceive e-book readers to play a significant role in providing instructional content over the next five years.

In 2004, Sony released an e-book reader based on the e-ink technology. Amazon, a leading online bookstore, entered the e-book reader market in 2007 with the release of their product called the Kindle. Prior to the introduction of the Apple iPad (Greenberg, 2010), Amazon Kindle and Sony Reader dominated the dedicated e-reader market. Based on a study of devices prior to the release of the iPad by Apple in 2010, Jorgensen (2010) noted twenty-four percent of students surveyed would use their cell phone to read an e-book. Bush and Cameron (2011) noted that by 2008, the Stanza reader application for the iPhone competed with the Amazon Kindle reader device. In the study by Jorgensen (2010), the dedicated reading devices ranked lower in usage than the cell phones. These articles demonstrate how rapidly the electronic device market has been changing.

Apple released the iPad on April 3, 2010, which is a tablet device capable of performing the operations of an e-reader and a web browser, running multiple applications and enables the
viewing of email. By October 2012 Apple reported there had been 100 million iPads sold. Bush and Cameron (2011) noted that by November 2010, the Apple iPad had thirty two percent of the e-reader market. Since the release of the Apple iPad, many other technology manufactures have released tablet devices.

With the recent availability and improved usability of e-book readers, the interest has grown such that publishers are expecting the digital sales to exceed print by 2014 (Jones, 2011). The demand for print books is rapidly diminishing. With the increase in tablet and e-book reader ownership, Brahme and Gabriel (2012) note that the consumer demands for e-books has increased significantly. Apple’s online bookstore, iBooks, also impacted the market with sales of 270 million eBooks between June 2011 and October 2012.

Between the increased availability of e-books and the diversity of e-readers available on the market, there is an impetus towards transitioning from print to digital. Governments and schools are evaluating how these devices could be used and how savings could be realized by using digital textbooks. Open Access initiatives have been developed to enable published works to be accessible and so they are not hidden behind complex subscription terms defined by publishers. Governments and schools have begun to look at using resources published under Open Access licences to reduce costs to students and keep education affordable. In October 2012, the Provincial Government of British Columbia announced it would be offering students free, open textbooks in the forty most popular post-secondary courses. All of these events are suggesting a significant shift from print to digital textbooks is underway.

Leadership Unbound

The literature used to describe and study leadership stems from a variety of scholarly works. Leadership unbound is leadership from a non-traditional perspective. A traditional
leadership role is one that is hierarchical or positional and the leader is in the formal position of authority. Non-traditional leadership is broader and not bound by formal roles. Mintzberg (2009, p. 66) describes, “a leader is anyone who breaks new ground, sets direction that shows others the way”. This definition is the ideal of leadership role used for this project.

With the rapid pace of computing technology changes, leadership is necessary to move educators towards embracing new resources for instruction. Technology is a tool educators can use to deliver information supporting the desired learning outcomes. The new generation of students are familiar with using technology to detect and discover knowledge on demand. It is important for educators to use these new electronic tools to develop their students’ learning skills to be critical of the information provided in abundance through electronic means and to ensure its validity. Barber (2011) indicates it is in the long term interests of an institution to include faculty in order to be proactive in the decision making related to technology. Technology enables blended learning opportunities (Bonk, 2010). Bonk (2010) further identifies how the information age provides a wide array of options to learn and expand our intellect and how a greater number of people are learning online. In short, a revolution in education is occurring. However, the resulting educational transition begins with and is enabled by leadership.

Several studies of a technology change provided insight into methods used to lead transitions with technology. Using the search term “leadership in technology” resulted in examples informing ones research. The following research projects provided ideas for this research project; Withers (2006) used Appreciative Inquiry for engagement in technology learning solutions. Baaz, Holmberg, Nilsson, Olsson and Sandberg (2010) introduced a strengths-based approach to provide a positive energy to projects and improve project success. Some key points emerged in their research such as the involvement of many actors being
important to develop a collaborative plan while ensuring trust is built and maintained. The theme of trust and integrity appears repeatedly in leadership material. Hsu and Sharma (2008) note that trust and rapport between change agents and stakeholders is an important component of leadership. This research is timely because technology resources are emerging that make the vision of digital textbooks highly portable. However, leadership in enabling the transition is key to success. Using action research and specifically the method of Appreciative Inquiry (AI) is well supported in the area of technology change with several examples (Avital, 2002; Baaz et al. 2010; Withers, 2006). AI is a positive forward-looking inquiry focusing on developing a vision to the future. AI provides a “practical change process” (Watkins & Mohr, 2001, p. 24) to readily deal with the rapid pace of technological change of today’s world. Finegold, Holland and Lingham (2002) identify limitations of a problem-based inquiry, as people seek to avoid blame, resulting in distancing themselves from the issue and the erosion of mutual trust. Using AI to engage a whole community to change may involve some formal leaders, but often informal leaders emerge through the process.

Demonstrating leadership is described in many ways. Kouzes and Posner (2008, 2003) call the process “Model the Way” and suggest that the actions of leaders can build trust and confidence. Bates and Sangà (2011) uses the concept of “leadership by example” to promote a particular technology. Success stories are told in Bates and Sangra’s (2011) work of grassroots initiatives where individual faculty or departments were developed in lieu of an institutional plan. These are the kinds of informal leadership successes that foster innovative thinking and facilitate significant change.
Leadership, Change and Technology

Leadership, change and technology topics in the literature are from a variety of scholarly writings that are published in primarily education focused collections. Students in this modern era begin their academic studies expecting to experience technology as a key component of their learning environment (Owen & Demb, 2004). This puts pressure on faculty to support technology integration in their teaching. It becomes important for institutional leaders to find effective ways to support their faculty to develop the skills, abilities and implement new tools necessary to serve these students (Keengwe, Kidd & Kyei-Blanson, 2009).

In searching for leading technology and change, another factor came to the surface, i.e. local language influences descriptors, yet information is now available globally. As globalization exists today, it is a challenge to identify similarities in ideas and concepts when local terminology is unique to the country. While leadership research may be happening globally, the local language influences how this leadership is understood. Cardno (2006) argues that learning leadership has many possible labels so linking these labels to their cross-cultural equivalents does involve some cultural awareness to identify the local term and link it to synonymous concepts used in other cultures. An example of this mixed terminology is that in England it is identified as educational leadership, whereas in New Zealand, is referred to as curriculum leadership. The use of terminology varies between countries but the importance of leadership in the adoption of technology remains the same. Search on the term ‘leadership’ included searches on curriculum, educational, and technology leadership.

The influence of the formal leadership role is enhanced with a trust relationship. While some changes can be achieved through the declaration of the formal leader, change engaged through trust has improved results. Anderson and Dexter (2005), indicated that when leadership
is based on trusting, the principal plays a strong influence on the effectiveness of the school. This trust is important to be able to successfully proceed with technology change. A technology leader also serves to guide the integration of technology into the learning (Sugar & Holloman, 2009).

Classical mindsets of leadership are not keeping up with the changing opportunities provided by educational technologies (Kowch, 2009) and need to expand in flexibility to adapt. Kaser and Halbert (2009) described growth mindset where learning is a lifelong pursuit as being important by leaders in schools to create change.

Davies (2010) also echoes the notes of Barber (2011) saying, that many voices need to be involved in the planning technology for successful engagement. Hughes, Ginnett and Curphy (2002) identify coaching as a powerful change facilitator and engaging the followers as part of the change’s success. It is not unusual for faculty members to coach students throughout their educational journey. Sometimes, faculty will assist in developing electronic textbook reading and influencing success of this switch to technology-based literacy. By moving toward this change, faculty need to be engaged in the idea of digital textbooks. Often the training for faculty is overlooked in the technology implementation which hinders effective integration into learning activities (Keengwe et al., 2009). Technology change calls for the leaders of institutions and classrooms to maintain expanded skills, including collaborative and visionary, to be able to adapt and respond to the rapid change environments (Keengwe et al., 2008; Kowch, 2009; Lebrun, 2007; Owen & Demb, 2004; Sugar & Holloman, 2009). In order to engage faculty, Fullan (2007) reiterates that leaders seeking to proceed with the transition from print to digital need to engage faculty to the change process by making the transition themselves.

For the purpose of this project, Appreciative Inquiry seemed to be the most suitable methodological approach. As technology experiences such a rapid pace of evolution, utilizing
time to focus on moving forward to achieve successful implementation within the shortest
timeframe and greatest engagement is often a key goal in technology adoption projects. Desiring
a positive visioning, the method of Appreciative Inquiry surfaced as the best fit.

