

**FACULTY'S PERCEPTIONS OF ONLINE EDUCATION:
A QUALITATIVE STUDY**

by

Maha Telmesani

A Thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfilment of the requirements to the degree of

MASTER OF EDUCATION

Department of Educational Administration, Foundations and Psychology
University of Manitoba
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FACULTY OF GRADUATE STUDIES

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Abstract

This thesis is designed to provide a qualitative description of university instructors' experiences, attitudes and perceptions of online learning in an effort to better design online courses that meet the needs of both teaching instructors and learning students. The purpose of this study is to investigate the perceptions of instructors regarding the advantages and challenges they face in online delivery of coursework compared to their experiences in the face-to-face delivery. The participants in the study are eight instructors, not necessarily at professorial rank, who work for a public Canadian university and teach students using in both face-to-face and online courses. An inductive, qualitative methodology was used in this study. In depth interviews with the eight participating instructors were conducted, transcribed, and analyzed for themes in which the instructors related to online teaching and learning. Suggestions for improving distance education courses based on the participating instructors' perceptions of their own teaching experiences are offered.

Chapter One

Introduction

Introduction to the Problem

Online education is increasing at a rapid pace in the environment of higher education. According to Stacey and Wiesenbergs (2007), this form of education has been used in recent years as a supplement to traditional face-to-face teaching. This growing interest and activity surrounding distance learning creates the need to understand how the expansion of distance education may be re-shaping education now and what it suggests for the future of formal institutionalized education (Nateriello, 2005).

The National Center for Education Statistics reports that during the 2000–2001 academic year, 56% of two- and four-year degree granting institutions of higher education in the United States offered distance education courses involving an estimated 3,077,000 enrollments. These institutions offered 127,400 different distance education courses, and degree programs were offered by 19% of the two- and four-year institutions. An additional 12% of higher education institutions planned to begin offering distance education courses within three years (Waits & Lewis, 2003, p. iv). This rapid growth can be explained by the numerous potential benefits of online education. Main benefits include new markets of opportunity for students, economic benefits for universities, international partnerships, reduced time to market courses or programs, educational benefits for students, anonymity for students, student interaction and satisfaction, growth in faculty learning curve in pedagogy and instruction, and “rich” feedback and evaluation (Appana, 2008). The convenience and flexibility of online learning is particularly appreciated by adult learners in graduate coursework who want to achieve their academic goals (Billings,

Connors, & Skiba, 2001). In addition to these benefits, Chamberline (2001) claims that instructors who take advantage of the pedagogical strengths of on campus and online teaching can give students the best chance to realize their strengths and weaknesses as learners and to find and achieve success.

With the growth of distance education, mainly through online delivery, comes a significant need to examine the phenomenon of Internet-based courses (Schrum, 1998). This new technology has changed the way students and professors experience the learning environment. They no longer have to meet face-to-face, and they need to shift from a primarily oral form of communication to a written communication (Holand & Moore, 2002). A student who chooses an online course has to adapt to a new virtual learning environment and transform him/herself into a virtual learner, searching for new means to acquire knowledge in an inventive way (Feng, 2005). Students are responsible for completing tasks without the oral help they usually receive in face to-face classes. They have to engage with the material, gain knowledge by doing and enhance their understanding as they construct new knowledge (Johnston, Killon & Omomen, 2005; Pallof & Pratt, 2003).

Although the enrollment in online courses and programs has been rising consistently, the value of web-based environments continues to be heavily debated among faculty and students at different universities. In his study of novice instructors' reflections on their online teaching experiences, Conrad (2004) suggested that future studies should look at how online instructors "balance their concerns for content delivery against students'" needs for a social community where they can effectively learn . It is also important to explore the benefits and limits of web-based courses from the instructor's point of view and compare their online experiences to face-to-face interaction in order to develop courses that would serve their content and pedagogical

needs and simultaneously help students achieve meaningful and positive learning. In order to address this issue, this study is focused on investigating instructors' perceptions of both the advantages and the challenges in online education at the tertiary level as compared to the more common mode of face-to-face teaching. It is believed that these perceptions will help to form the future development of online courses that will better serve the needs of both faculty and student

Statement of the Problem

According to Lao and Gonzales (2005), we need to understand distance education. We cannot implement distance education programs just because there is a demand for this type of course delivery or this form of education is popular among students or there is competition with other colleges and universities. The implementation and expansion of online, distance education programs should be informed by the research that has investigated the effects of online teaching and learning. Hurt (2008), however, suggests that many of the studies on distance education and online courses report only on the impact of online learning from the students' point of view. Limited research, in fact, exists beyond the focus on student's perceptions of online education and its effectiveness, which makes it difficult to locate studies of the experiences and perceptions of those directly involved in the process of online teaching. Moreover, limited empirical knowledge regarding the perceptions of online instructors has been provided utilizing qualitative methods.

According to Crossman (1997), relatively few studies have examined online learning from a qualitative perspective despite the fact that web-based instruction is growing rapidly. A few studies in the mid-1990s examined student and faculty perceptions of online learning experiences and traditional classroom experiences. The factors focused upon included the level and nature of interactions available online (Moore & Kearsley, 1995), the convenience of

asynchronous instruction (Navarro & Shoemaker, 2000), the time, skills, learner strategies, motivations, and perceptions of faculty and students (McIsaac et al., 1999; Shih et al., 1998; Yong and Wang 1996; White, 1999), and how some or all of these factors are tied to academic success (Brewer & Erikson, 1997, cited in Pérez-Prado & Thirunarayanan, 2002) .

It is for these reasons that a qualitative study of eight instructors involved in the delivery of online courses is being proposed. It is necessary to understand the depth and breadth of instructors' experiences and attitudes toward online education if courses that meet the vision of online learning and assist students in achieving satisfaction and a high level of academic learning are to be designed and delivered.

Purpose of the Study

The purpose of the study is to investigate instructors' perceptions and attitudes towards online education, to explore the advantages and challenges they face when teaching online courses, and to compare their online experience of teaching to their experience with face-to-face teaching. This will help provide a clearer picture and a deeper view of the instructors' experiences and concerns in teaching online courses, which will lead to the development of suggestions that will help to create effective online courses that facilitate teaching and serve students' demands to achieve meaningful learning

Research Question

The primary research question is: "What are instructors' perceptions and experiences regarding the advantages and disadvantages of online teaching versus face-to-face teaching?"

This question builds upon several more specific questions namely: "What are the advantages and disadvantages of teaching online courses when compared to teaching face-to-face courses?"

"What aspects of online courses are considered most effective for presenting information?" What

aspects of online courses are considered most effective for student learning?” “What aspects of online courses are considered most effective for assessing student learning?” “How do the answers of the last three questions compare with, or differ from, face to face courses?” “How can we design better online courses that would serve students and instructors needs?”

Rationale and Significance of the Study

The widespread phenomenon of distance education creates a need to research and study the educational experience of online courses for both students and instructors. A major focus of many studies on web-based learning has been on the potential of online technology, which includes: connecting with new learners from a distance, increasing convenience; and growing educational opportunities (Hara & Kling, 1999, 2001; Hill, 2002; Hofmann, 2002). While these particular topics are important, it is equally important to understand how to best implement the practice of online learning by focusing on effective teaching.

Many studies have examined student experiences with online education. These included a focus on learners' perceptions of online education and how these learning environments affect student learning and success (Bekele & Menchaca, in press). Another major focus of research studies of online learning has been the challenges faced by students involved in online courses (Singleton, Song, Hill, Koh, Jones, & Barbour, 2004). These studies also included faculty's experiences and roles but only from students' perceptions (Menchaca & Bekele, 2008) However, as Menchaca and Bekel (2008) argue, examining professors' experiences is important if our understanding of critical success factors in the online field are to improve.

As mentioned previously, there is a lack of research focused on investigating faculty perceptions and concerns, although published studies show that the successful pedagogical use of technology depends on instructors' attitudes and acceptance towards that technology. According

to Kim (2005), it is critical to discover the perceptions that faculty have about online teaching as well as the obstacles they face during the whole process of using online teaching. Bonk and colleagues (2000) stated that input from faculty on the usability or relevance of new materials (e.g., new electronic materials or courseware) is seldom requested. Rockwell (1999) also argued that faculty members themselves recognized the need to learn their colleagues' perceptions, incentives and obstacles to online teaching as one of the top main concerns of research in the online learning area.

In addition, many colleges and universities are offering online courses and online degrees, while others are planning to offer or expand their online programs. In order to ensure successful online courses and programs, it is necessary to identify those areas that instructors find challenging, as well as helpful in order to facilitate and improve the teaching and learning process.

Scope of the Study

Due to the nature of qualitative research, which is narrower than the quantitative and more focused, it will be difficult to generalize the findings to the larger population. However, I believe that interviewing eight instructors at the University of Manitoba will give some insight into what kinds of positive and negative experiences the instructors have when teaching both face to face and on-line courses. These experiences will no doubt also transfer to other instructors who are teaching using similar techniques. As well, using several search engines I could not find any information regarding students' enrollments in online courses in higher education in Canada. This does not indicate that there are no Canadian studies in that area; it simply means that in my research I did not come across any. For my thesis I will certainly broaden my research and hope to find such studies to include.

Definition of Terms

For the purposes of this study, the following terms are defined:

Online course: any academic course that has been delivered online completely.

Learners/online students: any person who is enrolled in at least one academic course online in a college or university.

Instructors/faculty members: instructors and individuals, not necessarily of professorial rank, who teach face-to-face and teach or have taught at least one academic course online in any department in a university or college.

Summary

It is necessary to explore instructors' experiences and identify the benefits and challenges they face when teaching online courses compared to face-to-face teaching. This will help improve the teaching and learning process, and most importantly will help design better online courses that will serve the needs of both instructors and students.

Chapter Two

Literature Review

Introduction

As online education continues to develop and grow in availability, its quality is still debated within universities and colleges (Bowers, 2000; Yang & Cornelious, 2005). This creates a need to understand this form of course work provision and how it affects students' and instructors' experiences. Gaining knowledge of higher education instructors' perceptions of online learning is necessary in order to improve online teaching and learning and to design better courses that meet the needs of both faculty and students. This review examines the literature on instructors' perceptions of online education. It is divided into four main sections. They are: (1) the emergence and growth of online education and its widespread development; (2) the advantages and disadvantages of this form of course as well as the known benefits and limitations of online learning; (3) students' perceptions of online education and (4) instructors' perceptions of web-based delivery of course material and the research conducted in this area.

Growth and Development of Online Education

Since technology began being integrated into education, e-learning has seen tremendous growth tremendously over the past years. Many writers refer to "e-learning", "online learning" and "web-based learning" interchangeably. E-learning can be implemented in many different ways, such as self-paced independent study units, asynchronous interactive sessions (where participants interact at different times), and synchronous interactive sessions (where learners meet in real time) (Ryan, 2001).

The advent of the World Wide Web has facilitated this new technology. The web has spread rapidly throughout the educational community and is currently being used for various

instructional purposes. In recent years, there has been a remarkable increase in its use as a course delivery method in higher education (Prado & Thirunarayanan, 2002). According to Natriello (2005), the growth of distance learning can be linked to a number of factors that create a promising environment for continued growth in the near future. These factors concern both the demand for and the supply of education.

Estimates suggest the amount of money American companies spent delivering internet technology (IT) based training expanded from \$3 billion in 1999 to \$11 billion in 2003 (Koprowski, 2000). In addition, the worldwide market for e-learning was expected to be more than \$18 billion by the end of 2005 (Moore, 2001). Colleges and universities also continue to increase their online course offerings to attract different audiences such as working adults who have limited access to higher education (Haugen, LaBarre, & Melrose, 2001; Liaw & Huang, 2002; McEwan, 2001). Estimates suggest that e-learning will continue to grow in both educational and corporate settings (Haugen, LaBarre & Melrose 2001; Koprowski 2000; McEwan 2001).

Universities throughout the United States are offering courses taught totally or partially online to students who live far from the university campus and to students who are geographically close to campus. Recent reports from National Center for Education Statistics (NCES) demonstrate that online education availability, course offerings and enrollments have been increasing at a rapid pace among institutions from K-12 to four-year universities since the 1990s (NCES, 2003). A comprehensive survey released by the Sloan Consortium indicated that online education would continue to grow at a rate of nearly 20% per year (Allen & Seaman, 2003).

NCES also states that 56% of two- and four-year degree granting institutions of higher education in the USA offered distance education courses involving an estimated 3,077,000 enrollments during the 2000–2001 academic year,. These institutions offered 127,400 different distance education courses, and degree programs were offered by 19% of the second- and fourth-year institutions. An additional 12% of post secondary education institutions that did not offer distance education courses planned to begin offering them within three years (Waits & Lewis, 2003, p. iv). In addition to programs and courses, most universities now require online access to basic course information (Leonard & Guha, 2001). This includes information such as the syllabus and office hours for the instructors and course registration.

Advantages and Disadvantages of Online Education

The rapid growth of web-based course delivery can also be linked to the numerous potential benefits of online education. Convenience is reported as a major strength. Online education brings the experience of learning from the university setting to the learner's home without the inconvenience of travelling. Students can complete their course work in their home or office (Beard, Harper & Riley, 2008). Online education provides opportunities to students who are physically removed from the source of instruction due to different reasons, such as living in far away locations or having difficulties with scheduling (Natreillo, 2005). In Song, Ernise, Hill, and Koh's (2004) study, participants stated it was helpful not to have to travel to the campus (which was up to a 60-minute drive for some), and to be able to complete the assignments and tasks at a time that was convenient for them.

