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PIONEERS OF ASYNCHRONOUS ONLINE EDUCATION AT RELIGION-BASED
INSTITUTIONS OF HIGHER EDUCATION: A MULTIPLE CASE STUDY
EXPLORING THE PROCESS OF ADOPTION OF ONLINE EDUCATION
AT THREE PRIVATE CATHOLIC COLLEGES

ALAN HANSEN

A Dissertation Submitted in Partial
Fulfillment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

Department of Educational Administration and Foundations

ILLINOIS STATE UNIVERSITY

2008

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Alan Hansen

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This qualitative study examined the process of adopting online education at three private colleges. All three institutions participating in the study were private Catholic colleges that offered their first online courses in the late 1990s. The research question posed for this study was: Within the participating institutions, how did online education get started and what was the process for its development?

Findings from this research indicated that, for an institution to successfully implement online education, four elements emerged: (a) some form of infrastructure needed to be in place that could support online education, (b) a latent force, referred to as an engine, was necessary to provide ongoing support, (c) an innovator, who had a strong interest in online education, was imperative, and (d) a bridge builder, who provided credibility, communication, and coordination between the stakeholders, was critical to the sustainability of the online initiative. The institution successfully implementing online education also needed significant amounts of personnel, funding, and technology.

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A. H.

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CHAPTER I

INTRODUCTION

According to a report prepared by the Department of Education, there has been a boom in the growth of computer-based distance education courses and programs since the mid-1990s (Wood, 2004). The Department of Education reported that, in 1998, 1.6 million students were enrolled in 54,000 online courses at 1,680 institutions. In 2003, the most recent national report available, the National Center for Educational Statistics (NCES) updated these statistics reporting that in 2000-2001 student enrollments in distance education courses had reached 3,077,000. Courses being offered via distance education grew to approximately 127,400 at 2,320 two- and four-year institutions (Waits & Lewis, 2003). These figures indicated that 38% more institutions were participating in distance education in 2000 than in 1998. Additionally, 92% more students were being served by 136% more distance education courses than just 2 years prior.

In a report for the Sloan Consortium, Allen and Seaman (2003) reported that the growth of online enrollments increased at an annual compound rate of over 25% between 1999 and 2002. They forecast that “Given the magnitude of continued anticipated growth, it is clear an upward growth trend is continuing and the peak in online learning enrollment is probably some years away” (p. 21). Growth rates were expected to continue at a rate of over 25% per year. This rapid growth of online education is causing numerous changes at many institutions of higher education.

The Research Problem and Its Background

A basic challenge in this study was the confusing use of the term “distance education”. Broadly, distance education refers to any type of education that physically separates the instructor and the instructed. In a 2001 report to Congress, the Department of Education categorized distance education in their demonstration programs as follows: “print-based correspondence study, one-way and two-way live video, audiotapes, videotapes, voice-mail, CD-ROM, and the Internet” (Riley, Fritschler, & McLaughlin, 2001, p. 15). Therefore, distance education represents everything from correspondence education to computer-based online education. Whenever I used the term, distance education, I was referring to the broader definition of distance education and the entire set of education at a distance.

Online education is a subset of distance education, including synchronous and asynchronous delivery. Synchronous delivery demands that the student(s) and instructor have live communication, whether it is via teleconference or instant messaging online. Asynchronous delivery allows access at any time by either the instructor or the student. This means that the instructor and the student are communicating regularly but with delays, at different times.

Although online education is growing rapidly, it has faced numerous roadblocks that go all the way back to the origins of distance education in the mid-19th century. For many people working in higher education, online education is different and, therefore, something to be feared. The cultural roots of higher education are an important starting point in understanding the environment around the adoption of online education.

Levine and Sun (2002) observed that, "The differences between the common perceptions of distance education and the traditional ideal of collegiate learning are difficult for an institution to accept or deem desirable" (p. 4). This barrier to the implementation of online education seems to be centered on the fact that online education often does not look like the paradigm of traditional higher education. Veysey (1965) noted that by 1910 "the structure of the American university had assumed its stable twentieth-century form" (p. 338). He noted that the system of higher education in the United States had begun a crystallization process. This crystallization defined what higher education was, including the artifacts, values, and underlying assumptions that built its organizational culture as an industry, and individually as institutions. As examples, Veysey suggested that it would be inconceivable to think of an American university without a board of trustees, a faculty rank system, a "president, department chairmen, athletic stadium, transcripts of students' grades, formal registration procedures, or a department of geology" (p. 340). Cohen (1998) provided an excellent example of the accepted paradigm of teaching:

Good morning, students, and welcome to the first class meeting of the semester. During this term we will be studying the concepts of, reasons for, and ways of developing.... Your resources include my lectures, class discussions, your textbook, the library, and the programs in the learning laboratory. You will write two fifteen-page papers and take three exams—one essay and two multiple-choice. Each paper and exam counts equally in determining your grade. (pp. 365-6)

Online education often functions in an environment contrary to the paradigms described by Veysey and Cohen. As an example, online education does not require buildings or a campus. Online education does not require face-to-face meetings between instructors and students. Online education does not require traditional lectures. Any of

these vestiges of traditional higher education may be present, but they are not required.

Most institutions of higher education in the U.S. have been around for many years, and in some cases, centuries. As institutions grow and develop they create a culture unique to their institution. Edgar Schein (1992) defined culture as:

A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 12)

Shared understandings of what the college experience entails may be held unconsciously and become intractable within a department, or even institution. Therefore, online education may be resisted not only because it is new but because it runs counter to what people believe is essential to the success of the college experience (Bower, 2001; Cohen, 1998; Jaffee, 1998; Veysey, 1965). This can be seen in the fact that distance education in the early 20th century made strides toward becoming mainstream, but faced stiff opposition from administrators and faculty members who felt that distance education had no place in the traditional universities. The best known, and perhaps most famous, of the early critics of distance education was Thorstein Veblen, a respected scholar at the University of Chicago, who rebuked the efforts of universities to be all things to all people, and questioned the very legitimacy of universities that attempted to offer “edification of the unlearned by ‘university extension’ and similar excursions into the field of public amusement, training of secondary school teachers, encouragement of amateurs by ‘correspondence,’ etc.” (Veblen, 1965, p. 16). He reaffirmed this position by criticizing university efforts “to comfort and edify the unlearned with lyceum lectures, to dispense erudition by mail order has no place with scholarship or science” (Veblen, pp. 191-192).

Veblen was not alone in his opposition. The groundswell of opposition by faculty kept distance education from achieving mainstream status for over 90 years (Veysey, 1965; Pittman, 1991).

Distance education in the form of correspondence programs had taken a quiet and secondary position in higher education into the early 1990s, minimizing criticism by maintaining a low profile (Edelson, 2001). However, asynchronous online learning made significant headway in many institutions of higher education by the mid-1990s. This was met in some cases by adaptation and in many other cases by opposition that should not have been unexpected. For example, faculty members posited that online education is pedagogically unsound (Betts, 1998; Cole, 2002; Edelson, 2001); that it might be subject to fraudulent practices by unscrupulous institutions (Edelson, 2001; Pittman, 1991; Wood, 2001); that course ownership and copyright issues remained unresolved (American Association of University Professors: Special committee..., 2002; Cole, 2002; Dooley & Murphrey, 2000); and that there was inadequate technical support to support online education at a given institution (American Association of University Professors: Special committee..., 2002; Bates 2000; Berge, 1998; Betts, 1998). Among the many issues faced by institutions choosing to adopt online education are those issues related to pedagogy, or how courses are developed and managed; power, in terms of who is in charge of course and program development; and fear, as manifested in concerns about job security, time constraints and pay. These issues are explored in depth in Chapter II.

Principle Research on the Implementation of Online Programs

How are barriers to online programming overcome? While the growth in online programming has been well documented, few researchers have examined the

implementation of online education at institutions of higher education. Austin (2000) conducted a multi-case study examining factors involved in creating online education programs at three community colleges. Her research found that faculty innovators played an indispensable role in the change process required to implement program changes. She also identified communication and coordination between faculty members as key components in expanding online programs throughout the college community. She stated that, “faculty members need to understand and accept the concept of distance education for the process to flourish” (Austin, p. 170). She added that the participants in online education initiatives need to share notes and ideas about what does and does not work. Austin also found that all three institutions where she conducted her research shared several organizational factors.

All three colleges enjoy financial stability and have the resources necessary for the development of new projects and programs. They have a reputation within their states as educational leaders and innovators. They are all located in populated areas with industries receptive to workforce education and training. (Austin, 2000, p. 174)

She also observed that each of the institutions where she conducted her research had flexibility in their organizational structure that allowed change to occur. Austin’s work was in the community college setting, and in all three cases the institutions were large, supporting multiple learning centers with substantial resources.