Transitions from Print to Digital Textbooks

The literature in this area of study presented some challenges. The evolution of electronic
reading devices has been significant in recent years. Articles related to electronic textbooks are
primarily appearing in trade periodicals and magazines. At the start of this project investigation,
searching various scholarly resources resulted in many empty searches. Searching the same
locations and using the same search arguments has revealed new resources each time showing
that new material is becoming available. Bush and Cameron (2011) completed a study using
iPads in an academic context. Fedigan (2011) completed a study regarding a portable device
application improving the user experience reading an e-book, Tualla (2011) researched the effect
of the Apple iPad on an English Honours course, and Voorhees (2011) measured and analyzed
the reader experience on digital devices. All of these studies are relevant to the topic of this
study. In 2009, Miles and Cooper spoke of the ease of use and anticipating a significant change
is coming with the ready availability of portable readers. With the release of the Apple iPad in
2010, this eventuality has arrived. The issue of intellectual property for digital material is still in
transition and also has an impact on the electronic textbooks.

Politically, governments have been aware of and are executing actions towards
technology choices. Morris-Babb and Henderson (2012) discuss some legislative actions passed
within the United States in an effort to allow students greater options to affording textbooks.
Some of these pieces of legislation are aimed at increasing the use of open-access textbooks.
These open access resources help to reduce costs to students and institutions using these
resources. Morris-Babb and Henderson (2012) identify that most textbook choices are still made by the individual faculty and that fifty two percent of their survey participants indicated they were “not at all familiar” with open access textbooks. Acker (2011) speaks of the balance between freedom for faculty to choose and the need to negotiate packages providing students with broad access to digital resources with minimal costs. While various governments are pursuing the idea of open access textbooks due to costs or universal access packages, faculty need the time to review the resources, research the authors work and evaluate their lesson plans before considering the cost impact on the students (Acker, 2011; Barber, 2011). As academic arenas tend to be strong proponents of innovative thought and may be outspoken in nature, there is a trend towards rejecting the main stream publishers who put profit above content quality. Academics are also opposed to the limitations of restrictive copyright practices where the benefit is financially motivated. Morris-Babb and Henderson (2012) identify that many faculty still see open access textbooks as a lesser choice of material, though that mindset is changing. Chesser (2011) notes that open access is a recent development in the textbook realm and is rapidly gaining adoption. Open access will provide students with greater scope of resources electronically and lessen the financial burden associated with textbooks in either print or electronic form. In October 2012, the British Columbia Ministry of Advanced Education announced a project to use Open Access Textbooks for the forty most popular post-secondary courses. At this time, institutions throughout BC are working to agree on the materials for these courses. For this initiative to succeed, faculty need to be engaged in the evaluation and selection of resources.

This research towards faculty adoption of electronic textbooks is timely and necessary as institutions and faculty respond to pressures to find less expensive and green alternatives to
traditional supporting course materials. Projections for the electronic textbooks are expected to be about 18.3% of the textbook market (Andrade, 2011). Sales reports for e-books continue to report increasing percentages in comparison to print in the news. The adoption of electronic textbooks is a new opportunity for research and is evolving to change the delivery of knowledge and information in ways not yet explored. Ongoing literature searches in the area of electronic or digital textbooks reveals new material with each search as there is a current demand for information in this area.

**Enriched Content of Digital Textbooks**

There are new opportunities facilitated with technology to present content. A digital textbook can be read aloud by electronic text readers. This technology is providing an alternate way of presentation for people experiencing visual impairments or simply preferring an audio reading of the information. Digital textbooks can be developed with embedded multimedia that provides video, audio, and interactive charts to convey information in a variety of representations appealing to many different learning styles. These features can also be utilized to meet Universal Design for Learning standards (CAST 2011) seeking to provide multiple ways of representing ideas for different learning needs.

Interactive applications for the Apple iPad are already expanding the learning experience. Choi (2012) identifies one application, Cachalot, created by marine ecologists at Duke University that engages students and is supported by peer-reviewed articles available through open access. This application is available free and downloaded for example. The application provides tutorials on how to navigate the application; it has detailed descriptions of various marine mega fauna complete with high quality pictures to support. This application has been created to further learning starting from a class by David Johnston of Duke University on large
marine animals. Choi (2012) identifies side-by-side comparison studies underway to identify if these types of e-books provide improved learning outcomes versus existing textbooks. Another such e-book is Al Gore's book Our Choice created by Push Pop Press to showcase opportunities of interaction in digital books. This book is an application available through the Apple iTunes store that presents information regarding environmental impact on choices made and explores topics such as solar energy, nuclear energy, wind energy and other power sources. This particular e-book has text, interactive statistical displays, embedded videos, and pictures with maps to identify where the picture was taken. A limitation of this product is that this is only written to work on the Apple platforms of iPod, iPad and iPhones. These recent innovations hint at the potential opportunities digital textbooks hold to provide to enhance learning.

Summary

Rapid development of technology does not allow for delays looking retrospectively at the past equipment features and usability. With the increasing rate of technological innovations, leadership plays a key role in the adoption of new technology tools. The AI methodology assists in facilitating engagement through the group action of visioning the future created through the AI process. The interest and adoption of digital textbooks has been expanding due to advancement of devices suitable to reading such materials. To make the transition in the educational environment, leadership is needed to facilitate the move from print to digital. On a broader scope, the digital textbook appeal is growing. Governments are exploring the use of digital textbooks to ease the financial burden of print in the educational sector. Open Access Copyright provides an option that further promotes the concept of universal access and realizes the reduced costs of textbooks in digital form. Navigating success to these goals requires leadership skills from different locations and not necessarily formal positions. Development in the process to
engage many in the change is a key role now required for leadership in the transition from print to digital and well suited to the method of Appreciative Inquiry.
Chapter Three – Methodology

Qualitative – Appreciative Inquiry

As the rate of adoption of digital reader devices is happening at a rapid speed, a change mechanism that moves forward and focuses to the future is optimum. This project seeks to utilize qualitative research to gain additional information about faculty, their choice of course textbooks and how to bring about change. As the research question is “What role does leadership play in transitioning course materials from print to digital textbooks?” and utilized as an open ended question starting discussion, qualitative research methods are well suited to discover new information about leadership and processes for transitioning course materials. Given the active role participants take in providing stories and describing their view of what the future may look like, the action research method Appreciative Inquiry was chosen as the method to conduct this research. This project is descriptive in nature and was not intended to have any statistical significance due to the small sample size. This project can be viewed as a pilot study assessing the usefulness of Appreciative Inquiry for a larger scale project involving an entire discipline or the whole institution.

Appreciative Inquiry (AI) is a newer process that has emerged in 1980’s initially through the work of a doctoral student, David Cooperrider. His work was developed under his advisor Suresh Srivastva in the area of organizational change (Ellevan, 2004). Watkins and Mohr (2001) provide a historical timeline of the evolution of AI. Throughout the literature, many of the names listed in the history such as David Cooperrider, Ken Gergen, Bernard Mohr, Suresh Srivastva, Jane Watkins, and Diana Whitney appear co-authoring in various books and cited in articles using AI. The strength of AI to focus on positive features and to develop a vision engaging the whole are the processes I wanted to explore further. “Adopting an appreciative inquiry lens
implies one’s conscious commitment to a humanistic, affirmative, and participative way of
doing” (Avital, 2011, p. 4). Research using AI is growing rapidly with its premise of looking at
what works and making it better.

The theoretical base for the AI involves five principles: positive, anticipatory,
constructionist, simultaneity, and poetic (Baaz, et al., 2010; Cooperrider & Whitney, 1999;
Cooperrider & Whitney, 2005). In addition, three other principles were implemented, wholeness,
enactment, and free-choice (Whitney & Trosten-Bloom, 2010). The constructionist principle
involves building connections through social interaction. This interaction is inquiry, the
simultaneity principle, and starting the change. As the inquiry is answered, the poetic principle is
executed where the description shapes the future. This description lends to the anticipatory
principle of the image inspiring action. Wholeness, enactment, and free-choice are about sharing
stories, acting as if to create a self-fulfilling future created by empowerment of free-choice
(Whitney & Trosten-Bloom, 2010). The initial five, and additional three principles noted, are all
similar and reflect the underlying theoretical framework building the positive vision and
following that image to shape and obtain the future goals.