Related to its convenience is the flexibility of online learning. Students have the ability to decrease time constraints, have the opportunity to receive assistance without waiting for class times or office hours (Burke, 1996, Laaser, 1998), and are able to complete courses when and

where they desire. In a study by Petrides (2002), participants reported it was easy to work in groups for online courses without facing scheduling problems that usually occur in a face-to-face environment. The convenience and flexibility of online learning is particularly valued by adult learners in graduate coursework (Billings, Connors, & Skiba, 2001) whose needs for growth can be supported by online education.

According to Natriello (2005), online education generally expands opportunities and better meets students' needs, interests, learning styles and work schedules. It also provides students with multiple chances to improve their technological, computer and writing skills. In Weiner's (2003) study, online learning significantly improved the students' writing and computer skills. Online education also provides students with an array of rich resources such as websites and journals (Thurmond, 2003). Additionally, online learning is used to reduce the cost associated with "brick and mortar" campuses, which allows the resources to be devoted to the development of other educational services (Appana, 2008).

Beyond obvious cost saving features, online education is reported to have a pedagogical potential beyond the traditional methods (Smart & Cappel, 2006). It can present new information outside of traditional methods which can enhance the learning process. For example, online courses use animation and multimedia capabilities that can facilitate students' learning compared to what can be used in face-to-face teaching (McEwen, 1997). Chamberline (2001) also claims instructors take advantage of the pedagogical strengths of on-campus and online teaching, which can give students the best chance to realize their strengths and weaknesses as learners, and accordingly achieve success.

Online instruction facilitates knowledge and provides opportunities for all types of learners, especially those who are shy. According to Chamberline (2001), online communication

reduces students' inhibitions by eliminating the psychological and social barriers to student-teacher and student-student interaction. In addition, online education promotes active learning (Zhang, Perris & Yeung, 2005) and creates an environment where students and "distanced groups" (Appana, 2008) can learn from each other and share common problems (Brown & Duguid, 1996).

Appana (2008) lists other significant benefits of online education. These include new markets for students, international partnerships, reduced time to market for instructor and students, educational benefits, anonymity for students including the shy ones, and the lack of visual cues which helps the instructor treat all students equally. Appana also mentions student interaction and satisfaction, growth in the faculty learning curve, "rich" feedback, and evaluation and economic benefits. Appana suggests the faculty should take into account the cost factor before starting online systems. Bartley and Golek (2004), however, argue that the cost of online education is justified considering that the benefits of online learning are real.

With the benefits of online education, schools and universities are racing to implement online programs and systems. However, just as there are advantages to online learning, there are also several potential weaknesses that have been reported in the research literature. According to Hannafin, Hill, Oliver, Glazer, and Sharma (2003), there is a lack of empirical evidence to support the effectiveness and benefits of online education.

Accessibility is considered to be a major disadvantage of online education, especially e-learning grids and virtual educational communities. Not every student has a ready access to a computer with a relatively fast internet connection. Without such access, online education is difficult or impossible.

The lack of a sense of community and, thus, a feeling of isolation is one of the main challenges of online education. In a study reported by Song, Ernise, Hill, and Koh (2004), 71% of students were dissatisfied with online learning and felt the lack of community. Other studies have shown similar results. Woods (2002) for example, stated online learners felt isolated from faculty and other learners. He attributed this to distance education excluding normal interactions that can make the learning process less personal between students and professors. According to Appana (2008), online education can appear to be an impersonal exercise, which leads students to feel “eSolated”. For example, online communication lacks the non-verbal cues that are a major element of face-to-face interaction. As a result, students may feel confusion, anxiety and frustration.

Technical problems are another disadvantage to online learning. Students must have the necessary technological skills to benefit from this type of learning. Those who lack the technological skills required for different types of online education may be anxious about approaching non-traditional learning situations (Beard, Harper, & Riley, 2008). Piotrowski and Vodanovich (2000) reported problems related to technology and technological difficulties. These included, losing saved documents and facing problems with registering, sound and video quality.

In addition to technology, the delay of response and lack of immediate feedback are other perceived disadvantages of online education. Delays and limited feedback could complicate the assessment and evaluation process for the instructor (Gary & Remolino, 2000), and delayed feedback prevents students from connecting with the instructor personally (Ryan, Carlton, & Ali, 1998). This lack of connection may lead students to think the instructor is unapproachable (Summers, Waigandt, & Whittaker, 2005).

Above all, time is considered to be a significant problem associated with online education. Studies have reported that online courses are very time-consuming for students (Taylor, 2002) due to the kind and number of assignments, and for instructors, especially those new to the medium who need extra time and training. Bartolic-Zlomislic and Bates (1999) found the instructing online is considered to be time-consuming, and that instructional time was different, taking into account how the online discussion went. The time factor also includes difference in time zones, which disturb the online interaction, especially with synchronous classrooms where all students have to log onto the web simultaneously (Appana, 2008).

Furthermore, Sulcic and Lesjak, (2002) found that readiness is a significant factor that affects students' success in online education. To achieve success in online learning environment, learners must be prepared to face the challenge of transferring the learned information through e-learning. According to Laine (2003), the process of transferring the knowledge and skills through e-learning is an important challenge for students because this process does not occur in the traditional face-to-face classes where "real learning" takes place. In terms of preparedness, students must also have, or acquire, computer and writing skills. More importantly, they must be self-directed learners, because the process of completing online courses and assignments depends completely on the individual learner (Appana, 2008). Similarly, several studies have emphasized the great need to have writing skills, self-motivation and the willingness to make a commitment to spend the appropriate time with online courses (Golladay, Prybutok, & Huff, 2000; Serwatka, 2003).

Another related weakness to online education is the time commitment required of the instructor. According to Appana (2008), the development of the material for traditional classroom teaching, depends entirely on the course instructors. In contrast, when an instructor

prepares online lessons, he/she must be up to date and possess the required knowledge, skills and experience to design an effective online course and deliver it. Moreover, it takes time to become a professional online course developer and qualified instructor.

Appana (2008) lists other potential limitations of online education. These include costs, ability to access course materials, crisis management, organizational preparedness, differing stages of group development, start-up funding, students with limited language skills, feedback and evaluation.

After weighing the pros and cons of online education and comparing online effectiveness to face-to-face teaching methods, some educators advocate blended courses which integrate a combination of classroom and online activities. According to Riffell and Sibley (2004), blended courses have the advantages of online education while maintaining the benefits of face-to-face instruction. These courses promote more active learning and allow flexible scheduling, while retaining the face-to-face contact characteristic of the classroom. Although blended courses are gaining momentum in the university environment for their ability to offer the benefits of both online and face-to-face delivery, this study will examine only those courses delivered completely online in order to keep its focus on the direct comparison of online versus face-to-face environments.

Online education is a newly debated approach to teaching and learning that is growing at a fast pace and spreading among schools and universities. As with every form of instructional delivery, online education has its share of advantages and limitations. Educators suggest that more research should be conducted in this area to provide a deeper understanding of web-based delivery and its consequences and ramifications for both learners and instructors.

Students' Perceptions of Online Education

The recent emergence of distance education and the spread of web-based courses effectively changes the way students have traditionally experienced the learning environment. Students have to shift from oral to written forms of communication, and be responsible to complete all tasks without the usual oral aid of the instructor (Howland & Moor, 2002). With the growth of distance learning comes a need to establish a meaningful learning experience and provide optimal learning environments for online students. In order to accomplish that, it is necessary to examine students' perceptions and to understand their experiences and needs.

Numerous studies have examined students' perceptions of online courses. In Song, Ernise, Hill, and Koh's (2004) study, 76 graduate students were surveyed and nine agreed to do a follow-up interview to identify useful components and perceived challenges of online learning. Across all areas of satisfaction, it appeared that the design of the course (83%), followed by comfort with the technology (76%), motivation (74%) and time management (71%) were identified as factors that affect the success of online learning. Convenience and flexibility were additional strengths revealed in the interview. The biggest challenge reported by the study participants was technical problems. Other challenges reported were the lack of community (71%) and difficulties understanding instructional goals (60%).

A study by Atan, Rahman and Idrus, (2004) examined various aspects of online learning, including the general web-based support system for students, learning materials and learning resources. Questionnaires were distributed randomly among first, second and third-year undergraduate students. A total of 315 were returned. Results indicated that students agreed on the necessity for a web-based general support system. Students perceived that the main role of online learning in distance education was to support the traditional print-based material by

enhancing their understanding of this material. That is, the printed material should remain the main medium of the course delivery in distance education. They also agreed that instructional strategies made the learning process more fun and helped them to learn collaboratively. The linkage to other reference resources was another advantage reported in the study.

Literature related to online education is contradictory when it comes to comparing the effectiveness of online learning to face-to-face learning (Lim, Kim, Chen, & Ryder, 2008). Some studies reported no significant difference in students' satisfaction and performances between those who studied online and those who studied in a traditional manner (Carey, 2001; McFarland & Hamilton, 2006). Other studies revealed that students taking online courses achieved equal or better performances and levels of satisfaction than students in face-to-face courses (Dorbin, 1999; Zhang, 2005). However, some studies found negative effects of online education, including the fact that students were less satisfied with it (Pillay, Irving, & Tones, 2007).

Similar to these studies, Lim, Kim, Chen, and Ryder (2008) conducted a study to investigate the effects of three different methods of instructional delivery, namely, online instruction, traditional face-to-face instruction, and a combination of online and traditional instruction, and their effects on students achievement and satisfaction levels. One hundred and fifty-three undergraduate students were surveyed. The results indicated that the combined and online groups had statistically significant higher levels of achievement than students in the traditional learning group, as well as greater satisfaction with their overall learning experience.

According to Crossman (1997), relatively very few studies have examined online learning qualitatively. Howland and Moor (2002) explored students' learning experiences and what were considered attributes for success in an exploratory qualitative study. Forty-eight students were surveyed using 12 open-ended questions. The analysis of the data revealed that

self-management, self-direction and accurate expectations of learning responsibilities were significant factors that promote success when learning online. Results demonstrated that students exhibiting positive attitudes towards online learning were more independent and responsible for their learning. However, the study also reported that some students felt overwhelmed with the need to depend on themselves. They expected the instructor to supply them with all the necessary information and provide them with materials. They also expressed the need to have more structure and feedback from the instructor.

Prado and Thirunarayanan (2002) conducted a qualitative study where they explored students' perceptions of the online learning experience and compared these perceptions to those who experienced a traditional learning approach. Qualitative data, including interviews and journal entries, were collected from 60 participants and the instructor. Results indicated three major themes: the importance of peer interaction and a collaborative learning environment; difficulties and advantages of online interaction; and, the significance of an effective domain in the learning process.

Many educators have pointed out the effect and importance of interaction in high quality online learning, whether it is peer interaction or student-instructor interaction. Several studies demonstrated the importance of integrating interaction in online learning. Palloff and Pratt (1999) argue that the "keys to the learning process are the interactions among students themselves, the interactions between faculty and students, and the collaboration in learning that results from these interactions" (p. 5). Steinman (2007) discusses the transactional distance, and its effects on the learning process in online learning. Schmidt (2002) indicates that learner-to-instructor transactional distance increases when the communication diminishes between students and the instructor, and when the students feel isolated. In order to reduce the transactional

distance between students and instructor, Schmidt argues that online classes should offer specific times where students can meet with the instructor face-to-face in the classroom or lab. If students cannot meet the instructor on campus, then they should have opportunities to meet him/her during "interactive office hours". An interactive office has a video camera and microphone where students can see and hear the instructor. Student and teacher interaction significantly affects the learning process in online learning (Jiang & Ting, 2000). Swan's (2002) empirical study suggests that students' perceptions of learning and satisfaction with online courses are significantly affected by their interaction with the instructor and other students. The study also emphasizes the verbal behavior that supports interaction among course participants.

Only a small number of studies, such as those listed above, have focused on investigating students' perceptions and satisfaction with online learning. Accordingly, developers of online courses need to conduct research devoted to understanding and exploring students' attitudes and perceptions of web-based delivery in order to enhance students' learning by creating more effective online courses.

Higher Education Instructors' Perceptions of Online Education

Although the research literature regarding online teaching and learning is rapidly growing, it remains inconclusive. Many studies are concerned with the effect of online learning from the students' point of view (Hurt, 2008), and the research mainly centers on the experience of the learners. Much less is known of faculty members' perceptions of online courses, especially members of graduate faculties (Santilli & Beck, 2005). Bonk et al. (2000), criticized researchers for failing to ask faculty members about their perceptions of the usability of new materials or courseware. There is a significant need to listen, understand and examine faculty members' perceptions of online learning, because their support for any new project is fundamental to its

success (Fish & Bill, 2009), and delivering a successful online course depends completely on the faculty members' attitudes, acceptance and quality as instructors.

As different colleges are expanding their online programs, these institutes need to search for faculty who are capable to deliver effective and reliable online courses (Wang, 2007). They need more qualified teachers who are able to meet the demands of the new markets. Unfortunately, most professors are not prepared and equipped to teach online courses effectively (O'Donoghue, 2000). Several studies have shown that faculty members given the responsibility for online course instruction request usable training (Feist, 2003), technical support and consistent structure (Frith & Kee, 2003).

Although online teaching has several benefits and advantages, instructors appear to utilize the instructional practices with which they are most familiar (Hinson & LaPrairie, 2005). This reaction from faculty highlights a resentment to move from an established pattern (face-to-face), where they have stable expectations, to an unsettled one (online), where they have to learn new skills and habits and accommodate new policies. The fear of change clearly prevents some faculty members from being involved in this new method of course delivery and keeps their apprehension about distance learning alive.