Turning to the private sector, Feller (2002) conducted action research at a small private university, Pacific Lutheran University (PLU), identifying four threads that influenced successful development of online education at her institution: (a) an existing, formal proposal that became a touchstone for dialog in the university community; (b) an advocate who combined networking and serendipity; (c) an environment that provided

support from the general university community and from administration; and finally (d) student support, enhanced by user-friendly technology. Feller referred specifically to a turning point that occurred by happenchance at a pub in London. She happened to meet with the Dean of Business from her university, who inspired her to expand the online program at their university, when he indicated an interest in also expanding online education into his college at the university. Feller added the fourth thread regarding student support almost as an afterthought:

Ironically, some time elapsed before the realization set in that there was a fourth thread that centered on students. With the summer of 2001 upgrade of PLU's eCourse system, the online classroom became user-friendlier to students and faculty alike. (Feller, 2002, p. 74)

Both technical support and software were upgraded in a manner that made access and use of the system easier for the students influencing the acceptance of online coursework at the institution.

Feller provided six recommendations on education from her action research:

1. remember that the purpose of education is to foster learning
2. foster democratized learning environment
3. involve the whole individual in the educational process
4. replace fragmented models of curriculum design with integrated models
5. value and honor all venues of learning
6. recognize learning as a lifelong pursuit (p. xi)

Her focal point for these recommendations was that "we must look first to fundamentals of education and learning before we readily embrace or dismiss one method of instruction" (p.168).

Two other studies provide some additional insights into online education initiatives. French (2001) conducted research in the State University of New York (SUNY) system where he provided insights into perceptions about an online education

initiative in the SUNY system through interviews he conducted with faculty and staff within the system. His interviews identified problems with the implementation of online education caused, in large part, by poor communication and lack of consultation with faculty and administration. Further, his interviews identified problems with the interpreted purpose of developing online education within the institutions he was studying. Likewise, Linquist (2004) provided additional qualitative insights into implementation of an online program through interviews posted in her research. Lindquist's research identified two areas of dissonance at the North Dakota institutions she was studying. The dissonance focused on interpretations of the reasons the institutions were participating in the first place, and issues with the planning process itself at those institutions. These two studies support the importance of good communication, collaboration, and planning to help facilitate success in online education implementation processes.

Kinley (2001) surveyed department chairs at 400 public institutions across all Carnegie categories, determining that the two strongest motivators for department chairs participating in technology-driven distance education were first, wanting to provide greater access for students (90% of respondents) and second, providing greater flexibility for the students (82% of respondents). His research also identified four keys for successful implementation of online education programs: (a) collaboration and shared goal setting between all participants; (b) administrative support and facilitation; (c) encouragement and resource allocation from administrative sources to development and implementation; and (d) chair participation as role-models and mentors. Kinley concluded that faculty ownership, buy-in, control and shared direction setting are critical to the success on any online program.

Online Programs at Private Colleges

Colleges and universities are faced with the challenge of determining how online education may or may not fit into their curricula. There is a strong division between the courses of action that have been chosen between public and private institutions. While 90% of public 2-year colleges and 89% of public 4-year colleges offered distance education courses in 2000-2001, only 16% of private 2-year, and 40% of private 4-year institutions offered any distance education courses at that time. As online education grew at public institutions, 62% of private 2-year colleges and 44% of private 4-year colleges had no plans to adopt distance education courses between 2002 and 2005 (Waits & Lewis, 2003).

Nonetheless, some private institutions have taken initiatives to start online courses. With smaller enrollments, the ability to provide both access and flexibility seem natural reasons for smaller institutions to want to offer online education. In the pilot study for this research, the innovator of online education, at that institution, identified access and flexibility for students as key motivators for his efforts to start online education coursework at that institution (Hansen, 2004).

While some research exists on implementation of online programs at public colleges and universities, little research is available regarding the implementation of online education at private colleges and universities. In 2002, I began teaching online courses at a small Catholic university. This institution had developed a successful online program, enrolling over 3,000 students in 2003-2004 (Hansen, 2004). By the very nature of being a small university, the institution had limited financial resources and talent resources to draw from in order to develop online education. What factored into the

success of this college's ventures into online programming? In a 2004 case study of the institution I found confirmation of Austin's (2000) assessment that an institution needs to be flexible and open to change. The study findings further substantiated Kinley's (2001) observation that chairs were motivated to provide online courses out of a concern for access and flexibility for students.