Watkins and Mohr (2001) emphasize the values of AI are grounded in this theory using
future visions generated through the AI process to create new realities and future. Watkins and
Mohr (2001) identify Ken Gergen’s work on the social constructionism theory as having a strong
influence on AI. Using the constructionist viewpoint to build the shared meaning and realize the
connection points to take action is a suggestion from Kaye Hart, Conklin and Allen (2008).

These developments set the tone to dream of the potential visions. Shifting the mindset is
important to generate new ideas. “Because AI is based in a social process as well as an internal
one, it supports the need to make meaning out of experiences collectively” (Hart et al., 2008 p.
These social and internal processes facilitate the positive energizing vision that AI is becoming known for.

There are four stages of Appreciative Inquiry that have consistently emerged called the 4-D model. For example, Figure 1 can be found in any of the sources listed with minor variations on the word choice. Watkins and Mohr (2001) add one additional D to the process called the definition phase which includes the stage where the question, the participation and the inquiry process are defined. Some of later works of Whitney and Trosten-Bloom (2010) show this as “Change Agenda and Topic Choice” leading into the circle at the Discovery phase. Watkins and Mohr (2001) also show another model called the Mohr/Jacobsgaard Four-I model where the diagram looks similar with the labels: Initiate Inquire, Imagine, and Innovate replacing Discovery, Dream, Design and Destiny in the 4-D model.

![Figure 1 Appreciative Inquiry 4-D Model](image)

Source: Adapted from Cooperrider & Whitney (2005); Cooperrider & Whitney (1999); Elleven (2004); Watkins & Mohr (2001); Whitney & Trosten-Bloom (2003); Whitney & Trosten-Bloom (2010)
The framework of the 4-D model is cyclical and can be repeated. The ‘discovering’ phase (the best of what is and appreciating), moves into the ‘dreaming’ phase (what is the world calling for and envisioning), to the ‘design’ phase (what should be the ideal and co-constructing), and then developing into the ‘destiny’ phase (delivery and how to improve and sustain) (Willoughby & Tosey, 2007). In this project, only the first two stages will be discussed in the interview process. The limited scope of this project results in not including a design phase to develop what should be the ideal or a destiny phase to implement new processes.

Understanding AI, or providing an introduction, is the first step towards using AI to generate new ideas (Baaz, et al. 2010). A key function of the interviews and focus groups are to reflect on the “positive core” (Cooperrider & Whitney, 2005, p.8) of the organization. Talking about the positive core gives it life and enables staff and stakeholders to reveal stories of what is done well and open up the imagination to what can be done better. The inquiry that creates this visioning is part of the anticipatory principle in the imaging and the poetic principle through the articulation of the stories which generate the positive momentum towards change.

In this project, the initial interview development plays a key portion of the project as these questions set the framework for the responses from faculty. The pilot sample in this inquiry is a total of four faculty members representing a variety of diverse disciplines. An expanded version of this research would encompass the institution as the topic is of interest and impact involving the whole system. If resources of time and manpower were not limiting factors, this would be a desirable choice for the engagement of the whole system (Cooperrider & Whitney, 1999; Cooperrider & Whitney, 2005; Watkins & Mohr, 2001; Whitney & Trosten-Bloom, 2003; Whitney & Trosten-Bloom, 2010).
As I realized that many of the faculty members are unfamiliar with options available in digital format, I provided interested faculty a brief reading package to inform them of some of the options presently available and described terms presently in use. The interview was intended to allow faculty to describe the possibilities, and outline how in the future they can see utilizing digital textbooks, and identify what needs to be done to get to that future. These stories provide the background information to lead the change process for textbook material adoption. Analysis of the interviews identified opportunities for the institution in support of the adoption of digital textbooks.

Identifying what role leadership plays in transitioning from print to digital textbooks is the research question this project seeks to identify. Utilizing Appreciative Inquiry as the specific method, this project sought to generate identification of positive processes facilitating faculty adoption of digital textbooks. The plan for this project included baseline questionnaires to identify where faculty members presently are in their perception of e-textbooks in relation to adding value to their curriculum. Providing some introductory explanations of print and digital textbooks along with the arguments for each in a simple reading package set the stage for the interviews. An appreciative inquiry interview regarding how faculty can adopt electronic textbooks as their curriculum materials develops a vision towards implementation of digital textbooks integrated into course learning. A follow up questionnaire was intended to assess if non-traditional leadership influences the faculty perceptions towards transitioning their course materials from print to digital textbooks. This research puts focus on leadership required to engage and redirect faculty perceptive towards the adoption of electronic textbooks supporting class work, learning objectives and goals. Generating faculty engagement was the goal.
Increasing excitement towards the process of electronic book reading with faculty was viewed as an additional benefit.

**Ethical Considerations**

This project has many broader ethical issues to consider. Faculty are busy and any research impacts their time. As this research is not of direct benefit to their discipline, it is by their own choice for their participation. As there are increasing demands on faculty, who should decide if digital is better than print? Or should options be provided and the ability to access the content in both digital and print be the criteria to meet? Other ethical considerations are the financial burden on students based on the faculty selection of resources, the biases of faculty; towards technology, towards open access resources, inexperience/familiarity with technology, and unfavorable past experiences.

Another ethical consideration is whether digital greener than print. There are compelling arguments to support both points of view. Paper comes from a renewable resource while requiring large outputs of energy to harvest and process the materials to create print. Paper production is seventy percent of the total carbon emissions attributed to the book industry (Romm, 2009). Digital requires electricity for devices reading the textbook, devices supporting the networks, devices hosting digital data and backup of data, much of the power consumed is generated from fossil fuels (Carli, 2010). The production of electronics requires precious metals (Genoways, 2010). This is a discussion greater than this project, but this brief summary does provide some consideration in the ethical evaluation. For the purposes of this research project, digital will be accepted as a green solution.

This project received Research Ethics Approval from the University of Northern British Columbia. All interviewees signed consent forms.

The first stage in research is identifying the research project and its scope, what resources are required and how to obtain those required resources. For this project, participants are asked for their stories for the researcher to analyze. Using human subjects requires developing a proposal and obtaining approval from the Research Ethics Board. Once approval was granted, then it was necessary to find participants willing to provide time to this project. Email invitations were sent to a variety of faculty with the plan that each of the first two consenting faculty from each College would be the selected participants. UNBC Faculty members were emailed an invitation to participate along with a brief description of the processes involved. Four faculty members from different disciplines accepted an invitation to partake in the study. Of these four faculty members, two were from the College of Arts, Social and Health Sciences and two were from the College of Science and Management. A critical criteria for being selected as a faculty participant is that the faculty member could not be on sabbatical during the participatory period and had not yet utilized a digital textbook for their course materials.

The process included a short questionnaire to identify their present viewpoint. After this questionnaire was completed, the interviewee was given a reading package consisting of some history, common terms, and explanations of print and digital textbooks. After the reading package, an interview was conducted using the Appreciative Inquiry interview method and electronically recorded. The interviews took place up at the University of Northern British Columbia’s Prince George Campus within the respective faculty member’s office. Prior to the interview, a consent form was provided and each faculty member was given the opportunity to review the process and, consent. After the interview, another short questionnaire was conducted
to record the viewpoint. The interviews were transcribed, returned to the interviewees for validation, and the transcripts were then themed and analyzed.

Commencing with a questionnaire to capture the initial viewpoint of the interviewee is the first stage in this project's data collection. Using the UNBC survey site, two questionnaires were constructed. This ensured the data was located on a secured server. This data within the questionnaires was compiled by the survey software and provided a summary of the responses on each question. The interviews, framed using the Appreciative Inquiry method, were scheduled within a few days of the initial questionnaire. These interviews took place in the office of the faculty members and were recorded and transcribed for analysis and themes. After the interviews, a follow up questionnaire was given to identify if the non-positional leadership influence had altered plans and perspective towards the transition from print to digital textbooks was completed and the collected responses were summarized for each question.

**Data Analysis**

Once the questionnaires and interviews were completed, the collected information was reviewed. One interview was not successfully recorded and that interview content was reconstructed from the notes taken during the interview and reviewed by the interviewee for validity. All interviewees were provided with the transcripts of their interviews for review and acceptance.