Although online education is rapidly becoming a common mode of delivery, it does not have an established pedagogy (Levine & Sun, 2003). Owing to this situation, many instructors who teach online courses for the first time rely heavily on their face-to-face experience (Conrad, 2004), and those who feel comfortable in a traditional setting believe their current pedagogical understanding will shift in the online or blended mode (Stacey & Wiesenbergs, 2007). Several studies have emphasized the significance of good pedagogical design (Paloff & Pratt, 2001), and

these authors argue that instructors must know the instructional pedagogies that create an effective online experience.

However, very few studies have examined professors' perceptions of online learning or determined their needs and concerns. A qualitative study conducted by Hurt (2008) focused on the instructors' views of the benefits, limitations, and effects of online teaching and learning. The findings of the study indicate that professors agreed the students needed several characteristics and traits such as self-direction, accountability, responsibility, flexibility, time management and problem-solving skills, in order to succeed in online courses. Among the different patterns that emerged in Hurt's study are the benefits to teachers of online education. One benefit is the flexibility and freedom from time constraints. There were also several professional benefits such as the ability to change roles and become a facilitator, to be more creative when presenting materials, and to organize more structured courses. The participants in Hurt's study also cited several limitations. The most predominant one for instructors was the increased preparation time to design and monitor the online course. This finding supports Zhang's study (1998) where faculty reported that course preparation was much more time-consuming than they anticipated. In addition, instructors also spent much time in providing feedback to students. Other mentioned limitations were students being isolated, dial-up problems, and the potential for online participation to draw students away from the on-campus population.

Tamashiro (2003) conducted a similar study to explore online advantages and disadvantages for teachers. Flexibility was determined to be the most favorable advantage, and the lack of face-to-face, personal or social contact with the instructor or students was considered the least favorable aspect of online teaching. Some issues were contradictory, time and technological fitness, for example. Time was considered both a pro and a con. On one hand,

being online saves time, but it can also be time-consuming. While online learning can provide the opportunity to learn new technology, it can also be detrimental since computer literacy, typing skills and comfort level are required.

Marquire (2005) lists a range of factors that hinder faculty engagement in online education. This list includes lack of time, lack of institutional support, and lack of training. Metcalf (1997) discusses the increased time factor and Smith, Ferguson and Caris (2001) explain how this factor may explain professors' reluctant behavior towards online education.

Despite these disadvantages and limitations, studies have shown some positive faculty attitudes toward online education. These include incentives and benefits such as convenience, the chance to improve students' learning, flexibility, the opportunity to create innovative instruction, opportunities for professional development, opportunities to reach more students, and to play the facilitator and manager (Daugherty & Funk, 1998; Hurt, 2008; Rockwell, Shauer, Fritz, & Marx 1999). According to Felix (2003), online education offers great promises for administrators, instructors and students.

In conclusion, teaching online is similar to learning online as they both have potential benefits and limitations. According to Hurt (2008), both online teachers and students need to understand that online teaching and learning involve many new and different roles and responsibilities, and not everyone is suited to teach or learn online. For instructors, they must continue studying and developing for online instructional pedagogy in order to construct effective courses that would allow students to benefit most.

Theoretical Framework

This study is designed within a constructivist framework. The constructivist approach to teaching and learning is based on a combination of a subset of research within cognitive psychology and a subset of research within social psychology. The foundation of this theory is that individuals actively construct their knowledge and skills as they adapt to stimuli from the environment. According to Huitt (2003), all advocates of constructivism agree that it is the individual's processing of stimuli from the environment and the resulting cognitive structures, that produce adaptive behavior, rather than the stimuli themselves (Harnard, 1982, p.1).

There are two major strands of the constructivist perspective. One strand is social constructivism (Vygotsky, 1978) and the second is cognitive constructivism (Piaget, 1966). The social constructivist view “posits that knowledge is constructed when individuals engage socially in talk and activity about shared problems or tasks” (Driver et al., 1994, p. 7). According to Merriam et al (2007), Vygotsky is credited with developing the foundation of this view because “he proposed that learning is socially mediated through a culture’s symbols and language, which are constructed in interaction with others in the culture” (p. 292).

On the other hand, cognitive constructivism is based on the work of Swiss developmental psychologist Jean Piaget (1966). Piaget's theory of cognitive development proposes that humans must “construct” their own knowledge through experience. Experiences allow them to create mental models in their heads, what we know as schemas. These schemas are changed, expanded, and made more sophisticated through the harmonizing process of assimilation and accommodation. According to Bhattacharya and Han (2007), “Piaget believed that human beings possess mental structures that assimilate external events, and convert them to fit their

mental structures. Moreover, mental structures accommodate themselves to new, unusual, and constantly changing aspects of the external environment” (p. 1).

I have chosen to frame my study using Piaget’s understanding of cognitive constructivism and Vygotsky’s understanding of social constructivism because developing a new method of teaching would seem to be necessary when switching from face-to-face to on-line learning. Changing from what is known (prior experiences with teaching curricula and pedagogy) to what is new (online learning) would mean that the instructors would have to rework their schemas based on their previous experiences and would have to construct new meaning within their cognitive structures, but also socially with students, which is what Vygotsky and Piaget theorized. That is, the interaction between the knowledgeable other (instructor) and the student is socially driven and therefore changes depending on the circumstances (Vygotsky). Also instructors construct new knowledge and skills (teaching online) through experience and have to rework their mental schemas to adapt to the changes in the external environment (Piaget)

Summary

Chapter Two provides a literature review of the development of online education, its benefits and limitations, and students and instructors’ perceptions of online education, as well as the conceptual framework supporting this study.

Chapter Three

Methodology

Qualitative Research

The literature, in chapter two, does not provide a definitive answer to the question of what perceptions university instructors have regarding web-based courses. Many of the studies noted were concerned with the effect of online learning from the students' point of view (Hurt, 2008). Since it is the instructor that prepares and delivers the courses it is significant to find out how instructors think about the on-line delivery method of their courses.

There is not much known of faculty's perceptions of online courses, especially the graduate faculty (Santilli & Beck, 2005). Bonk and colleagues (2000) criticized the failure ask faculty about their perceptions on materials or courseware. There exists a significant need to listen, understand and examine faculty's perceptions of online learning, because instructors support for any new project is paramount to its success (Fish & Bill, 2009), and delivering a successful online course depends completely on the professors' attitudes, acceptance and quality as instructors.

My research attempts to answer the primary research question: "what are professors' perceptions and experiences regarding the advantages and disadvantages of online teaching versus face-to-face teaching?" In order to answer this question a qualitative approach was utilized because I am investigating complex attitudes and experiences about online learning, and because I am exploring what the full range of those attitudes and experiences may be.

Qualitative research, broadly defined, means any kind of research that does not rely on numbers and statistical measures. Creswell (2008) defines qualitative research as follows:

“A means for exploring and understanding the meaning individuals or groups ascribe to a social or a human problem. The process of research involves emerging questions and procedures. Data typically collected in the participant’s setting, data analysis inductively building from particulars to general themes” (p. 4).

Researchers who use qualitative methodologies believe that participants’ perspectives represent multiple realities, and that context is critical in understanding the investigated phenomenon. According to McMillan (2008), with the qualitative approach “there are multiple realities as different people construct subjective meaning from the same event. As a result much of what is reported in qualitative studies is participants’ perspectives” (p. 271).

Qualitative researchers are also concerned with process rather than outcomes. They are mainly interested in what their participants’ experience, how their participants interpret their experiences, how their participants construct meanings and what those meanings are (Bogdan & Biklen, 2007).

There are several considerations when choosing to adopt a qualitative research methodology. Qualitative methods can be used to gain in-depth information, search for deeper understanding of participants’ experiences or to represent their perspectives accurately. Moreover, the goal in qualitative research is to better understand participants from their point of view without aiming for generalizability (Bogdan & Biklen, 2007).

In the context of the proposed study, relatively few studies have examined online learning from a qualitative perspectives (Crossman, 1997). Gibson and Peacock (2006) state that the inclusion of open-ended questions interviews is even less frequent. As such it is not clear how learners and instructors perceive e-learning. They suggest more in-depth qualitative interviews to provide richer insights, which is the aim of the study reported here.

This study before you, therefore, uses a qualitative interpretive inquiry approach to a) describe the experiences of individuals teaching online courses, b) to gain a broader understanding of instructors' perceptions in online course environments, c) to contribute to the existing growing body of online literature and d) to potentially provide some insight into how to design courses that best meet the teaching and learning needs of instructors and students. It, in particular, explores instructors' perceptions of the advantages, disadvantages and effectiveness of online learning compared to the face to face learning.

Participants

The participants for this study are eight instructors who work for a Canadian university and who have taught students in both face-to-face and online courses. These participants were interviewed using a semi-structured open-ended interview method. Semi-structured interview can contain open-ended questions because the researcher is expected to prompt for the other person's perspectives and to encourage a participant to become more engaged in the conversation, particularly if the participant provides brief answers or has difficulties answering and addressing the questions (Millar, 2008). The three main purposes of these interviews were (1) to explore participating faculty members' perceptions and experiences in teaching online courses; (2) to capture what participating faculty members considered to be advantages and disadvantages of online learning; and (3) to examine participating faculty members' perceptions regarding the effectiveness of online courses when compared to face-to-face courses.

A purposeful sample was used in this study. Such a sample is not necessarily representative of the population of all online instructors, but it was chosen because of the ability of participants to provide more in-depth understanding of the topic being researched. The researcher selected the sample because these individuals have experience and knowledge with

the topic at hand and, therefore, provide in-depth perceptions. For this study, instructors who teach face-to-face and teach or have taught at least one academic course online in any department of the Canadian university or associated college were selected to participate.

The participants' recruitment process began by contacting the head of the Educational Administration department and the head of the Extended Education department by email. These department heads contacted potential participants by email, as well, regarding their interest in participating in the study. A copy of the interview questions was provided to each potential participant. Confidentiality was assured. Participants were also be informed of their right to withdraw from the study at any time without a penalty, and to have their comments stricken from the study. All protocols for confidentiality, anonymity and ethical procedures as outlined by University of Manitoba research ethics guidelines were respected in this study. See letters of information and consent in Appendix 1.

Data Collection

A single semi-structured interview was conducted with each of the eight participants. Interview appointments were set up by phone call and/or e-mail message. The interviews were conducted in face-to-face meetings. The participants decided where the interview took place. Each interview lasted approximately one hour and was audio recorded. The audio recordings were transcribed by a professional transcriber. All interviewees were asked to comment on their perceptions of face-to-face and on-line teaching methods. Instructors were asked to provide examples that would corroborate their responses in an attempt to address the limitations of self-response. In this research, member checking was used to increase credibility and internal validity. All interviews once transcribed were returned to the instructors, via e-mail, for verification purposes before analysis begins. To ensure transferability of the results, I included

direct quotations from the participants in the discussion section of Chapter Four to paint a clearer picture of the participants' thoughts.

Research Questions

The interview protocol was composed of five open-ended questions:

- 1) Please describe your experiences of teaching in an online environment.
 - (a) How many courses have you taught online?
 - (b) What was the nature of the course(s)?
 - (c) How many students were enrolled in the course(s)?
 - (d) Is this course(s) also taught in face-to-face setting? If so, why was the course offered online? If not, why was the course developed for online setting?
 - (e) What made you decide to try teaching in an online environment?
- 2) From your experience teaching in face-to-face and online settings, what do you consider to be some of the advantages of online learning?
 - (a) For students
 - (b) For instructors
- 3) From your personal experience please identify the challenges that you encountered during the process of teaching an online course?
 - (a) For students
 - (b) For instructors
- 4) In what ways (if at all) does teaching in an online environment differ from face-to-face teaching in terms of:
 - (a) Course planning
 - (b) Content choice and design

- (c) Presentation of information and/or pedagogical strategies
 - (d) Building rapport with students
 - (e) Students demonstration of learning
 - (f) Students assessment and feedback
- 5) What suggestions might you have to facilitate a better teaching and/or learning experience for instructors and students in online coursework?
- (a) Course planning
 - (b) Content choice and design
 - (c) Presentation of information and/or pedagogical strategies
 - (d) Building rapport with students
 - (e) Students demonstration of learning
 - (f) Students assessment and feedback

Data Analysis

The qualitative analysis involved segmenting the information, developing coding categories, and then generating themes from the grouping of related categories. These steps are identified by Tesch (1990) as part of the process of analyzing written data, which includes the transcriptions of data from audio recordings.

McMillan (2008) explains clearly this systematic process. The first step is organizing the data into segments. Most studies organize the data according to their source. Data can be divided into Emic data which contain information provided by participants in their own words and Etic data which represent the researcher's interpretation of the Emic data. After looking carefully at the data, codes are usually developed for specific patterns and topics. The next step is summarizing the data into much smaller themes and categories. Categories are formed from

coded data and are more general. Once the data have been coded and summarized, the researcher looks for relationships between the patterns, begins interpreting the data inductively and explains what he/she has found.

The small sample size and the purposeful selection of participants limit the findings from being generalized. The results for the study are also limited by the fact that it is difficult, if not impossible, for the researcher to be completely free of bias. However, the richness of the data provided by participants who have taught online courses will contribute to the lack of qualitative data that exists in the area.

Summary

This chapter examined the characteristics of qualitative research and its appropriateness for use in this study. Subjects' involvement, along with data collection and analysis were outlined. The next chapter will discuss the results of the data and the analysis of the results in the form of themes and patterns that emerged inductively from the subjects' responses.

Chapter Four

Results and Discussion

This chapter addresses the research questions posed to each instructor in the study. As a result of the participants' response to each interview question, the collected data collected have been coded into categorized themes. Direct quotations from the participants have been included in an attempt to provide clear, detailed information about the instructors' thoughts and experiences.

There are procedures that researchers can use to organize and interpret data. According to Strauss and Corbin (1990) these procedures consist of "conceptualizing and reducing data, elaborating categories in terms of their properties and dimensions, and relating through a series of prepositional statements. Conceptualizing, reducing, elaborating, and relating, are often referred to as coding" (p.12) Once the researcher codes and construct themes, these themes can be classified as; (1) consensus themes- when the majority of the instructors state the same theme; (2) supported themes- when approximately half of the instructors state a theme; and (3) individual themes- when only one or two instructors state a theme (Lincoln & Guba, 1985).

As indicated in Chapter One of the thesis, three primary questions provided the framework and purpose of my research:

1. What are instructors' perceptions and experiences regarding the advantages and disadvantages of online teaching versus face-to-face teaching?
2. How does online teaching differ from face-to-face?
3. How can we design better online courses that would serve students and instructors needs?

The specific instructor questions can be found in Appendix 2.

Following the categorization of the specific instructor interview responses into consensus, supported, and individual themes, these themes were captured under the three primary research questions to offer a summary of key findings for this study.

Instructor Identified Themes

The questions asked of instructors focused on the experience of teaching online (what made them decide to teach an online course?). Questions were also asked on the advantages and disadvantages of teaching online courses, differences between teaching online courses and face-to-face courses in terms of: (a) course planning, (b) choosing the content, (c) presentation of information, (d) building rapport with students, (e) demonstration of learning, and, (f) assessment and feedback, as well as, suggestions to facilitate a better online environment for both instructors and students in terms of the previous six factors.

Reasons for Teaching Online Courses

The first question posed to the instructors asked them to comment on their experience and the reasons for teaching online courses. Table 1 indicates the resulting themes that emerged from the instructors' comments.

Table 1. *Themes related to the purpose of teaching online courses.*

Consensus themes	Supported themes	Individual themes
	External force and obligation	Need a job
	Teaching online is a new experience	

One supported theme, mentioned by half the participants, was that they either felt forced or an obligation to teach online courses. One of the instructors stated, "Distance Ed and online

asked me to" (M). Another instructor added, "The real reason is they asked me to design the course, so I designed the course for continuing education, and, in fairness, it seemed to me that I was obliged to teach it the first time" (O). Four of the instructors indicated that their main reason for teaching an online course was that they were asked and hired to teach online courses.

The second supported theme signified that teaching online was a new exciting experience and an innovative challenge. Some of the instructors felt that they needed to teach online to experience the new environment "I thought it would be a new experience, I like doing new things and I thought this would be a challenge and I would give it a shot" (H). Another instructor commented, "I felt it was a new experience for me to teach online" (G).

One instructor stated that the reason why he decided to teach an online course was that it offered an opportunity for employment. The instructor stated, "my additional interest was not idealistic or noble, I was a sessional lecturer and I wanted the job" (N).

Advantages and Disadvantages of Online Courses

The second question asked instructors to discuss the advantages and disadvantages of online courses for both instructors and students. Tables 2, 3, 4, and 5 report on the themes that developed.

Advantages for instructors. Table 2 provides the findings related to the perceived advantages of teaching online courses.

Table 2. *Themes related to advantages for instructors*

Consensus themes	Supported themes	Individual themes
	Improving pedagogy skills	Advanced planning
		Good discussion

Personal communication with students

Access different students

Less judgment about the students

Legitimate service to supplement
the income.

Instructor has more control.

One supported theme that emerged related to advantages of online teaching was a perception that teaching online courses improves pedagogy skills. It helps the instructor to think more about the content and focus of the delivery method. One instructor stated, “for instructors... Definitely makes you think about your course content and how you are going to deliver it. So I think it makes you more aware of your course content... Specifically how to deliver it so it really helps with your pedagogical skill... So you really have to put things step-by-step” (H).

Numerous individual themes arose such as instructors have more control when teaching online courses, they are less judgmental about students, and they can usually have good quality discussions that are better than face-to-face.

Disadvantages for instructors. Table 3 offers the themes related to the disadvantages associated with online teaching.

Table 3. *Themes related to disadvantages for instructors*

Consensus themes	Supported themes	Individual themes
	Technology	Inability to see students

Difficulties with materials Inability to manage the
It is labor intensive experience.
Concerns about students'
understanding of the material.

With regard to the disadvantages of teaching online course, one supported theme that emerged was related to technology and included: (a) lack of technology skill; (b) lack of access to equipment; and (c) technical problems. One instructor commented, "The single most important challenge that I encountered was that in many cases understanding the technology, it was a greater barrier to success" (O). Another instructor stated "the next challenge was that the system [for handling online courses] at the university was very unfriendly" (L).

The second supported theme was difficulties with the material embedded in the online environment, described as: (a) retaining a fresh attitude towards the material, (b) relying on the quality of the course, and (c) having to work with material that does not reflect the philosophies of the instructor. One instructor said, "The challenge as an instructor for me is to retain a fresh attitude towards the material... the challenge is for the instructor to stay fresh and not stereotype the answers or lose your appreciation for the students" (N). Another instructor commented, "I have to rely on the quality and the integrity of the course manual that gets sent out. I have to rely on the quality of that to transmit the learning information and content in an adequate way to an adverse group of students" (R).

Individual themes that emerged were an inability to see students, and an inability to manage the overall teaching and learning experience.

Advantages for students. Table 4 provides the results for responses related to the advantages of online learning for students.

Table 4. *Themes related to advantages for students*

Consensus themes	Supported themes	Individual themes
Convenience and flexibility		Explore the capacity of writing Anonymity Consistency of information

The second part of the question addresses the advantages of online learning for students. One consensus theme that emerged was that online coursework offers flexibility and convenience. All participating instructors stated that convenience and flexibility are among the obvious and major motives behind students' decisions to enroll in online courses. One instructor said, "I think for students it is mainly flexibility" (H). Another commented, "The advantage, of course, is that it can be done at their pace... It makes education more accessible, and it can be done from where ever" (R).

One individual instructor talked about the opportunity for students to improve their writing capacity as one of the advantages of taking online courses: "They are able to develop and explore their capacity for writing better with the online courses" (N).

Another instructor discussed the advantage of receiving the same face-to-face material and information for the online students. He said, "The advantage for students...There is a consistency to the information they receive. The material they get from the online course is the same material they get independent of the instructor" (O).

Disadvantages for students. The findings related to perceptions of the disadvantages for students in the online environment are found in Table 5.

Table 5. *Themes related to disadvantages for students*

Consensus themes	Supported themes	Individual themes
Technology		Problems with extended
Social and human interaction		education
		Problems with instructors

Regarding the disadvantages of online learning for students, there was consensus from the majority of the instructors that technology is considered one of the main obstacles when taking online courses. Technology issues were perceived to include (a) technical problems, (b) lack of technology skills, (c) issues related to access to technology, and (d) poor design of information. One instructor talked about some students facing technical problems and spending more time searching for information as well as the challenges they deal with while using the platform because of the lack of technology skills.

You have students who spend more time finding information, finding the tasks to do, finding the explanations to those tasks then doing them and that's problematic... A problem that continues to be with the black board (platform system) that we are asking people to spend more time learning how to use the platform than we are to acquire their understanding of the assignments. That was the single most significant complaint (O).

The second consensus theme revolved around the absence of social and human interaction. This theme included (a) independency issues, (b) students' inability to articulate concerns, (c) less negotiation between students and instructors, or between students on expectations, coursework, assignments, and the like, (d) differential levels of productiveness compared to face-to-face instruction, and, (e) the reliance on strict deadlines. The instructors all felt that the absence of visual and verbal cues, in other words, the "physical separation" affects students in a negative way. One instructor commented, "I think for the students, a well taught course face-to-face is better. To be in a room with other students and hear what they are saying. You get feedback you see the drama" (M). Another instructor said:

The students hand in the first assignment and they don't have a clue who I am or what I am looking for or [what] my biases are in terms of content or teaching method ... There is very little communication between students... They don't know each other. The human piece is missing (R).

And because there is no human communication, it is very hard for students to articulate their concerns or to receive constant guidance through the course material or course manual, especially if they are young and not independent learners. One instructor stated,

I think for some students, if they are younger, it's tough. Because they are used to someone that's talking, and they are getting a lot of information that way, and most people are verbal learners... Persons who are a little older and little more mature, they tend to deal with that a little better... I think persons who are more independent have a little more life experience, they know that you have to put the work in, you have to motivate yourself to do a little bit each time (H).

Differences Between Online and Face-to-Face Instruction

The third question asked instructors about the differences between online and face-to-face courses in terms of (a) course planning, (b) choosing the content, (c) presentation of information, (d) building rapport with students, (e) demonstration of learning, and, (f) assessment and feedback. Table 6, 7, 8, 9, 10, and 11 offer the themes that stemmed from the comments.

Course planning. Table 6 provides the results of the question focusing on the differences between online and face-to-face instruction in terms of course planning.

Table 6. *Themes related to differences between online and face-to-face courses in terms of course planning.*

Consensus themes	Supported themes	Individual themes
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a- Online themes

Detailed advanced planning.

Did not design the course.

Difficult to manage

b- Face-to-face themes

Planning flexibility

Regarding the difference between online and face-to-face courses in terms of course planning, one supported theme that emerged was the actual course planning. Instructors indicated that planning online courses was completed in advance, had more details and required potential problems for students to be anticipated. One instructor stated, "In course planning, it is way more detailed online, you want to try to anticipate problems before they happen" (H). Another instructor said "we had to plan discussion topics and post them ahead of time in the course

outline which typically you don't do in face-to-face" (L). A third instructor commented "for the planning [of an online course], it requires more planning... if everything is planned way in advance, then it is like a machine that is well oiled" (G).

Another supported theme that materialized was the fact that three of the instructors did not design the online courses they taught. They were implementers and did not have the opportunity to plan the courses. One individual theme that was mentioned by one instructor was that planning online courses was difficult to manage "online, it is a crisis management" (R).

On the other hand, planning face-to-face courses was flexible, included less planning than online, varied each year and the instructor could entertain multiple ideas at one time. One instructor said

"Not so much planning in face-to-face. My course planning [consists of] what are my outcomes? What is the key conceptual chunk I want them to have to do at the end... So course planning in face-to-face is really who I have in my class. What are the conceptual chunks? What are they trying to learn this for? Where do I want them to get to, how do I get them there?" (R).

Another instructor commented "In online you want to try to anticipate problems before they happen. You don't have to worry about that face-to-face because you can fix it on the fly, but you can't do that online" (H).

Choosing content. The differences between online and face-to-face instruction in terms of content choice can be found in Table 7.

Table 7. *Themes related to differences between online and face-to-face courses in terms of choosing the content.*

Consensus themes	Supported themes	Individual themes
a- Online themes		
	Largely similar to face-to-face	Structured around text books.
		Did not choose the content.
		Instructors' communication
b- Face-to-face themes		
	Largely similar to online.	

In terms of choosing the content, half of the participants stated that it was largely similar to face-to-face. The concept is for the students to get the same amount of credit as face-to-face [so that] requires them to have the same content. What is different is the pedagogy. One instructor said, "The content strikes me as being the least difficult part of designing the course... The content is largely the same, the pedagogy is different. How I get them to do it is different" (O). The instructors choose the same content in order to keep the learning experience for online students as similar to face-to-face as possible. One instructor said, "We chose the content from the face-to-face course. We had taught that same course with the same person who had worked on it, and we knew we wanted that experience to be as similar as possible" (L).

One theme, that came out was the result of two instructors who spoke specifically of the online content including the need for more explanations and being more theoretical. One of the

instructors said, “Whereas in the other one [face-to-face] the content it is a lot more theoretical. Some of it is excellent theory, but it needs to be mediated differently for the students to make full sense of it” (R). The second instructor talked about adding more explanations to the online content to balance the absence of the instructor “I was far more careful in explaining beyond any doubt what I mean when writing the material for the online course. The other challenge was I was inclined to give them more material online to compensate for the absence of my wisdom in the classroom” (O).

Presentation of information. Table 8 provides the findings related to differences in information presentation.

Table 8. *Themes related to differences between online and face-to-face courses in terms of presentation of information.*

Consensus themes	Supported themes	Individual themes
a- Online themes		
	Technology	Information more detailed.
		Information presented in big chunks.
b- Face-to-face themes		
Technology and human interaction.		

With regards to the differences between online and face-to-face courses in terms of presentation of information, the instructors addressed this aspect in different ways. Half of the

instructors talked about how they covered the information using technology tools, which included Power Point slides, videos, animations, and recorded concentrated lectures. One instructor said, "I was presenting the information using two methods: One was PowerPoint slides, the other was written explanations of concepts" (O). Another instructor added that he would like to use more video in the online coursework, "We program some flash animation so that helps to understand some concepts. I would like to put[in] more of these in the future" (G).

Two of the instructors talked about how the type of information was presented online; One instructor stated that it is usually presented in "big chunks" and is not as clear as face-to-face

"In terms of presentation of information. The pieces in the middle are too high level, and is not clear enough on how they connect... It is in bigger chunks and not as tightly connected online. In face-to-face, I can present little bit sized pieces so the presentation of information happens in little clusters" (R).

The second instructor commented on the need to include more details and explanations for the information presented online, indicating, "We just tried to make the manual more clear, more detailed" (H).

In face-to-face courses, the major theme that emerged was technology and human interaction. Instructors discussed the way they present information in face-to-face using mainly visuals, activities and gestures. Promoting engagement was considered to be much easier in face-to-face courses than online courses as instructors can mix human interaction with technology to assess and clarify the presented information. One instructor said, "face-to-face I lecture, I gesture widely, I try to select answers from students... but the fundamental difference is when I am in the classroom, I monitor the class looking to see whether or not it is working" (O). Another

commented, “Oh yes, face-to-face you get to use all the props, data projectors, videos, you can use the whole gamut of things to get your point across. Again, it is much easier” (H). A third instructor added that in face-to-face the lectures are not as organized as online lectures: “The thing with the courses I have taught online is they are prescribed. There is a syllabus, there are required assignments... In face-to-face, my lectures tend to be loosely organized around a few major things” (N).