**Before and after interview questionnaire data.** Data analysis comparing the descriptive results of before interview data and after interview data from the questionnaires was seeking to capture if faculty perceptions towards digital options altered. The questionnaire questions were asked to determine self-assessed knowledge of technology, perceptions around digital resources, and future directions.
Technology knowledge. Within the questionnaires, the responses to the question regarding technology knowledge provide a self-assessed value of personal technology knowledge. These responses reflected some familiarity with technology. Half of the responses rated themselves as knowledgeable. One person indicated their knowledge was somewhat familiar. One response rating personal technology knowledge to “Can use some technology” was the lowest technology knowledge response provided. This question could have been expanded to further identify the scope of knowledge as technology knowledge can be a broad description. For the interviewees, having a comfort level with technology does serve as an indicator of the ability to understand features that digital devices can enable.

Approaching technology problems. The questionnaire for evaluating how technology problems are approached were included in both the before and after survey. Within the first questionnaire, the questions were seeking to understand how faculty approach technology and what steps they take towards resolving their technology challenges. In the second questionnaire after the interview, the intent was to identify what IT support may be necessary to optimize digital textbook adoption. These questions were asked with the idea that this project could be informative about additional needs such as the requirements for IT support to enable the adoption of digital textbooks. The response on the question of how technology problems are resolved provides an interesting point where half of those interviewed use word of mouth from family, friends and/or colleagues. Questions with regards to support requirements indicate only one interviewee was comfortable with their own knowledge. Three of the participants require some additional support. An opportunity for informal leadership to support the transition may be indicated in this response.
Using digital resources. Expanding the scope to ask if digital resources are presently used for courses, all respondents use digital resources presently. So some familiarity and exposure to the opportunities have been utilized. The after the interview questionnaire asked if the interviewee would expand the digital resources. In this question, three of four responded ‘No’, there would be no expansion of the digital resources used for their classes. These responses about expanding the digital materials suggest that there is room for leadership in this area to discover opportunities and challenges. It can be interpreted as an unwillingness to expand the digital resources, but it may also present opportunities to be explored. This question could have been further developed to define what the perceived barriers of implementation may be.

Using digital textbooks. Questions pertaining to the use of digital textbooks were asked in both questionnaires. In the first questionnaire, the question asked was, “Have you considered using digital format textbooks in your classes?” The choices included: ‘Yes’, ‘No - do not agree,’ ‘Never thought of it’, or ‘No answer’. Two of the participants responded ‘Yes’ and two responded that ‘No - did not agree’. The second questionnaire asked the question “would you consider using digital textbooks for your course?” The choices to this question included: Yes – next year, Yes – within the next three years, No – not interested, No – do not agree, or No answer.

In the comparison there was no change between the before and after for the question to use digital textbooks in the courses. In this question two participants were not interested and disagree with the idea of adopting digital textbooks. The other two participants are expecting to adopt digital textbooks within the next three years and had considered digital textbooks prior to the project.

Open Access resources. As there is a provincial initiative to adopt Open Access textbooks within BC (BC Government Ministry of Advanced Education, 2012), questions were
included in both questionnaires pertaining to this area. In the first questionnaire, there was little knowledge about this initiative acknowledged by three of the participants. Only one respondent felt they had some knowledge of the government initiative. When the question was posed in the second questionnaire about using Open Access Resources, two of the participants said they would consider using these to reduce the financial burden and the other two would consider this option if the correct material could be found. These responses suggest that there is an interest and awareness of open access resources as an option for faculty to assist their students in ways to ease some of the financial burden on their students.

**Experience with electronic reading devices.** Questions to determine the participants’ previous experience with electronic reading devices were posed in the first questionnaire. Only one of the participants had read a book on an electronic device and rated this as a somewhat enjoyable experience. The remaining participants had not read a book on an electronic device and remained neutral in the response to describing the value of the experience. The limited experience reading books on an electronic device may be a factor influencing the dream phase of the AI interview. As part of the AI process, the dream phase uses the simultaneity principle to begin change as it is thought the process of inquiry start the seeds of change (Cooperrider, Whitney & Stavros, 2008).

**Multimedia enhanced digital textbooks.** The first questionnaire asked two questions about multimedia enhanced digital textbooks. The first question was “if digital textbooks expand to include multimedia embedded within them, would this provide the additional learning resources to support your curriculum and learning objectives in your courses?” The second question was “If digital textbooks could contain these multimedia features would you want to use them for your course material?” All participants answered yes to both questions. The responses
to these questions would suggest that if digital textbooks were to provide additional value, there may be an interest towards digital textbooks. There appeared to be energy and enthusiasm in this area. Examples of some current market textbooks with enhanced media were demonstrated at the end of the interview and this may also have helped provide insight to the potential value of such features.

**Writing or publishing a textbook.** Looking to the future, two questions regarding the process of publishing were included in the second interview. The first question asked was inquiring if the participant had written a book in their subject area. None of the participants had written a book in their field. The second question asked “would you consider writing a textbook using multimedia to convey the important points and provide multiple ways to represent important concepts?” This question was included to identify if the participants could see a future growth opportunity with the digital textbooks. An additional value to these processes enabling multiple representations is the idea of Universal Design for Learning (CAST, 2011) is viewed as opportunities for technology to assist teachers. Given unfamiliarity with the process of publishing, it is significant to note that two of the participants would consider writing books that would include multimedia material to expand ways to present ideas. These responses may hint at the dawning of a new vision towards digital textbooks.

**Interview coding.** The following description will give an overview of how the interview coding process unfolded. In the beginning stages, an open coding of the interview transcripts was done and did not provide themes relevant to the project. Reflection of the goals of this project changed the focus of the coding to be descriptive to the research question. The interview transcripts were coded for the research question, “What role does leadership play in transitioning course materials from print to digital textbooks?”, from the viewpoint of can a positive visioning
conversation improve the perception towards digital textbooks. As the interview questions were framed in the AI manner, most of the conversations had positive reflections. In this process of coding, three areas emerged as the common themes: engagement, reading and technology. Within each of these areas, a positive or negative tone was captured through the coding such as a positive engaging story or a negative reading experience or a positive technology story. At the end of the initial coding, little connection to the electronic textbook was identified.

Comparing positive to negative comments amongst the themes, I chose to visually plot those general codes of positive and negative responses within the coded themes. This created a visual which I required to assist my analysis in identifying areas for further investigation. In viewing Figure 2, the greatest negative values are towards technology. This co-relation had not emerged when reflecting on the stories alone. In viewing this graphic, I reflected back to the stories in an attempt to identify where this emerges and what these stories provide in this focus.

![Figure 2 Interview themes illustrating positive/negative comparison](image)

*Figure 2* Interview themes illustrating positive/negative comparison

The initial results of the interview coding seemed to produce limited results to support the research question. The visual representation of that distribution noted in Figure 2 helped develop
the focus on the stories to look closer into the technology reflections within the stories. This refocus on the specific theme and attribute helped bring together the stories with the research question.

A large portion of the stories focused on reflections of engagement both as a learner and as an instructor. Ideas of interaction from stories such as “I want my students to participate” give suggestions to include activities creating participation. This also can be suggesting course development to ensure activities incorporate participation with digital material as a way to support the transition of the textbook format. There were stories as a learner describing the impact experiencing an instructor who was passionate about what he taught had on the learner. Passion as a descriptor appeared a few times in reference to engaged teaching and learning stories.

**Findings**

The trend of strong, positive responses across the themes reflects well on the AI type of questioning. The overall tone of the interviews was upbeat and developed as the sessions progressed. Due to the concern of time, the interviews were kept short lasting approximately between twenty to forty minutes for the interviews and included a windup discussion. If this research were to be expanded, an allotment of a longer period enabling further expansion of the stories and visions would be recommended.

Much of the interviews provided positive themes pertaining to engagement. Engaging both instructor and students in the subject emerged as a dominate theme. Stories gave life to the personal experiences as both a learner and as an instructor. The most passionate reflections were of stories where students and faculty were engaged in learning. The success of students is noted as a strong motivator for instructors to engage in their role. One interviewee noted, “I feel most
engaged when my students are responsive in class”. A strong sense of reward for faculty came through in the stories when students developed a connection between the learning material and how to apply that knowledge in the world around them. One faculty member reflected, “I have always been a learner, which is why I became a professor so I could keep learning”. Another reflection was, “My entire career I have been engaged as an instructor. Talking with students and seeing the light bulbs come on as they get it is the best”. Faculty stories also showed a strong reflection of their own student experiences as an influence on their own practices and methods of instruction. One story spoke of a negative learning experience, “they were really negative experiences and I learned that was not the kind of professor I was going to be”, thereby shaping how they did not want to instruct or run their classes.