Building rapport with students. The findings related to the differences in building rapport with students between online and face-to-face coursework are described in Table 9.

Table 9. *Themes related to difference between online and face-to-face courses in terms of building rapport with students*

Consensus themes	Supported themes	Individual themes
a- Online themes		
	Difficult	Different
		Easy
b- Face-to-face themes		
	Easy to interact	Intimate rapport

Building rapport with students did not have a clear consensus of opinion. In fact, participants' responses appeared to be contradictory. Approximately half of the instructors thought it was difficult comparing face-to-face with online learning mostly due to the absence of visual proximity. One instructor said, “It is more difficult to build a rapport... You don't see them, so you don't get that body interaction, what is going on. We rely on them making contact

with us, and most of them won't ... I said, if you have a problem, email me, and I check my email every day or two... I think that helps" (H). Another instructor agreed, suggesting, "Yes, the only way I could [build rapport] was by exchanging emails or participating in the online chats both of which are far more labour intensive than the ways I have built rapport in face-to-face" (O).

In contrast, two of the instructors found building rapport with students in the online environment to be easy. For one of the instructors, building rapport online was easier than face-to-face. She believed this was linked to the students' age and flexibility in accepting her method of approaching the topics presented. She said,

Is it more difficult online? No, it was not more difficult online... the online students seem to be a little more open to that and I wonder if it is because they are an older group... I find it easier for students to confide to me online because neither of us knows what each other looks like and even if we passed each other we would never know (E).

Several instructors even mentioned that building rapport online should not be considered a major concern because students who take online courses do not expect it [rapport] or look for it and believe that the online environment is not the proper environment that helps to nourish this rapport. One instructor said, "I just say it is a different relationship... With the Distance Education, it is not a situation where you are expecting human contact" (N). Another stated "I don't think it is a good medium for doing that... Students who sign up for online, I don't think that is their primary [focus], I don't think that is what they are after" (L).

One individual theme that arose was that building rapport online was different. One instructor tried to clarify the way in which this difference is manifest by suggesting that in the online environment,

The paper is the voice of the teacher. I am a secondary voice, not the primary. So it is harder to set the tone, though I still try to do that. A friendly welcome, sending out email, checking in with everybody, sending out little invitations to discussion: I think all of those things say I am here (R).

Certainly building rapport with face-to-face students was easier for the instructors. Two instructors described having a more intimate rapport with students. One instructor explained that the rapport is based on the experience of having both the instructor and the students in the same place “[for] the students in face-to-face environments, the students imagine an intimacy based on the experience of us having been there. So it is more effective at establishing a connection between us” (O). Another instructor said,

“I think it is still easier face-to-face and I will say why...because I can make them laugh. They start laughing, they are enjoying themselves... There is much more of this back and forth. I give them a little of that in the online live courses... But usually face-to-face with 40 to 50, I have more intimate rapport with face-to-face (M).

Demonstration of learning. Table 10 provides the findings concerning the differences in demonstrating learning between online and face-to-face environments.

Table 10. *Themes related to differences between online and face-to-face in terms of students' demonstrations of learning*

Consensus themes	Supported themes	Individual themes
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a- Online themes

Course assessment

Quality of discussion

Tutorials and problem

sets.

b- Face-to-face themes

Conversations and body gestures Assignments

The fifth aspect was students' demonstrations of learning. One supported theme that emerged was the nature of course assessment which included assignments and tests. One instructor said, "If they [students] phone me or email me that is one way... that's one way, but then again most students don't call. So it's really tough to see how they are doing in their assignments ... There are no tests online, just the exam and assignments" (H). Another commented, "Online because you don't have access to the non-verbal, I did quizzes ... The greater understanding came from writing essays" (O).

One individual theme that was mentioned by two instructors was the quality of the discussion. Instructors believed that students can demonstrate learning through the quality of discussion they have during a chat or a live video. One said, "Well, you are always left with that in the assignments... How they demonstrate the competency... Also in the quality of the discussion that you have" (L). Another said, "[How do I assess] online? Through the discussion I have" (E). Another instructor talked about using problem sets and tutorials in addition to the written assignments to assess students. When asked how students demonstrate their learning online, this instructor said, "We ask for tutorials and then we ask for problem sets. Problem sets are the place where we check for this [assessment]" (G).

In face-to-face, nearly all the instructors agreed on conversations and body gestures as the major method to judge students' demonstrations of learning. One instructor said, "I ask questions physically in class... It gives me an instant profile of how they grasp the concept. So I can come back to it someday or I can move on if it's ok" (G). When asked, what is there in face-to-face

classes that lets you judge if students learned the concept, one of the instructors said, "I am constantly watching. I am watching faces. I do a lot of group discussion. I walk around so I can hear what people are saying. I do a lot of constant dialogue and a lot of little presentations and group activities" (R).

Other means to monitor students' understanding in addition to course assignments were the use of participation marks and exams. One instructor said, "Well there are written assignments in face-to-face and those are what you grade. I do think that the students are able to figure out the prof if you know what I mean. We used to call it psych out. I think that the students are able to figure out the prof's hot button topic easier in class" (N). Another stated "So in my face-to-face I usually have participation marks...and with stats and research methods, we have labs. So I can go around and make sure and I can see them working on the computer to know that they are doing it properly so I get the feel that they are getting it" (H).

Assessment and feedback. Table 11 offers the themes related to assessment and feedback differences between online and face-to-face learning environments.

Table 11. *Themes related to differences between online and face-to-face courses in terms of assessment and feedback*

Consensus themes	Supported themes	Individual themes
a- Online themes (assessment)		
Largely similar to face-to-face		Structure of assignments and exams.
		Difficult and hard.

b- Online themes (feedback)

Instructors' availability	More negative and
Grades	specific than face to face.
	Positive
	More personal
	Same in general
	Useless

a- Face-to-face themes (feedback)

Mostly positive	Personal and useless
	Complaints about instructor's method of explanation.

Concerning issues of assessment, one consensus theme acknowledged by the majority of the instructors was the similarity in the assessment process between face-to-face and online courses. One of the instructors suggested that assessment in both learning environments was "very much the same... The same forms, the same assignments, same rubrics" (L). Another said, "They write the same number of essays, the same number of words. Instead of doing a midterm, they write three unit tests. And then they all write the standard final exam. So they are all being assessed using the same tools" (O).

One individual theme was a result of two instructors who agreed that the structure of assignments and exams to assess students online was sometimes different. One instructor qualified this difference by suggesting, "It's different, because in class you get three tests and those three tests work out to 60 percent, online they have one exam worth 60" (H). Another commented that "online they [students] are going to give you their assignments...for the online courses the assignments are already set so I have to grade according to [the designer's rubric]" (E).

Another individual theme that emerged was the difficulty of assessing students online as well as face-to-face. The instructor considered the process to be hard and different in both settings but more complicated online. As one instructor suggested, "I find assessment to be difficult anyways, and this applies to both. So perhaps assessment issues are common in both face-to-face and online... So assessment is difficult right across the board because the criteria to me is not clear... The marking is even more complicated because there is just extra hurdles" (R).

Regarding feedback, one supported theme that emerged was students' complaints about instructor's availability. One instructor stated, "More students in the online course reported that I was less accessible ...What students complained about the most is the accessibility and how well the logistics and stuff works" (L). Another said "they complain about grades or that I was not attentive enough" (H).

Several individual themes that emerged were that online feedback from students is negative, rude and more specific compared to face-to-face. As one participant stated, "Generally you are getting subtle constant feedback in face-to-face and more specific feedback online. And I think probably you hear more negative online than you do in the classroom because it can be

sorted out [in the classroom]. When the frustrations hit online they hit big... I have had more rudeness from online students than [I] ever got from face-to-face" (R).

On the other hand, several instructors found the online feedback from students to be positive. One instructor said, "[In] the online [course] I've gotten good feedback for the most part. Really nice feedback from the students. They say I'm accessible, I make the material comprehensible, they enjoy the course, I have a good sense of humor" (E).

Another supported theme that arose was that online feedback from students is mostly complaints about the assessment. One instructor said, "You don't get complements...in Distance Ed it is more you only hear from the students when something has gone wrong...now online all you get is about assessment" (N). In addition, one instructor felt it was more personal "It feels more personal online" (M).

One unexpected individual theme was brought up by one instructor who believed the online feedback was generally the same as face-to-face and not very helpful. This feedback usually comes from students who face troubles when dealing with online courses: "It is the same in general, and it is not very useful... It's usually from students who don't do well. They complain about grades or I wasn't very attentive and I go look at my emails from them and I had replied within a day or two, and I can't be any more attentive than that" (H).

Contrary to the general findings related to the preponderance of more rude or negative student-generated feedback in online environments, positive feedback was a supporting theme in face-to-face environments. One instructor said, "The feedback from face-to-face is positive" (O). Another stated, "Generally, I get positive feedback in both directions... But generally you're getting subtle constant feedback in face-to-face and more specific feedback online. And I think probably you hear more negative online then you do in the classroom, because it can be sorted

out” (R). Just as was the case for online environments, however, the evidence was contradicted by one instructor who found the feedback to be useless and personal in face-to-face situations and more helpful online. The instructor believed the negative comments and critique given by the students were addressed to her personally and not to the method of teaching.

My face-to-face students the last year I taught was at St Boniface College and I got terrible feedback but it was personal. It was like, “I don’t like her”, so I said to them, “so? You don’t like me, but that doesn’t help me to learn how to teach better in the future.” What it tells me is that you don’t like me as a person, and I’m not about to change the person I am because you don’t like me, no more than I would expect you to change because I don’t like you. So it was personal feedback in face-to-face whereas, online, it was much more helpful in terms of it would have been more helpful if the professor did this ...But there was none of that in face-to-face and that would have been much more helpful (E).

Another individual theme that emerged was that the face-to-face feedback includes complaints about the way instructors explain their points in class. One instructor said:

On campus, you’ll get some compliments and some complaints. Now, face-to-face, you will get some objections about the way you made your point in class. . And it’s very easy and this happens to all professors that in your attempt to make the material accessible, you will use an example, an anecdote or a way of emphasizing it that may offend someone who is deeply religious or it may offend someone who is involved in an ethnic identity... (N).

This individual talked about the kind of complaints he usually receives in a face-to-face setting. The instructor appeared to like the face-to-face feedback because it is immediate. He can realize instantly if he offended someone and take the necessary steps to correct the situation.

Suggestions for Facilitating Better Online Learning Environments

The fourth question asked instructors to propose suggestions in order to facilitate a better online environment for both students and instructors in terms of the previous six aspects; course planning, choosing the content, presentation of information, building rapport with students, students' demonstrations of learning and assessment, and feedback. The themes related to this question are found in tables 12, 13, 14, 15, 16, 17.

Course planning. Table 12 outlines recommendations for course planning.

Table 12. *Themes related to suggestions to improve online environments for instructors and students in terms of course planning*

Consensus themes	Supported themes	Individual themes
Quality and design of materials/ platform/assignments/activities		Need for training Financial issues Convenient platform system

The majority of the instructors discussed making some changes when planning the material for online courses. Two instructors discussed revising the quality of the material, going through it and adding more details to make it clearer for students. One instructor suggested:

Make sure that manual is as detailed as possible. Go through it, get someone to read it, go through it again if you're developing this. That's the key. So your course manual has to

be that much more detailed than your in class notes. Try to anticipate problems you normally wouldn't fix easily with verbal, make sure that manual is good for them (H).

Another instructor complained specifically about the Angel platform [operating] system and suggested that the design needed to be changed so that the information for the course would appear on one site instead of requiring students to log on to several different sites:

I think having material more linear so that even if the connections between the units are not obvious to the students, the order in which they do them is so the material flows whether or not they realize it. Having a single source so your lesson plans are coming through there you don't have to switch from module to module to module so it's all happening in a single site. I'm talking specifically about Angel, [the online operating system used at the University, where the horizontal organization of material [meant that the] students had to go searching this way rather than simply logging in, if you're in the course . I did this, I did [that] section last time, and everything for section two is right here...So making it [clearer would be helpful]. Whether or not we solve the problem, I don't know, but the point of that correction has to be students don't have to struggle more with the technology than the content, and that's what's key to me. Once you go in, your focus ought not to be on the procedure of the technology but on the learning of the content of the course (O).

Another comment related to providing a more convenient system for both students and instructors, "A system that is more user friendly...This business of having to get out of one section to go to another and then to get back...Only the tech people say that they like it...The rest of us just find it very awkward" (L).

Other instructors proposed adding a personal component to the material of online courses. One instructor suggested adding recorded lectures “I think having the recorded lectures are a good idea so long as you have a good lecturer, because it’s a different kind of learning...Otherwise you just sit at home and read a book. You need to bust it up, you need that personal component” (M). Another talked about forming an advisory committee of younger people, which would help decrease the generational gap when designing the material for online courses: “We need advisory committees of younger people who have grown up in this world who tell us how we think now and how they [think]...There is a bit of a generational divide, I think..... If we had younger people advising us, it’s a different way of thinking. It’s a different way of communicating a different set of expectations” (R).

Adding constructive activities for students was another approach to improve and enhance the quality of online courses. One instructor said, “I always say I want more in quality and less in quantity, now I need to apply that ... If there are things that are superfluous, I should probably skip that and replace them with more constructive activities” (G). Another instructor discussed the possibility of changing the syllabus every couple of years to keep the course modernized: “It may begin that way as a teaching issue, but the professor will say ‘I think the course has outlived its usefulness, it has no design and has to be redone’. I’m sure Distance Ed would like to change the syllabus and the degree and that kind of thing every couple years, but it’s impossible” (N).

The changes that were proposed also included organizing the activities according to a weekly schedule.

OK. Adjustment...It was difficult and I like to learn that...when Distance Ed asked me now that we have this bunch of activities that you asked your students to do...tutorials, problems sets, quizzes...labs, now we have to take these things and

put them onto a schedule per week...I know roughly in class what I'm going to cover in a week, but it's very rough. In online you need to be more accurate...Students need to know for that first week they will do Module One...This is where I need to make another adjustment...So I need to literally review all my course material and see if I think this is coverable within a week or will it be more? How much reading is involved there, how much exercises will be required there for them to do... Perhaps I can cut some here and add some more there. So this is where I am now. Also the schedule adjustment, which I forced myself to do, is there but it's not fully complete. Hopefully I refine that in the future (G).

One individual theme that emerged was the need for more instructor training and discussions. One instructor said, "I think as instructors we need more training. We need to learn" (R). Another instructor who works off campus expressed the need to arrange more training discussions following working hours: "I do know that the faculty of social work was reviewing all the online courses and the text that was being taught ...trying to standardize everything...The problem is that the discussions always happen during the day. I realize they are working all day too at the university, but if they set them for 5, and people who work till 4:30 can't get there in time" (E). This instructor would like to see the discussions of online courses held at a more convenient time for those instructors who work off campus.

Additional individual themes that emerged were the significance of being prepared for the financial repercussions of working with extended education. As one instructor mentioned, "It's a committee in Distance Ed and that's how it has to be. Now they run in a thing called money. It costs money to change a course. Even the faculty contract has a prescribed amount of

money for working with Distance Ed. So to change a course, I think they have to come up with several thousand dollars to change a course, and that's your first issue" (N).

Choosing the content. Table 13 provides a summary of the themes related to content choice.

Table 13. *Themes related to suggestions to improve online environments for instructors and students in terms of choosing the content*

Consensus themes	Supported themes	Individual themes
Adjusting and updating the materials	Delivery and organization of the	
Standardization of content	content	

There was a consensus from the majority of the instructors that adjusting and updating the material is a critical step to improving the content for online courses. One instructor stated that the department of extended education needs to work with the instructor and attempt to revise parts of the content to keep it updated, "But in Distance Ed, certainly presenting the material would be enhanced by having ... the professor rewrite everything and rewrite these parts [of the syllabus] in terms of what's hot in current events" (N). Another instructor said, "I think online we could update it more often...if we take the time so that would improve it, once a year...I think there's so much research being done. I think there's probably, every 2 or 3 years, there are significant developments as trends that need to be updated significant new writings. But the little stuff like links, probably needs it once a year, even if it's just to check, like 5% that needs to be revised" (R).

Reducing the amount of reading, removing some parts of the content, adding practical examples and providing optional assignments and textbooks were other suggestions to improve

the content. One instructor said, "If I did anything, I would probably reduce the amount of reading they [students] have to do, but I was guided by a very good course designer who was telling me not to overload them, not to compensate for the absence of time by giving them more material" (O). Another instructor concurred with this idea and added that the use of more online tools or flexibility in assignments or materials would benefit students:

"We could provide some optional assignments within the syllabus, and I think some of the courses do that. Instead of having a prescribed regiment, students have a broader creative range of assignments and approaches. It seems to me that it might be possible to actually present students with alternative texts instead of telling them you must buy this text or that text" (N).

Several instructors discussed keeping the content the same without modification. The first instructor said

"Content, I don't think you should change from face-to-face. I think it has to be the same. It's the same credit; it has to be the same... From my perspective it has to be the same" (H). The second instructor confirmed: "I guess you'd have to talk to students... Again, because we developed the online course to be very parallel and the content and so on and because we tried to make it accessible... We didn't change the content much... If we were going to revamp the campus course, I think we would want to revamp the online course... So I keep the content pretty much the same" (L).

One supported theme that emerged was adjusting the method of delivering the content instead of changing the content itself. One instructor said, "The solution to that would be in the way we cover the content... And this is where the variety of tools can be used. Some concepts are understood that we have visual means, other concepts would be if you provide examples of

problem solving..That kind of thing” (G). Another instructor stated, “You may have to adjust how you deliver it.... From my perspective it has to be the same. You just have to find a better way to deliver it” (H).

Presentation of information. Table 14 provides the themes related to improving the presentation of information in online learning environments.

Table 14. *Themes related to suggestions to improve online environments for instructors and students in terms of presentation of information*

Consensus themes	Supported themes	Individual themes
Technology		Structure Structure coursework around students' prior knowledge Online tutorials for learning platforms

One consensus theme that emerged was the use of technology tools. The majority of the instructors agreed on adding more technological learning tools such as videos, recorded podcasts, and facilitating live presentations. One instructor said,

I think podcasts...Whether or not they actually mimic the classroom, the face-to-face classroom... It seems that when you're speaking and a student is seeing someone speaking, that it seems more like a natural learning environment for them. So even having a recorded podcast, where a student would see the lecture being delivered, as if he were delivering it in class, I think would probably make it easier to follow (O).

Another instructor commented,

... and I've done 10 to 15 PowerPoint presentations like this...To compromise that...Now I discovered with time that these could be replaced by video of me...Explaining these things...Because they would see me more often...Otherwise they don't have an idea what I look like, or anything like that. They don't know my voice (G).

The instructor encouraged the use of multiple communication/learning mechanisms, including "videos, have some synchronous communication, have some reading for the students to do" (G).

One individual theme was the result of an instructor discussing designing the courses around students' knowledge and technical background. The instructor talked about designing online courses that would serve the needs of both adult and young students. And if the students face problems with the platform or the system, they should be introduced to a tutorial online to navigate them through it:

These poor students don't get needs assessments. Here we are, adult educators teaching about how a course shouldn't start unless you know who your students are...If we know that we have a third who have never done program planning before, a third who have never used a computer before, and a third who are way ahead of the game, or are taking the course because they need to, then we can structure things according to that. So if we have students that don't have a computer background, why couldn't there be a little module developed that for those who are having trouble navigating Angel learning. Go through this, have a little tutorial, try this out (R).

Building rapport with students. Table 15 provides the findings that offered suggestions for building rapport with students in online learning environments.

Table 15. *Themes related to suggestions to improve online environments for instructors and students in terms of building rapport with students*

Consensus themes	Supported themes	Individual themes
Social interaction	Instructor's effort	Technology

One instructor suggested smaller classes and offering blended learning classes as a better environment to nurture the rapport between students and instructors: "If students are interested in that kind of relationship building then [we] really need to think about other ways of doing it. Having smaller class sizes, looking at these so called opportunities of combining face-to-face whether it's in the same room physically or through video conferencing, Skype, so called face-to-face with real time interactions with the online stuff" (L). Another instructor talked about being a skilled instructor and combining technology with pedagogy: "I think that is up to the teacher, and if we were more skilled we could do that better. A combination of the technology doing what we need and the teacher knowing what to do" (R).

One consensus theme that emerged was facilitating more social interaction, which included phoning students and using synchronous chat. Another instructor encouraged instructors to use humor to appear as real people to students, emailing students frequently and giving out phone numbers: "Try to be as humorous as you can in your manual. Show them that you are a real person, that you are accessible. So give them your email, tell them you will get back to them in a couple of days. Give them your phone number to get back to them... That's all

you can do really” (H). Another instructor mentioned, “More synchronous communications so they [students] don’t see this course as just online and robotic...There’s someone at the other end who is caring about my success. I think students feel that with more and more synchronous communication” (G).

Two instructors believed that students don’t expect, or don’t care about, building rapport with instructors. One instructor stated,

“I suspect most students who take online courses are doing it because it’s convenient, not for relationships, for learning. If you want relations you’re going to lobby for something else... So the groups that are interested in relationships will contact us and want a different format. Students who sign up for online, I don’t think that is their primary...I don’t think that is what they are after...” (L)

Another instructor said:

I tell you now we hashed around this once before. I don’t think they [students] expect it [rapport] with Distance Ed. I don’t think they expect it. I don’t think they regret it or say sorry about [not building a rapport with the instructor]. They’re glad to have the credits that they can get working at their own pace, on their own time. They’re glad not to take a bus ride or find parking or carpool, and I think they’re realistic about that. I think they are right. And they realize and these are adults.... So the trade off is you don’t get to know the prof. Well who wants to anyways? (N).

Student demonstration of learning. Table 16 provides the themes that were found for suggestions related to student demonstration of learning.

Table 16. *Themes related to suggestions to improve online environments for instructors and students in terms of students' demonstrations of learning*

Consensus themes	Supported themes	Individual themes
	Assignments	Instructor's attitude. No change

One supported theme that emerged revolved around assignments. Instructors discussed adjusting and adding assignments. One instructor talked about using a variety of questions to tap every type of knowledge:

"I would still use about half multiple choice questions. I would still use some definitions. I think some of my short answer questions are too easy. You got to give some students some easy questions but you want them to think...To be honest I think I put some of the easy ones in there because it's easy to grade, but if I ask a complicated question then I have to read hard to make sure they got the concept" (M).

Another instructor said "That's one thing I'm always trying to improve. I changed my assignments and made them a little more random. So even if the students were talking to friends, they would still get different data sent. Try to cut down on the plagiarism, which I know goes on" (H).

One individual theme that rose was the importance of retaining a fresh attitude towards the material:

I've graded for 20 years. We changed it a little with new text, but basically I worry about getting casual. The student comes up with an original idea and an original approach, and

I don't recognize it as it is original. I just think he just didn't get the right answer because I've graded so often that you get so used to what to expect, so used to what students usually give me, even the A paper, you know, you just get used to it. Then someone does an original sentence or comes up with a notion I haven't seen before or often enough to remember, you know haven't seen it in five years, and probably got it wrong then. That's the kind of thing I worry about (N).

Assessment and feedback. The findings related to improving the nature of assessment and feedback in online learning environments are found in Table 17.

Table 17. *Themes related to suggestions to improve online environments for instructors and students in terms of assessment and feedback*

Consensus themes	Supported themes	Individual themes
Change		Follow up results Receive positive Review

One consensus theme that emerged revolved around the need to change assessment and feedback processes. The majority of the instructors discussed a variety of techniques to improve the assessment process and the quality of students' feedback. These techniques included: changing assignments, adding more formative testing, building better rapport with students, using peer evaluation, putting in more effort into designing good assessment strategies, phoning students and adding live sessions to facilitate students' learning.

One instructor talked about establishing clear rubrics:

Assessment in my sense would be much easier, I would start with setting up some really clear marking rule breaks, and I would do it by pulling together all the teachers who do any of the versions. Do it as a big messy discussion, where we put up on the wall all the things that when we say something's good regardless of the delivery method. And I suspect that out of that would gel, whether we all say that this is good so let's take a look at that good, and try and say, okay, if that's good, then this is medium and this is bad (R).

Another instructor suggested phoning students and adding live sessions (web camera), though qualified the remark by suggesting this wouldn't occur because of the additional work it would require: "I said I'd phone them. My number is out there. That would be a good idea, but I'm not going to do it...because of the amount of work it would be... You're asking for practical suggestions, these are ideals. Live classes are great but I don't want to do more of them" (M).

Two instructors discussed specifically the concept of using peer evaluation and students' assessment. One instructor talked about giving students the opportunity to grade other students' assignments and believed it s a valid form of learning.

I'd like them to put themselves in my shoes... I keep all the exams I have done over the last few years...These were graded and not all the exams were accounting for full marks...My idea is, if we can put students in our shoes...If I send them a test or a problem that was done by someone else...A number of years ago...Not graded...And say this student obtained a grade of 2 out of five. Why is that?...So they have to find the mistakes the students have done...they have to correct themselves what the other person has done ...We learn a lot when we teach others(G).

For this instructor having his students grade other students' assignments is a learning experience that would help them with their own assignments.

One individual theme that emerged was that the instructors need to follow up the results and comment on their own feedback to students:

In order to improve the feedback we need, especially for the essays, when they [students] need the instructor to comment on the writing, in the four stages in which we break the essay down....Having more feedback from the instructor at each of those stages may be a factor...We assume that people are going to learn from feedback and if they aren't getting it, it's difficult to understand. Especially if it's not face-to-face feedback, how are they [the instructors] going to assess whether or not they are learning? (O).

Another instructor commented that the quality of their feedback to students helped to increase the feedback from students, though it was found to be a time-consuming process in online environments: "In my case, it is to do a closer follow up on the results. I told you already we have tutorials and problem sets and quizzes; I should take time to look at their results. That's very time consuming..." (G).

Another individual theme was a result of two instructors talking about the positive review they get for their online courses. One instructor considered the online feedback to be quite useless because students don't put effort into them: "I don't find it very useful...I don't think the students take the time to think..." (H). When asked about suggestions to improve student feedback, the instructor said, "To improve it? I don't know, because I don't think students, once they're done, they just want to move on... That said, how do we improve this...Maybe a new delivery system or fairly new anyway...From my perspective it seems to be working fairly well" (H). Another instructor talked about getting good reviews with few complaints that tend to focus

on the hardware and the system: “We get pretty good reviews on the assessment process. What students complain about the most is the accessibility and how well the logistics and stuff works, software, hardware stuff. The course assignments and so on they like” (L).

Summary

This chapter addressed the research questions posed to each instructor in the study. Consensus, supported, and individual themes were generated as a result of the participants' responses. Substantial description from the participants and the inclusion of research supporting the themes were presented throughout the chapter. The next chapter will analyze the themes created from the participating instructors' responses and present a summary of the study's key findings. Included in this final chapter are recommendations to further improve the online environment along with areas for future research.