The area of reading included both digital and print. Comments were made pertaining to the volume and quality not the delivery type. One interviewee revealed, “As a student, I didn’t read most of the textbooks”, and another one reflected on the reading experience, “and I know for myself that if you just read it in a textbook it doesn’t click”. These reflections are worth mentioning as some of the reading experience between digital and print is about the engagement to the content not the medium delivering the content.

In analysis of the comments related to technology, there emerges excitement towards the ability of technology to provide multiple ways to engage students in learning experiences through video, and links to the internet. The stories spoke of bringing many resources that appeal to different levels and different interaction providing greater engagement in the learning. In the negative points, the static nature of a textbook print or digital was identified in the participant statement, “the things that limit book reading is that it is not interactive, I mean it is you and the
book or it’s you and the article. And that is very static”. This links to the questionnaire regarding using digital material to support textbook material.

One participant stated, “only if everyone actually had the technology”, reflecting that equal access to technology was noted as an important factor to ensuring equitable opportunity for students to material supporting learning. Enthusiastic visioning of, “being able to sit down and just read anywhere”, was the life giving story told by one interviewee. Another story spoke of the experience of, “flipping through pages to find content that appeals and links together”.

Concerns about the security and integrity of the digital form were identified. One participant stated, “if an e-book is hosted on a web site, someone hacking into the system could alter the integrity of the book for everyone accessing that book. How can you protect the content?” Another statement made by a participant was, “the digital can be lost so quickly with a magnet”. The glamour of technology also made note as a negative in the reflection, “I think we can sometimes lose sight of the point where there are too many bells and whistles”. Some of these negative statements towards technology may also be the result of negative experiences with technology.

A strong theme of the use of multimedia as a value of technology was noted. The mention of the portability of text on an electronic device as constant weight instead of the variable weight of print was one specific reflection. Another reflection with regards to technology was the ability to link text and search text without the sequential flipping of pages in one interviewee’s story. Yet in another person’s reflection, there was a sense of loss to this tactile experience provided by print flipping between chapters and finding topics to link.

In reviewing the results of this research project, the need for expanded questions included within the questionnaires has been identified. A self-reported lack of technology knowledge and
a limited ability to resolve technology problems impair the idea of a technology solution developing. Further questions may have assisted in identifying specific areas for support to develop and give improved perceptions of existing skills. This would help provide greater optimism towards future plans based on technology. Also gaps were noted in the interview questions, in particular the progression from the discovery phase to the dream phase. Stories of what is good did not transition well to what could be. There was limited visioning towards the topic of course materials, specifically textbooks. The AI interview questions did not generate a strong vision to the future in the context of moving from print to digital textbooks in part due to the question asked did not connect from what is good in learning and teaching experiences to what can be with technology supporting learning and teaching. Crafting an AI question is a challenge and in the case of specific focus, it is a skill to capture and engage the audience to think of what can be from the discovery phase discussions. The leap to technology supported reading is a difficult one to envision if reading on the screen has been associated with a negative experience such as a monitor in a fixed position, not a portable reading device. As AI is about the lived experience, it is problematic to envision with devices not yet experienced. The negative response to technology issues is greater than any of the other areas, but this may be explained by the results from the questionnaire describing lack of familiarity with technology. With such low self-assessment to technology knowledge, and without the opportunity to build a vision in a collective fashion, it is possible the negative response also is a response related to the unknown. Concerns of content integrity being protected and digital stored material being vulnerable to influences of the immediate environment such as magnets were noted in the stories recorded.

There seems to be limited enthusiasm towards a flat digital textbook that merely mirrors the print textbook. The questionnaire results illustrate no change in the interest to adopt digital
format. The digital format raised concerns with one participant as to the integrity as data can be hacked, altered with no evidence of this tampering visible to the reader. Only one participant in the study felt positive toward the format of electronic over print.

The findings provided positive visions of an engaged class and learning. In both the interviews and the questionnaires, the value of multimedia was seen by all. In the questionnaire responses all participants expressed interest to use digital textbooks if embedded multimedia exists within the textbook. One interviewee described the multimedia as, “where you can have a really good technology experience is where you can bring a lot of resources that appeal to different levels”. This is seen to enhance the learning and the engagement to the material. The stories spoke of eagerness to have engaging learning and teaching experiences. The stories give life to the idea of the digital textbook value coming in enhanced features expanding the text print provides.

Summary

The process of AI interviewing provided a foundation for positive conversation and was greeted well by the interviewees. Stories of learning and teaching engagement filled the discovery phase with what gives life to what has been experienced. In summarizing and analyzing the research, the transition to thinking of a future with digital textbooks and envisioning the results was not well realized in the interview process through the resulting stories. Ideas did emerge with closer analysis. Technology seems to be an unknown with some reluctance to embrace it. Reflecting to the research question, stories of engagement provide ideas on ways to help the transition process such as having activities that result in participation. Stories of reading provided insights to the lived experiences of reading that can be useful in moving to digital reading. Between the information from the questionnaires and the coded
interview transcripts, this research project was able to identify ways to help lead a change for faculty from print to digital textbooks.
Chapter Four – Discussion

This chapter seeks to discuss areas of possibilities for leadership in the transition from print to digital textbooks. Success with change is improved when participants are engaged and willing. Leadership roles assist in developing the engagement towards change. This project was about exploring how leadership from a non-positional role can develop engagement towards change in particular the change from print to digital textbooks. This project sought to explore the positive visioning through the Appreciative Inquiry method of action research as a means to engage faculty in the opportunities created by technology development in digital textbooks.

Leadership roles.

As previously noted the scope of this project could not address some of the many facets to the process of transitioning from print to digital textbooks. Within each of the following areas, questions are identified along with aspects to be explored further. Each of these areas could be a research project of their own from the viewpoint of leading the change necessary to transition from print to digital textbooks and have opportunity to be led by non-positional leadership. As this is about change, there is opportunity to different roles of leadership throughout the print to digital topics. The transformation of the institution towards this transition will not be led by one individual. It is likely to emerge as different leaders from different areas at different times. Positional roles will likely set dates for formal adoption, but it is in the role of the non-positional leaders that the energy and enthusiasm will develop for a successful transition.

Print to digital topics. Collectively all of these areas need to be addressed by an institution along the path towards digital textbooks. The role of leadership towards this transition is important and involves identifying when a formal positional leadership stance is required. Different components of this whole system project would benefit from a non-positional
leadership role, in particular the process for peer to peer collaboration. Often the enthusiasm of one individual leads others to engage in the exploration of new ideas. If an institution is to commit to this transition, AI would be a powerful resource to develop both the vision and the engagement of the larger group to the change. One strength AI provides is the involvement of many to formulate a collaborative plan.

**Technical considerations.** Some of the questions include what is required in terms of devices, software and how updating may happen. Another consideration is how long the technology will be available. Leadership in these areas will help define both equipment and support training directions necessary. Lamb and Johnson (2011) provide some tips on considerations to issues facing decision makers in the selection of resources both the devices and the content materials. Within each discipline, unique content and usability requirements must be understood. In discipline such as Natural Resources Management, there could be the issue of outdoor weather concerns and waterproofing to be weighted in the evaluation of devices suitable. The cycle of repair, the costs of components, the process to powering devices, identifying usability features and how the device meets the needs require leadership. This leadership is most likely emerging from a non-traditional location as the technical skills are not expected in the role of the positional leader. This leadership role may come from interested students such as those involved in any of the Green University™ projects. Working with the various viewpoints and understanding the needs are parameters to be defined for the scope of research.

**Copyright considerations.** As new laws pertaining to copyright are passed in regards to digital content, this needs to be reviewed and critically reflected upon how it applies. Some publishers have been managing this with Digital Rights Management software. This software at present is awkward to use and presents some barriers between devices. As this area continues to
change with the influx of devices and accessibility to digital books, this will require a process defined to regularly review and identify the current market practices. The laws for electronic media are still being written and challenged to provide clarity of what is included and what is not. Ongoing reflection of this and what impact it has on the various clients using the digital textbooks is required. It is likely this area will be led by staff from the UNBC Geoffrey R. Weller Library or through staff from the UNBC Bookstore as both units would be actively involved in providing guidance in the contractual terms necessary for the acquisition of materials. While some of this change is driven by formal roles such as laws, the leadership of those tasked with communicating new definitions can engage and encourage others towards willing compliance. Approaching discussions with others with an AI modelled framework can assist in moving forward in a timely fashion and providing the leadership to facilitate compliance.