Chapter Five

Results and Recommendations

Summary, Conclusions and Implications

The purpose of this study was to investigate University instructors' perceptions of teaching both online and face-to-face courses. In order to address the topic, I interviewed eight professors, from various departments within one university, who had taught one course at least both face-to-face and at least once online. Each instructor was asked the same open-ended questions, which are appended in Appendix A.

Included in this final chapter are my conclusions based on the results of my study, and recommendations to improve online courses for both instructors and students.

Conclusions of the Research

Upon analyzing the questions, certain themes emerged from the data. Some of the themes were similar for most of the instructors, some themes were mentioned by only a few instructors, and some were individual themes mentioned by one or two instructors. These themes were used to draw conclusions that are organized around the four research questions of the study.

Reasons for Teaching Online Courses

Based on the findings, there appears to be two primary reasons for instructors to become involved in teaching online coursework: pressure from external forces to teach courses, and excitement about the possibility of trying new teaching opportunities. According to the instructors in this study, one of the reasons for teaching online courses was the pressure of external forces. That is, instructors were hired to teach online courses or were asked to do so as part of their teaching loads, so they felt they had no choice. Another reason was a sense of a

desire to experience the new media involved in teaching an online course. Although I anticipated that the instructors would have different motives, for teaching an online course, I was surprised to find that they were divided equally between being obliged to teach for various reasons and wanting to explore teaching in the online technological environment.

Advantages of Teaching Online Courses

No consensus themes from the instructors emerged when they talked about the advantages of teaching online courses. However, some of the advantages mentioned by instructors included the following: being able to plan courses in advance; the ability to have good quality discussions with the students online; opportunities for maintaining personal communications with the students; having access to a variety of students; having the opportunity to improve their pedagogy skills; having more control over the learning environment; and being less judgmental about students because of the lack of personal connections that can cause biases to develop. The latter one aligns with Appana's (2008) study where he listed the lack of visual cues as one of the advantages of online education because it helps the instructors to treat all students equally. In general, most of the themes found here are supported in studies that cited advantages of teaching online, such as: convenience and flexibility as well as the ability to change roles and become a facilitator, to be more creative when presenting materials, and to organize more structured courses; opportunities improve students' learning, to reach more students, to create innovative instruction, to take on the role of facilitator and manager, and for professional development (Daugherty & Funk, 1998; Hurt, 2008; Rockwell, Shauer, Fritz, & Marx 1999)

Disadvantages of Teaching Online Courses

Technical issues became a primary concern for the instructors, whether it meant acquiring the proper technical skills or accessing the equipment or having to deal with technical problems regarding the system or the platform. This result aligns with Tamashiro's study (2003) where technology was a detrimental factor because it required instructors to acquire typing skills and a high level of comfort with technology, which they lacked.

Another disadvantage for the instructors was their frustration with the course material. This theme was mentioned among instructors who did not design the online courses they were responsible for teaching. They experienced a hard time with the following aspects of the course: the quality of the overall course; their ability to relate to the material; and, their ability to keep a fresh attitude towards the course because it did not reflect their philosophies and had not been modified or up-dated for several years.

Other disadvantages included the inability to see and interact with students. This aligns with Tamashiro's (2003) study where the lack of face-to-face, personal or social contact with the instructor or students was considered the least favorable aspect of online teaching. Also problematic was the inability to manage the overall learning experience; concerns about students' understanding the material; and, the fact that teaching was labour intensive, which meant it required a lot of time, effort, and commitment from the instructors. The instructors spent more time than they anticipated teaching the online courses. This finding supports a study by Hurt's (2008) where he found that the increased preparation time to design and monitor online courses was perceived as a predominant limitation to online education among the instructors. The lack of time was also listed in Marquire's (2005) study as one of the major factors that hinders instructors' participation and engagement in online education. In addition Metcalf (1997)

discussed the increased time factor and how it may explain the instructors' reluctant behaviour towards online education.

Advantages for Students in Online Learning Environments

The majority of the instructors were in agreement that convenience and flexibility were major advantages for online students. This finding is consistent with a study by Bread, Harper and Riley (2008) who reported that convenience and flexibility were major strengths for online courses. Students certainly value the ability to decrease time constraints, to learn without the inconvenience of travelling and having the ability to complete the assignments and tasks at a time that is convenient for them.

The instructors mentioned other advantages for students, including: accessibility; the ability to receive personal attention from instructors while at the same time offering anonymity; and, the opportunity to improve their writing capacity. The latter aligns with Weiner's (2003) study which indicated that online learning significantly improved the students' writing and computer skills.

Disadvantages for Students in Online Learning Environments

As with the case for instructors, technology issues emerged as a major theme. The instructors felt that students who lack technical skills and knowledge spend more time dealing with technical problems than understanding the material. Students must have the necessary technological skills to benefit from online learning otherwise they end up, as Piotrowski & Vodanovich (2000) have found, facing different problems such as those associated with registering, losing electronic documents, and technical problems with sound and video quality.

The lack of social and human interaction was another major theme. The instructors discussed the absence of visual proximity and verbal cues and the serious effect this has on the

instructors' abilities to monitor students' learning. Several instructors felt that some students were not satisfied with the lack of interaction between their peers or instructors. This aligns with Swan's (2002) study, as he suggested that students' satisfaction and perceptions of learning were significantly affected by their interaction with course content, the instructor and other students. In fact, there is consensus throughout much of the literature that the lack of interaction is one of the great factors that hinders the success of online learning and affect students' satisfaction. For example, in Song, Ernise, Hill, and Koh's (2004) study, 71% of students were dissatisfied with online learning and attributed much of their dissatisfaction to the lack of community in the online learning environment.

Several other factors that affect the success of online learning were mentioned by the participating instructors. One significant factor was that the student has to be an independent learner, which means that the student should be capable of managing time, navigating through the system, and working on assignments alone without the instructor's usual help. In other words, to achieve success, online learners must be "self-directed" learners. They must be prepared to face different challenges, to motivate themselves and to commit to the learning process (Laine, 2003; Golladay, Prybutok & Huff, 2000; Serwatka, 2003). The findings of Hurt's (2008) study indicate that professors agreed the students needed several characteristics and traits such as self-direction, accountability, responsibility, flexibility, time management and problem-solving skills, in order to succeed in online courses.

The lack of social and human interaction also attributed to students' inability to articulate concerns to instructors; having less negotiation with instructors, dealing with strict deadlines and being less productive when compared to face-to-face learning. Facing problems with instructors and the department of extended education were other reported disadvantages.

Differences Between Online Courses and Face-to-face Courses

In terms of course planning, the instructors suggested that online courses required more detailed structure and advanced planning. Instructors had to anticipate problems when they designed the courses and did more planning than they expected. This aligns with Moore's (2003) study that showed some instructors use a more structured approach that includes using well organized and detailed syllabi and structured activities to deal with online learning, while others concentrate on creating friendly courses where students are interacting and collaborating and where the instructor listens to students' needs. Face-to-face course planning was reported by the participating instructors to be more flexible, and variable.

When it comes to choosing course content, several instructors felt that it was very important for the content to be largely similar to the face-to-face content since the number of credits was the same for both courses. Other instructors discussed designing online content with a more theoretical framework; and, the need to include more explanations and details to compensate for the instructor's lack of face-to-face communication with their students. Hartzler - Miller, Emerick and Kenton's (2006) study, reported that instructors faced an inescapable challenge of keeping the original content when converting the face-to-face course into online course. They had to remove some of the course's materials due to the lack of time, communication and online teaching experience. While the face-to-face course was mostly practical where students were asked to explore their own teaching situation throughout the course, the online version was based on a hypothetical case study minimizing the process of personal interpretation.

For online courses, technology was reported as the main method of presenting information to students. Instructors used different means such as recorded lectures, animations,

videos, and Power Point slides. Although instructors are always encouraged to implement different technological components to produce meaningful learning experience for students, they should be aware of the fact that offering the tools to provide information for students does not guarantee that they will employ these resources for their own understanding (Lana & Greene, 2000). Actually implementing advanced applications such as video, voice, lecture slides, bulletin board system... may affect the learning experience and could be distracting for the users (Wuensch, Aziz, Ozan, Kishore & Tabrizi 2008). This contrasts with face-to-face environments where participating instructors used both technology and human interactions; body gestures, conversations and discussions. Other instructors in the study perceived the question differently and talked about the type of information they present for the students, describing the layout of information in online courses as “big chunks and loosely connected” compared to “little bite sized” pieces in face-to-face courses.

Building rapport with students online was described as being different and difficult for the instructors due to the physical separation between themselves and the students. Only two instructors described rapport building in online learning environments as being easy. In contrast, building rapport with students in a face-to-face course was reported to be simpler due to the more intimate environment where social interaction became a basis of building rapport. This finding aligns with Aragon, Shaik, Palma-Rivas, and Johnson's (1999) study where face-to-face students expressed a more positive perspective regarding the learning environment characteristics than the online students. Students in face-to-face courses can more easily get together and build a social relationship. In contrast, online students don't have comparable opportunities. This, according to Aragon, Shaik, Palma-Rivas, and Johnson (1999), suggests that the online environment may lack the strong social dimension that is beneficial to face-to-face learning experiences.

An interesting finding in this study concerned some instructors' beliefs that rapport building was not necessary in online learning environments, and/or that students who chose to learn in this format were less interested in building rapport than students in face-to-face learning environments. Such a finding lends itself to the need for more research from a student perspective to consider whether such a perception may have merit.

When it came to demonstrating learning, instructors' mainly used course assignments and tests to assess students' learning in the online environment. Additional formative assessment methods used were online discussions, online tutorials and problem sets. In face-to-face instruction, instructors talked about judging learning more informally by looking at body gestures and facial expressions, and by using assignments and conversations to judge if students were learning. According to Wuensch, Aziz, Ozan, Kishore and Tabrizi (2008) one of the main advantages of face-to-face setting is that the facial expressions and body gestures give a feedback mechanism for instructors. For example, instructor can immediately recognize if students are engaged in the material from their body language and facial expression. Unfortunately, this is not possible online.

In online courses, instructors agreed that their method of assessing students was largely similar to that found in face-to-face learning environments. Some instructors talked about being limited to the use of assignments and exams. Regarding the feedback instructors received from students in online courses, instructors commented that feedback tended to include mostly complaints about grades and instructors' unavailability. It was also described by individual instructors as being more personal, useless, negative and specific as compared to the feedback from face-to-face courses. In contrast, the face-to-face feedback was mostly positive. There were minor complaints about how instructors deliver and explain their topics, but most instructors

attributed this difference to the social interaction and community that is built in synchronous, face-to-face learning environments. This finding is congruent with Aragon, Shaik, Palma-Rivas, and Johnson's (2000) study. They found that face-to-face students rated the instructor relatively higher for instructor support than the online students. While the instructor provided limited feedback to online students, various types of feedback were provided to the face-to-face students.

Suggestions to Facilitate Better Online Learning Environments

The majority of the instructors suggested changes for improving online learning environments that revolved around the material of online coursework. Several suggested revising the quality of the material, where others suggested adding more activities and a personal component that would help students to connect more with the material and feel less isolated. A Sloan Consortium report indicates that many instructors take great efforts to "personalize" their online courses, and they aim to create a friendly and trustworthy online learning environment. (Moore, 2003). The process of developing an online course is significant. According to Torrisi & Davis (2000), it should be considered as a transformation process instead of translating lecture and content to a different mode of instruction.

In addition, each participating instructor mentioned several minor changes such as changing the syllabus every couple of years, changing the layout of the information to appear in one site and organizing all planned activities according to a weekly schedule. One instructor mentioned the importance of receiving adequate training before teaching online courses. This is of particular importance, as several studies have shown that most faculty members don't receive or have little formal training on efficient use of technology (Barely, 1999). Another instructor underlined the significance of understanding the financial implications of working with the extended education department prior to designing online courses.

In terms of choosing course content, the suggestions revolved around changing the material. Several instructors suggested adjusting the content by adding practical examples, a wide range of optional assignments and text books and keeping the material current and up-to-date. Some instructors were satisfied with the content and preferred to keep it the same. They suggested adjusting the delivery method rather than the content itself. In the estimation of most instructors, the content of parallel courses taught in face-to-face and online learning environments should be standardized, as they believed students should experience similar content in both environments. This finding supports Xu and Morris's (2007) research that indicated objections and goals of online courses and the content should not differ significantly from face-to-face classes.

Related to the presentation of information, the instructors were in agreement in their desire to use more technological tools to replace the usual Power Point slides. They suggested using mini videos, flash animations, recorded concentrated lectures and synchronous chat to keep close contact with students. According to Harper (2008), students have various learning modes, and educators should consider designing various types of activities that use a wide range of learning tools to meet and focus on all modes of learning to provide more meaningful experiences.

Several instructors found a positive connection between the effort they put into connecting with students and building a good rapport. They suggested using synchronous chats or, phoning students in an effort to compensate for the lack of social and human interaction. This finding aligns with Branon and Essex's (2007) results. They found that while instructors use both synchronous and asynchronous tools for a variety reasons, the majority, 65%, preferred and chose an asynchronous approach more than a synchronous approach.

One instructor suggested using blended learning modules where both components from face-to-face and online environments are incorporated. The instructor felt that this type of blended module had lots of advantages particularly in terms of building a good rapport and decreasing students' isolation. One instructor felt that it was significant for the instructors to be technically skilled in order to facilitate a better relationship with students.

The instructors mainly discussed adjusting assignments to facilitate demonstration of learning by applying different types of questions such as multiple choice, definitions, short answer, to tap different types of knowledge and making the assignments more random to cut down plagiarism. The latter issue, plagiarism, has become a significant problem in online learning environments. Although the percentage of students who had been surveyed at schools and admitted that cheating is wrong was never below 90% (Davis, 1992), Scanlon reported cheating rates as high as 75 % to 87 % among the same students (Scanlon 2003). One instructor, participating in the current study, talked about keeping a fresh attitude towards the assignments when grading. The instructor suggested that instructors of online learning courses should be open minded when grading and reading original answers and make an effort not to "stereotype" students' answers.

The main theme related to assessment and feedback revolved around change. In order to receive good feedback from students, instructors discussed several suggestions including putting in more effort and time to phone students and follow up on questions and concerns and commenting on students' assignments and test results. Kuriloff (2004) proposed that the role of the instructor in an online writing course is to expand, elaborate, or clarify student writing (p. 40). Other suggestions from the participating instructors were adding more live sessions, using peer evaluations, using students' assessment as exemplars, changing some assignments, having a

better rapport with students and establishing a clear rubric for assessment. Findings related to feedback were contradictory in online versus face-to-face environments, though more professors mentioned that feedback tended to be more negative for online courses, linking this to the lack of rapport and social interaction of these environments.

Implications for Practice

Online education is a good delivery method. The learning experiences, in face-to-face and online learning environments have their differences, both negative and positive. Educators must realize that online delivery as an educational format has its weakness and strengths as does face-to-face delivery, and that there are similar concerns regardless of the delivery method.

The instructors agreed on incorporating more technological activities and more personal components in online courses to better appeal to students. This personal approach includes more online chats, more collaborative works and discussion groups, and having occasional face-to-face meetings or online tutorials for those students who face difficulties navigating through the course. I would suggest blended learning for those students who are in close proximity to the university and for those who feel more comfortable with the combination of the face-to-face and online experience.

I would also suggest that instructors be given proper training prior to teaching online courses especially training related to the potential for technological challenges that they may face when teaching online courses. In addition, I would recommend having a more user- friendly computer platform for students that would decrease the spent time on comprehending the system and searching for information and materials.

Students should be able to access an online tutorial that would help them navigate through the system without the need to seek out help from the instructor. More importantly, I

would recommend that students be given a detailed specific outline of the syllabus, the activities organized according to a weekly schedule and important points to consider before attempting an online course. For example they must have an adequate technological knowledge of how to use a computer, how to search for information online, and how to contact and chat with the instructor. They also have to be aware of the significance of self discipline and direction to achieve success.

Instructors mentioned the amount of time and effort spent preparing and managing online courses particularly while designing and planning the material, grading and providing feedback and written comments to students. I suggest having an assistant, in addition to the course instructor, who could be available during specific times of the day and evening to complete different tasks such as grading, answering emails and reporting student concerns to the instructor. This would free the instructor to deal with more pressing problems related to course content, pedagogy and assessment.

Another area that needs attention is the incorporation of social and human interaction, which was considered a great limitation for both students and instructors. It would be helpful to use more synchronous chatting, phoning, and adding some brief videos of the instructors giving the occasional lectures where they explain certain aspects of the material. This will offer the students the opportunity to see and listen to the instructor and may help them feel less isolated and remote. Students would also be able to watch the lecture repeatedly if they had problems comprehending the information. In fact, students would obtain the benefit of listening to the instructor and being able to take advantage of the instructor's personality. It would also serve to connect the students to the course and the materials to a larger degree than reading alone.

Recommendations for Further Research

The present study provides the foundation for further meaningful research. The following discussion considers studies that diversify the population, use a quantitative research method and a longitudinal design.

First, researchers should consider utilizing a quantitative method in order to reinforce the findings of the present study. Such a study would allow for a much larger population sample than was possible in the present qualitative study. A quantitative study could address questions about the potential generalizability of the results to other study samples or populations.

A further study, focused on students' perceptions, could be conducted to compliment the current study focused on the perceptions of online instructors. Investigating students' experiences of online learning, students' comparison of online and face-to-face learning in terms of advantages, disadvantages, and differences and students' suggestions for improving online courses would allow researchers to address questions concerning the similarities and differences between students' experiences and perceptions and the instructors' experiences and perceptions described here.

Even though the scope of my study did not differentiate between instructors who designed their own course and those who just implemented an existing course, the information that I gathered through the interviews seems to suggest that there are differences. For example, implementers' faced some difficulties trying to retain fresh attitudes towards the content of the courses and the assessment tools. Further study could be conducted that would compare the advantages and disadvantages of teaching on line courses from the designers and implementers point of view. A different set of questions would need to be asked that would provide

information as to what the similarities and differences are between designers and implementers' experiences and concerns. As well, it would be interesting to compare their suggestions as to how they would facilitate a better online learning environment. This will also address issues related to designing online courses. Questions such as: Should implementers be allowed to redesign their online courses? Could this process of redesign be done outside the Department of Extended Education? Do implementers need the approval of the distance education department, and/or the designer of the course, before redesigning existing online courses? These issues and others, such as cost of changing an online course, could be addressed in these types of studies.

Finally, researchers should consider the option of conducting longitudinal studies of online instructors starting at the point when instructors begin developing and teaching online courses. This type of study would answer questions related to the development, over time, of online instructors' perceptions of teaching and learning in online environments, thus providing a deeper insight into the instructor's role in this ever-growing educational phenomenon.

Personal Conclusion

The present study provides valuable insights into the experience of instructors who teach face-to-face and online courses. Studies of online instructors' perceptions can help educators understand what instructors perceive as benefits and limitations of online education, what they suggest that leads to meaningful learning and what the underlying structures are of such an experience. Although this study does not allow for generalizations to be made across the population of online instructors or to different populations, its in-depth descriptions should allow for more informed suppositions.

As online education continues to grow, educators are struggling with the challenges and opportunities it creates. This study's findings concerning the advantages and disadvantages of

online education, the differences between online and face-to-face courses and the suggestions to improve online learning and teaching may allow educators to better prepare online courses, create a better online environment, and help instructors to better understand their own roles in online teaching.

The findings strengthen previous research that has claimed instructors' perceptions of online learning relate to their experience of teaching, comfort with technology and ability to commit to the online teaching process. In addition, all findings related to the advantages, disadvantages and differences between online and face-to-face learning were largely similar to the pattern found in the existing research. For example, the great amount of time required to prepare, design and teach online courses, the lack of social and human interaction between instructors and students, the technological barriers are examples the common predicted disadvantages of teaching online courses which surfaced as further supporting evidence in this study.

Instructors responsible for online teaching may find the results of this study useful, as it provides descriptive data about instructors' experiences and perceptions of online education. The study offers information that suggests ways of improving online teaching and learning, and suggests limitations and disadvantages that should be avoided so that students and instructors benefit effectively from the online experience. The results suggest that an emphasis needs to be placed on the online instructor's concerns and suggestions to actively facilitate a better way of teaching online courses. Instructors may want to pay more attention to the quality of the content, the material, and the tools they use to present information in online courses. They may also need to focus more on the communication and interaction with students during online courses and consider using chats, phones, or webcams and sending helpful comments and feedback.

Online designers should consider the role of the instructors while designing courses. The results suggest that designers of online courses that take into account both the needs of both students and instructors. For instance, to design courses with user friendly platforms, to include a variety of instructional teaching and learning tools and most importantly to consider the importance of the interaction between students and instructors and students and the interaction between students and the course content.

The participants in the current study consisted of eight instructors who teach face-to-face and had taught at least once the same course online. Because the participants are from different departments, have different ranges of experience in teaching face-to-face and online and are teaching different courses (fact based and interpretive, completely online and correspondence), the results may be affected by these factors and could have been different if all the participant were for instance from one department or taught the same course or had similar experience. These factors could also be linked to the numerous individual themes that arose, although there were agreements on several themes among the instructors. In addition, although the time management and commitment was not brought up as a theme among the participants, I do believe it is a concern that hinders instructors' engagements in this type of education. Some of the instructors refused to repeat the online experience and the time issue could be one of many other factors, such as the platform system, the level of comfort with technology and the responsibility and effort required to teach online courses that led to the decision not to teach again in the online environment.

In conclusion, the results help to present a clearer description of what online learning is as perceived by instructors. Educators should realize that online delivery as an educational format has its weakness and strengths just as face-to-face does, and there are nearly identical

concerns regardless of delivery method. They should also pay more attention to the disadvantages, concerns and suggestions made by instructors to create a better online environment that will help to enhance nourish students' learning and facilitate online teaching. This has implications for future research. As further research is developed regarding this topic, researchers may find it useful to refer to the themes identified by the current results. This may help shape clearer discussion of instructors' perception of online learning.

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APPENDIX 1 – Letter of information and consent

Dear participant:

My name is Maha Telmesani, and I am a Masters student in the area of Post Secondary and Adult Education at the University of Manitoba. I am writing to invite you to participate in a research project, as part of the requirements for my Master's degree in Education. The purpose of this research is to explore instructors' experiences, attitudes and perceptions of online learning. The results should help to design more effective online courses.

Research project title: Faculty's Perceptions of Online Education: A Qualitative Study

Researcher: Maha Telmesani

Sponsor: University of Manitoba.

This letter will provide you the basic idea of what this research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of my study is to explore instructors' experiences, attitudes and perceptions of online learning. The results of such projects will help to design online courses more effectively.

I am asking you to consider taking part in this study and to participate in an individual, face-to-face interview which should take approximately an hour of your time and will be audio taped. The questions I will ask relate to your personal experience as an online and face-to-face instructor. You have, of course, the right to answer only those questions you feel most comfortable answering, and you can withdraw from the study at anytime. *Should you chose to withdraw, your interview will not be used in the final reporting, and there will be no penalty associated with your withdrawal.*

Any quotations, I use, from participants in writing the report on this study, will be attributed to pseudonyms in all published results. No one individual will be identifiable or identified in the results. All of your responses will be kept strictly anonymous and confidential. Should any comments suggest the identity of a person, that data will simply not be used. All results will be reported in a general format.

A transcript of the interview will be returned to you for five days prior to writing the report, so that you can add, delete, or change any responses and to ensure that all identifying information has been omitted. This will occur before the analysis of the data begins. If I do not hear from you within the five days, I will assume that there are no changes with your transcript. If you require more time, to read over the transcript, you can e-mail me with your request. You will be asked to offer factual information regarding your personal experience with online and face-to-face teaching. Only aggregate data will be reported to further protect the confidentiality of all participants. Should any data allow for the identifying of any individual, it will simply not be used in the results. The interview data will

be securely stored on a password protected computer file as is required by the University of Manitoba guidelines and all printed data (transcribed interviews) will be stored in a locked file cabinet in my home. Only the principle researcher and my thesis advisor, Dr. Kelvin Seifert, will have access to all the data. All data and surveys will be destroyed after five years.

There are no risks involved in this study to subjects, or to third party, since participation is entirely voluntary and the results will be reported only in their generalized format in the final report. In no way will individuals be identifiable and/or identified in the reporting and of study results.

Should you wish to participate, please sign the consent form on the bottom of this page. Keep one copy of this letter and the form for yourself, and give a second copy to me for my records. If you do not wish to participate, please discard the information.

Note that this research has been approved by ENREB (Education Nursing Research Ethical Board). If you have any concerns or complaints about this project you may contact me or Dr. Margaret Bowman who is the coordinator of human ethics; her contact information is margaret_bowman@umanitoba.ca, or telephone 474-7122. You may also contact my advisor, Dr. Kelvin Seifert, at 474-9859 or seifert@ms.umanitoba.ca.

Sincerely,
Maha Telmesani
University of Manitoba
Tel : (204) 219-2721
E-mail: maha-telmesani@hotmail.com

- ☐ Check this box if you want an email copy of the thesis to be sent to your address after it is completed.

Your address:.....
.....

I have read the information in this letter and consent to participate in the research as described above.

Participant: _____ Date: _____

Researcher: _____ Date: _____

APPENDIX 2 – INSTRUCTORS INTERVIEW PROTOCOLS

This study has a primary research question: “What are instructors’ perceptions and experiences regarding the advantages and disadvantages of online teaching versus face-to-face teaching?” This question builds upon several more specific questions namely: “What are the advantages and disadvantages of teaching online courses when compared to teaching face-to-face courses?” “What aspects of online courses are considered most effective for presenting information?” “What aspects of online courses are considered most effective for student learning?” “What aspects of online courses are considered most effective for assessing student learning?” “How do the answers of the last three questions compare with, or differ from, face to face courses?” “How can we design better online courses that would serve students and instructors needs?”

Specific interview questions:

1. Please describe your experiences of teaching in an online environment.
 - (a) How many courses have you taught online?
 - (b) What was the nature of the course(s)?
 - (c) How many students were enrolled in the course(s)?
 - (d) Is this course(s) also taught in face-to-face setting? If so, why was the course offered online? If not, why was the course developed for online setting?
 - (e) What made you decide to try teaching in an online environment?
2. From your experience teaching in face-to-face and online settings, what do you consider to be some of the advantages of online learning?
 - (a) For students
 - (b) For instructors

3. From your personal experience please identify the challenges that you encountered during the process of teaching an online course?

- (a) For students
- (b) For instructors

4. In what ways (if at all) does teaching in an online environment differ from face-to-face teaching in terms of:

- (a) Course planning
- (b) Content choice and design
- (c) Presentation of information and/or pedagogical strategies
- (d) Building rapport with students
- (e) Students demonstration of learning
- (f) Students assessment and feedback

5. What suggestions might you have to facilitate a better teaching and/or learning experience for instructors and students in online coursework in terms of:

- (a) Course planning
- (b) Content choice and design
- (c) Presentation of information and/or pedagogical strategies
- (d) Building rapport with students
- (e) Students demonstration of learning
- (f) Students assessment and feedback