**Support considerations.** Support considerations should include; how to get assistance if the digital material is unreadable; what to do if the device experiences failure; and how this would impact delivery. Is the institution providing support for digital textbooks? Does the bookstore require the publishers to provide support or is this left to the students to figure out. How much support does faculty need to evaluate different options? How committed is the institution to supporting this transition and what kinds of resources are being dedicated to support this move. The UNBC departments of Information and Telecommunications Services (ITS) and Center for Teaching and Learning (CTL) are likely where leadership roles will come from to provide workshops to inform faculty regarding researching the types of devices and types of challenges to be aware of when selecting materials. The opportunity to engage faculty in new ways can be done in an experiential fashion using demonstrations and hands on activities to introduce and develop discussion towards new ways. By approaching these informational
sessions with AI framed questions, stories can emerge; the demonstration of the new technology can aid in the envisioning what the future may look like. New innovative approaches can be constructed from the lessons in the stories along the demonstration to illustrate possibilities.

**Supporting materials.** Research into the types of options offered by publishers for additional resources to assist the students is another ongoing exploration. Additional materials may include online resources, video clips, and online self quizzes. Does the publisher provide this material and at what cost? How is student data protected if they are online and entering student information to uniquely identify them for marking? These areas can be led by people with a comfort and skill in these types of materials. AI discussions could lead to the development of alternate solutions through the collective discussion where stories give life to options available. The idea of the multimedia digital textbook can create lots of ideas of what that might include. Stories of learning with digital resources could develop new innovations for how digital resources can be presented. Research could include how existing additional resources are marketed and selected and experiences with these resources towards effective learning. Privacy issues must be considered for any resource providing assessment feedback for students. Research in this area can be varied and should include representatives from the UNBC Bookstore, ITS, CTL, and the Privacy Officer.

**Institutional policy.** Future research could involve looking at what policies have been created as various institutions and how well those policies have been implemented. This project could be used to inform decision makers with options and ideas on ways to proceed. Does the institution have a policy regarding the adoption of digital textbooks? Does the institution provide any support towards the devices reading such material? If a student encountered failure with the file, what organization is responsible? How lenient are the policies when such failures impact
students' ability to meet deadlines? How important is the initiative to move to digital textbook to the institution? Is this supported in preparation time and training opportunities for faculty? Is this something the institution is mandating? Does this have implications for Faculty Agreements? A formal leadership role would be best suited in the task of defining institutional policy. Hillman and Corkery (2010) recommend policy development include all the stakeholders. This process involved both the formal and non-traditional leadership to engage the stakeholders in adoption of policies developed. As the technology tools and delivery are changing rapidly, the AI process can inform policy makers how to proceed. Stories from all areas of an institution can give life to the impacts felt and help inform policy development.

Learning requirements. Reflecting on the responses to the survey question regarding the need for IT support, providing training for faculty would benefit the adoption. Faculty need to be supported to develop and explore new resources supporting their courses. Ensuring institutional commitment to provide the resources necessary both in terms of training for faculty to develop skills in using the materials in this new format and the opportunity of time to develop or alter existing courses to utilize digital textbooks is important to the adoption. Barber (2011) notes many decisions made by institutions neglect to consider the impact on faculty and course development when policy is implemented.

Learning requirements can be from alternate viewpoints such as what is required for students and how does the digital textbook meet the pedagogy. Requirements of students with disabilities, both visible and invisible need to be met. Burgstahler and Cory (2008) reflect on how higher education institutions are experiencing significant increases of students with disabilities. An area of research could focus on how digital textbooks meet the needs of these students. A further study could look at how to inform faculty about standards such as the
Universal Design for Learning (CAST 2011) that can enable the individualization of courses for students. Embedding the positive framing of AI questions can be utilized in many situations to create social interaction and construction of new ways enabling innovative solutions to develop.

**Digital textbooks distribution.** A consideration is how the distribution of the digital textbook occurs. If a password is provided by the publisher for download purposes, a few questions should be considered. Is this unlimited download, is there a limited number of times the electronic file can be downloaded and is there a limit on the time this resource is available. Another consideration is the number of devices to read the digital textbook on. For example an iPad, an iPod, a laptop and a desktop computer could be resources the student uses. Do the licenses allow for the book to be accessible on all devices? In the event of a device failure, what is required to obtain another copy? If the digital textbook can only be viewed online, how does this impact for the remote students without high speed internet access? Bates and Sangrà (2011) reflect innovation towards using technology will come from the bottom up due to the autonomy awarded to faculty. Research into the types of technology use happening in the classroom within an institution present value to the decision makers to the policies being written.

**Appreciative Inquiry Interviews**

The Appreciative Inquiry interview is best suited as a mechanism for change. In this project, it was used for inquiry with no change required. It is developed to serve whole system reform. In the limited discussions of this project, the power and strength of AI to engage and generate ideas of what the future may look like was felt in a smaller scale. It is requires some skill in maintaining a forward focus and keeping the questioning positive. Expanding the AI interview to further discuss technology possibilities in the context of teaching and learning would be beneficial.
In the focus of the AI method, some gaps were identified in the research conducted during this project. A gap was noted between the discovery phase of what is exceptional teaching and learning experiences to the dreaming phase of what could be with digital textbooks. This process requires an expanded conversation identifying the roles technology plays presently. This expansion provides the additional time to develop ideas and bridge to the dream phase. Through this envisioning process, the group collectively fashions the future. Allotting additional time to develop trust is already identified as necessary. If a larger group was included, the wholeness principle of AI comes to complete the process and enable the collective whole and synthesis of many stories (Whitney & Trosten-Bloom, 2010). The research would be able to look at the adoption of the digital textbooks and further analyze steps in the process. One gap noted is in the sample size and process. Ideally whole system reform would include a majority of those involved and would be done in a group conversation. An expanded version of this research would encompass the institution as the topic is of interest and impact involving the whole system. If resources of time and manpower did not limit, this would be the desirable choice for whole system engagement (Cooperrider & Whitney, 1999; Cooperrider & Whitney, 2005; Cooperrider, Whitney & Stavros, 2008; Watkins & Mohr, 2001; Whitney & Trosten-Bloom, 2003; Whitney & Trosten-Bloom, 2010). This would meet the AI principle of wholeness brings out the best and would facilitate the understanding of the whole (Whitney & Trosten-Bloom, 2010). Demonstrations of the material from different electronic devices would enable experiential opportunities possibly generating additional innovative approaches. This experiential component would help the construction of a vision by providing a sense of what the new technology brings. In regards to technology, sometimes it is difficult to envision something never before seen.
Another gap noted was with the wording of the questions. The challenge in crafting these questions is keeping the tone positive (Cooperrider, Whitney & Stavros, 2008; Watkins & Mohr, 2001). For the research conducted, an additional challenge exists finding a common point of understanding. There are various points of comprehension and experience to the digital textbook for each person. Skill development in having AI interviews would be an additional preparation step to contribute to successful AI based research. Also planning to include a demonstration of such new technology can help construct a vision as the experiential opportunity provides some example. In the initial project, demonstration of a multimedia textbook aided in the comprehension of what some desired features may include.

Moving forward, further training in the specific area of Appreciative Inquiry facilitating would provide the skills necessary. In this particular area, reading from textbooks provides some of the knowledge necessary, but training with skilled AI experts would provide the additional advantage to achieve the interaction necessary to discover, dream, design and create destiny. Further research ideally would include a longer time frame to discover and allow the opportunity to develop specific common knowledge and detail to this area. This time also is used to develop the relationships and trust to engage and tell the stories that give life to the vision (Cooperrider, Whitney & Stavros, 2008). With regards the specific questions used in this pilot, the dream questions need to be expanded and structured to allow greater development of the dream phase.

Expanding the process to include small groups of people would enable some of the underlying AI principles. In reflection of the pilot project, the interviews were conducted one on one and this limited interaction does not develop construction of collective ideas and enabling stories to give life to the development of a future. Additional research should be conducted for an
extended period to encompass all four stages. Extension of the time allotment would allow the design and destiny phases to be explored and developed.

Creating Digital Textbooks

The enthusiasm and interest by all respondents towards multimedia digital textbooks generates the idea of researching how does one create such a resource? Can a member of one discipline lead another to tackle the challenge of creating a textbook? What features expand the pedagogical delivery of information in a digital format? Choi (2012) noted there is presently a study underway comparing print textbooks with enhanced digital textbook learning outcomes. A similar type project would provide an opportunity for faculty to lead the development of both the digital resource and record the results on the learning. As the technology tools continue to expand and provide greater opportunities to explore and deliver new material, ongoing projects creating enhanced digital textbooks would help provide faculty with the tools to provide learning environments for diverse learner needs. Already software tools to create digital textbooks are available for the creation of e-books. Topics outlined above for print to digital transitions would also be factors in the creation of the materials. The idea of what textbooks will look like in the future and how the material may be presented could be part of the focus of further conversations originating from the initial transitioning from print to digital discussions.

Future Research

As discussed, there are many areas to explore as the transition from print to digital textbooks is underway. Further research using Appreciative Inquiry with a group to maximize the AI principles to shape and obtain future goals built on the AI principles of whole-system change would be a possibility.
One potential research project could include the first or second year top forty courses included in the Open Access Textbook initiative in BC. Using this group of faculty from different institutions responsible for instruction in these top forty courses in first and second year undergraduate programs, the AI interview can draw out the stories that give life to the project and help shape what the learning experience looks like for those entry courses. This research would also include the various support groups also playing a role in the implementation such as the IT departments for support, the bookstore and library departments for contracts within these AI discussions and would expand the vision providing additional perspective. The process would include the all of the AI phases including the design phase to craft questions more suited to what is ideal in terms of transitioning from print to digital and the destiny phase to deliver and sustain this implementation. An outcome of this project would likely expand for the various faculty involved from seeking materials for the top forty post-secondary courses to an expanding list of the other courses they teach. As this project also seeks to ensure material is available through the Open Access definitions, this would alter the copyright context and may require additional focus to ensure material meets the legal requirements. This would pull in additional stories and viewpoints, further enriching the stories and vision to the future.

Looking towards additional areas I may research in, further research projects I explore would work in groups to maximize the AI strengths. This group work is better suited to the principles of AI and allows the social interaction to construct visions from the stories told. These stories are important to engage the audience and define what the future would look like. The positive visioning and collective development of a vision is part of the leadership role I find rewarding and
Chapter Five - Conclusion

As the future research section outlines, there are significant research opportunities in leadership roles emerging from this initial exploration on transitions from print to digital textbooks. In this project, gaps exist between the questions and data. The questions needed further crafting to draw out the positive core and connect to the digital idea. The resulting stories, while full of engaging learning experiences, did not develop sufficient visioning toward transitioning to digital textbooks. This pilot did not employ enough interaction to give life to the stories between members. In an effort to minimize time and impact on faculty, insufficient time was allotted to explore connections and envision opportunities and to develop trust. An increase in the number of faculty members involved could have enhanced the breadth and volume of stories gathered. Conducting these interviews in small groups of 5-8 would have developed the enactment principle (Whitney & Trosten-Bloom, 2010).

In spite of the gaps, engagement and energy developed towards some forms of digital textbooks, those with multimedia. Within the multimedia digital textbook, the ability to interact with the content starts to make the data come to life for the learner. Engagement of student and faculty into the learning is enhanced and individualized learning is created with the multiple ways of representation. As the expectations of higher education morph to the changing times of the information age, individualized learning is becoming a common descriptor and requires increased acknowledgement of processes to support this. The multimedia digital textbook enables this individualized interaction.

This project provided an opportunity to explore the Appreciative Inquiry interview positive thinking. Crafting questions in a positive framing presents a challenge as frequently nature of our inquiry tends to be problem-based inquiry. While the results in the specific
interviews did not provide sufficient detail, the process of the appreciative inquiry interview was a positive experience and worth the effort to invest in the skills required. Moving forward with this method of inquiry, the budgeting of time is overlooked and must be sufficient to encourage the stories to come alive and be collected. It is important to value time as a required resource to enable collective dreaming to build towards a vision or design for the future. AI’s strength is in the collective conversation and is not as well suited to individual interviews. The power of AI is its role to engage people to change and help people feel personal contribution to the development of what their future looks like through the collective experiences through stories they bring to the discussion.

The research question, “what role does leadership play in transitioning from print to digital textbooks”, is not well defined within this project. The method chosen was AI for its positive and engaging process to change. The subject of digital textbooks is specific with limited understanding and a commitment to change was not expected although interest towards the change was hoped for. Making the jump between the questions in the discovery phase reflecting on the best of what is and the question in the dream phase to envision what could be was not well realized. Time became a constraint that limited the opportunities to explore and construct ideas of what might be. Having a conversation with faculty about the potential of digital textbooks does begin the AI principle of enactment, creating a self-fulfilling future by discussing the idea. By this action, leadership does play a role. The research was to explore non-traditional leadership roles impacting the adoption of digital textbooks. In a small way, the responses that all interviewees would look at digital textbooks in the near future would indicate there is a role that non-traditional leadership plays towards developing engagement to the change process for technological transitions.
Non-traditional leadership roles can be found anywhere on a regular basis. Conversation when faculty member describes a new method of research can be the start of a leadership role. When faculty take the risk to embark on a project using a new method of inquiry is an example of a non-traditional leadership role. Leadership does not have to come from a position of authority. Observations of the initiative taken by peers can be noted and can lead to engagement in new areas. While this research did not find positive conversation strongly influenced faculty willingness to adopt of a digital version of the print textbook, this research did note a strong interest from faculty towards an enhanced textbook. This would suggest conversation can influence acceptance of a new idea. Trust and rapport need time to develop and are necessary to expand into positive visioning. The power of the Appreciative Inquiry method is in the collective development and construction of connections through social interaction to engage in change. Leadership is bringing in the method that generates the momentum towards change and can be started from any level. Non-traditional leadership can lead the transitions from print to digital textbooks.
References


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Toronto, ON: Pearson.


doi:10.1162/108819802763471825


Appendix A Interview Questions

Discovery Phase

Think of the best learning experience you have had. Please tell what happened and how it affected you.

- What made this experience so exceptional?
- What can we learn from this experience?

Think of the best teaching experience you have had. Please tell what happened and how it affected you.

- What made this experience so exceptional?
- What can we learn from this experience?

When were you most engaged as a learner?

- What can we learn from this experience?

When as an instructor/teacher were you most engaged?

- What can we take from this experience?
- How could this be created?

What course materials provided you the greatest interest in the subject?

- Is there something in this story that can provide a best practice guide for course development?

Dream Phase –

In a perfect world where the print no longer exists, and everything has gone to digital, what does that world look like?

## Appendix B Questionaires

### Understanding Personal Digital Perception and Knowledge Before and After AI Interview

<table>
<thead>
<tr>
<th>Before Reading Package and Interview</th>
<th>After Reading Package and Interview</th>
</tr>
</thead>
</table>
| Do you use digital material for your courses?  
This could include YouTube videos, online articles, web blogs, audio sound recordings.  
Yes  
No | Will you expand the digital resources used in your classes?  
Yes  
No |
| Have you considered using digital format textbooks in your classes?  
Yes  
No - don’t agree  
Never thought of it | Would you consider using the digital textbooks for your course?  
Yes – next year  
Yes - Within the next 3 years  
No – not interested  
No – don’t agree |
| Have you heard of Open Access Resources?  
Using scale 1 to 5 how would you rate your knowledge about open access resources?  
1 very knowledgeable  
2 knowledgeable  
3 some knowledge  
4 little knowledge  
5 no knowledge | Would you consider using Open Access Resources?  
Yes – to help reduce the financial burden on my students  
Yes – if I can find the correct material  
No – can’t be qualified if free  
No – not using digital |
| How would you rate your technology knowledge?  
1 - expert  
2 - knowledgeable  
3 - somewhat familiar  
4- can use some technology  
5- need significant assistance | Would you require IT support to utilize digital textbooks?  
Yes  
Yes but only for Initial prep and assistance with troubleshooting  
No |
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you read books on electronic devices?</td>
<td>Yes - frequently, Yes - a few times, Yes - No -</td>
</tr>
<tr>
<td>If digital textbooks expand to include multimedia embedded within them, would this provide the additional learning resource to support your curriculum and learning objectives in your courses?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>On a scale of 1 to 5 with 1 being unpleasant and 5 being desirable what would you say your experience with reading electronic format has been?</td>
<td>1 Unpleasant, 2 Somewhat unpleasant, 3 Neutral, 4 Somewhat enjoyable, 5 Enjoyable</td>
</tr>
<tr>
<td>Would you want to use these multimedia textbooks?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>If you experience problems with your technology devices how do you resolve these?</td>
<td>Use own technical knowledge, Use online support, Use word of mouth from family, friends and colleagues</td>
</tr>
<tr>
<td>Have you written a textbook in your subject area?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Would you consider writing one using multimedia to convey the important points?</td>
<td>Yes, No</td>
</tr>
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</table>
Appendix C Reading Package

Leadership Unbound: Transitioning from Print to Digital Reading Package

Digital textbook

A textbook that is available in a digital format. Sometimes this may be an electronic version identical to the print edition. More recently this may include multimedia embedded features such as video clips, interactive charts, maps or sound clips.

Digital textbooks can provide opportunities to accommodate different learning requirements such as screen readers for the visually impaired. Expanded opportunity such as defined by the Universal Design for Learning (UDL) may be met with the availability of digital. Such UDL Elements may be available with digital to provide multiple means of representation, multiple means of expression and assessment, multiple means of engagement allowing different learning styles and needs to be met without the specific intervention of the instructor. This could be the ability to read the book via a text reader.

Environmentally Friendly

Digital materials are viewed to be environmentally friendly as they do not require the expense of printing. The ability to update and maintain current information without the expense of re-printing as well as the portability are some of the perceived environmentally friendly features to digital materials.

Copyright issues

Open Access Resources - Open access resources remove copyright and permission issues related to use for study purposes and tend to be available at no cost. There may remain some limitations in terms of use for commercial purposes. These resources are generally created without publisher fees.

Digital Rights Management – (DRM) is best described as software locks to prevent the unauthorized and likely unpaid use of digital materials. Digital Products sold by publishers may use DRM to prevent unauthorized copying and distribution of material.

Digital Drawbacks

Textbooks require electronic devices to view. This requires electrical power and may also require internet access. Digital textbooks from some publishers may have DRM embedded and may be cumbersome to use.
Appendix D Information Letter

Leadership Unbound: Transitioning from Print to Digital

Information about the Study

The purpose of this project is to document perceptions towards using digital instead of print course materials in particular electronic textbooks replacing print textbooks. Specifically, this study will explore if leadership can influence the transition from print to digital. The study participants are current faculty not yet using digital textbooks in their courses. These interviews will be face-to-face and will take approximately 20 minutes of your time. You have been chosen to participate in this study because of your active involvement in the education and willingness to participate.

If you agree to participate in this research, there will be a series of steps. 1. A short online survey of 5 minutes will be to provide a measure of where you are presently in your perceptions of print and digital. 2. Following the initial survey, two-three page reading package informing about digital textbooks, the technologies available, definitions and history is to be delivered to you by email and 3. an interview should be scheduled. 4. At this point, an interview is to be conducted, scheduled with you at a time and place that is mutually convenient for both you and the interviewer. This interview is to be conducted using the initial discovery and dream phases of an Appreciative Inquiry process. If you agree, the interview is to be electronically recorded and transcribed after. If you would prefer not to have the interview tape recorded, the interviewer is to take written notes throughout the interview to capture your comments. 5. Within a few days of the interview, a follow-up 5 minute online survey is to be completed to record your current perspectives. 6. A copy of the transcribed interview will be emailed in PDF format for your review and comments.

What we intend to do with the information we collect

In this initial project, the comments will be reviewed to identify factors and challenges to adopting new processes using digital textbooks. It is hoped that this report will be of value to planning transitions to digital textbooks. The information we gather from your interview will be combined with other interviews into a collection of reflections in order to highlight those factors and challenges considered important to the transition from print to digital. It is hoped this report will be of value to administrators and educators to inform steps important to this type of change. There is also the possibility that information gathered will be used in the development of a future academic journal article.

Your participation in this interview is completely voluntary. If you decide to participate, you may withdraw at any time without any consequence or explanation. If you withdraw from the study, your data will not be used in the research analysis and will be destroyed. If at any time you decide that you do not want your answers to be included in the report, you will have until two weeks after the release of the first draft to inform the researcher and have your comments removed.

Consent/Confidentiality

You will be asked to sign a consent form by which you will agree to the use of your information for the purposes identified above. Only information documented in the transcription or interview notes will be used for these purposes. You will be provided a copy of the
transcription to review. After a period of two weeks, if you have not forwarded any comments or concerns, I will proceed with the transcription as presented.

In order to maintain your confidentiality, any information linking you to this project will be kept in a password secured location within the University of Northern British Columbia for a period of one year, upon which time it will be destroyed. The data will be seen only by the immediate research team consisting of myself, Carolee Clyne, and my graduate supervisors who will be working directly on the project. We will not attribute any information provided in these interviews to any specific individual. We will ensure that we do not use any quotes in the report that can help others identify that you made them. If you wish to have your comments attributed to you, you may indicate this on the consent form that is provided, and if you do choose this option, only your first name will be used to identify you. You will also be provided with a copy of your transcription or notes and given the opportunity to verify these for accuracy, as well as an opportunity to provide feedback on the draft report that is produced from this study.

**Risks/Benefits**

There are no anticipated risks and a benefit is expanded knowledge regarding digital resources.

**Questions**

If you would like to participate in the project, would like more information, have any questions about this study, or would like to get copies of the research results, you can contact myself Carolee Clyne (250-960-5197, email: clyne@unbc.ca) or my graduate supervisor Tina Fraser (250-960-5714, email: frasert@unbc.ca). You may verify the ethical review of this study, or raise any concerns you might have about how this research is conducted, by contacting the Office of Research at the University of Northern British Columbia (250-960-6735 or email reb@unbc.ca).

Thank you for taking the time to participate in this project.

---

Carolee Clyne
University of Northern British Columbia
Prince George, BC
V2N 4Z9
### Appendix E Consent Form

**Leadership Unbound: Transitioning from print to digital textbooks**

Project by Carolee Clyne MEd MDL Candidate  Supervisor: Dr. Tina Fraser

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>Do you understand that you have been asked to be in a research study?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you read and received a copy of the attached information sheet?</td>
<td></td>
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</tr>
<tr>
<td>Do you understand notes will be taken throughout the interview?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree to having your interview electronically recorded?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you understand the benefits and risks involved in participating in this study?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you had an opportunity to ask questions and discuss this study?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you understand that you are free to refuse to participate or to withdraw from the study at any time? <em>You do not have to give a reason.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the issue of confidentiality been explained to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would you prefer to have your comments be attributed to you in the products of this research?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you understand who will have access to the information you provide?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you understand how the information you provide will be used by the researcher and agree to allow the information to be used in this way?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I agree to take part in this study:

---

**Printed name of research participant**    **Signature of research participant**    **Date**

---

**Printed name of interviewer**    **Signature of interviewer**    **Date**

*Please provide us with your preferred contact information so that we can contact you in the future to give you an opportunity to review the transcript and/or notes and so that we can provide you with a final copy of the report once completed.*
Appendix F Research Assistant Confidentiality Agreement

This study, Leadership Unbound: Transitions from Print to Digital, is being undertaken by Carolee Clyne under the supervision of Dr. Tina Fraser at the University of Northern British Columbia.

The objective of this study is to determine if positive visioning influences faculty perceptions toward digital resources for classroom support. Data from this study will be used to reflect on how positive appreciative inquiry conversation affects faculty viewpoints in regards to digital resources.

I, ____________________________________________, agree to:

1. Keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g. disks, tapes, transcripts) with anyone other than the Principal Investigator(s);

2. Keep all research information in any form or format secure while it is in my possession;

3. Return all research information in any form or format to the Principal Investigator(s) when I have completed the research tasks;

4. After consulting with the Principal Investigator(s), erase or destroy all research information in any form or format regarding this research project that is not returnable to the Principal Investigator(s) (e.g. information sorted on computer hard drive).

Research Assistant:

(print name) ____________________________ (signature) ____________ (date) ____________

Principal Investigator:

(print name) ____________________________ (signature) ____________ (date) ____________

If you have any questions or concerns about this study, please contact:
Professor Dr. Tina Fraser
3333 University Way, Prince George, BC V2N 4Z9
(250) 960-5714
Tina.Fraser@unbc.ca

This study has been reviewed by the Research Ethics Board at the University of Northern British Columbia. For questions regarding participants rights and ethical conduct of research, contact the Office of Research and Graduate Programs at (250) 960-6735