This study spurred my interest in how private colleges have adopted online education. Among private colleges and universities Catholic colleges and universities are well represented and provide some consistency for study. Within the body of private colleges and universities, the largest private system is the Catholic colleges and universities in the United States. As of 2001, there were over 200 Catholic colleges and universities enrolling approximately 670,000 students in the United States (Maxwell, 2001). In a survey of the 180 members of The National Catholic College Admission Association, 59 self-reported that they offered distance education courses in some format (National Catholic College Admission Association, 2005). This indicates that one-third or less of the members of the National Catholic College Admission Association offer online education. While aggregate growth of institutions of higher education participating in online education has continued to increase rapidly, the overall participation of Catholic colleges and universities appears to be changing relatively slowly, as is the case with private colleges and universities generally.

Study Problem and Purpose

Private colleges are less likely to adopt online courses than public colleges, and extant studies of why and how colleges adopt online courses focus on the public sector. However, a minority of private colleges have invested in online curricula. An

investigation of what led these colleges to develop online programs may shed light on why these institutions buck the trend and how these institutions successfully adopted online programs. Therefore, the purpose of this study was to examine, from the perspective of those who were involved, why and how online courses were initiated at three Catholic institutions of higher education.

Research Questions

This study was both qualitative and exploratory in nature. There was one driving research question for this study: within the participating institutions, how did online education get started, and what was the process for its development? From exploring this question, the findings suggested some answers for institutions interested in pursuing the adoption of online education at their own institutions.

Study Methods and Procedures

I took a multi-case study approach to this study problem. This involved case selection, a research approach, and establishing a process for cross case comparisons. I examined the school profiles of 177 Catholic colleges and universities (National Catholic College Admission Association, 2005). This was an online source that included the majority of Catholic colleges and universities in the United States. It also included a profile of each of the member institutions, whether or not the institution claimed to offer distance education, and general contact information for each institution. I reviewed each of the 177 profiles, and contacted each of the 59 institutions within this group that claimed to offer distance education in some form.

In order to select specific cases for this study I developed three criteria for inclusion in the study. First, the institution had to be offering computer-based online

courses. Second, the institution had be offering full course programs online, or be moving in a direction to do so, with a large number of online courses available at the time of this study. The third criteria for inclusion in the study evolved through discussions with the institutions. In some cases, the online development at the institutions had evolved to the point where information about the early development of the institution's online initiative was lost. In those cases, key participants had moved on and were no longer available for interviews in some cases. Therefore, the third criterion was that the online initiative be recent enough that there were key participants still available to interview and participate in the study.

Stake (1995) and Eisner (1991) both identified the importance of access for successful case studies. I selected potential case studies that both met the three criteria above and appeared to be cooperative and positive toward such a study by responding and indicating a willingness to help by participating in such a study. Ten institutions met the first two criteria. Five of those 10 institutions were eliminated from the candidate pool based on the third criterion or their willingness and ability to participate in the study. From the final five candidates, three were selected for participation in the study.

The focal point for research and analysis was the interview. I conducted face-to-face and telephone interviews with participants in this study. I expanded the list of participants in the study by using a snowball approach within each of the participating institutions. In addition, I reviewed documents and archival records that were accessible. I was able to conduct some field observations with site visits to each of the three institutions. I also utilized a reflective journal. Documents, records, and site visits served primarily to help corroborate details and observations based on the interviews. The

reflective journal was a useful tool in reviewing the evolution of the analysis, and finding thoughts and information that would have otherwise been lost in the process of analysis. I took an observer-as-participant role in my research with a clear agenda of observation with those participating in the study.

After generating data and evidence, I used open coding to develop categories for analysis for each institution. Once I completed this initial process, I moved on to a cross-case comparison, developing matrices for evaluation and analysis.

Theoretical Framework

This research utilized a framework from which to view the process of adoption of online education as a multi-case study. As the research was exploratory in nature an *a priori*, concrete theoretical framework was unreasonable. On the other hand, proceeding without any boundaries for the study was impractical. This study proceeded with four pre-conceived lenses through which to examine the research: (a) Roger's (1995) adoption of innovation theory, (b) Vroom's (1964) expectancy theory, (c) Schein's (1992) model for adoption within mature organizations, and (d) a model developed by the researcher, Hansen (2004), in a pilot study for this investigation, examining the role of the innovator at a small Catholic university.

Rogers (1995) developed a model that describes the process of adoption for innovations. In this model he identified the stages of adoption, which include the innovator, early adopter, early majority, late majority, and laggard stages. In the process of adoption, innovators were identified as risk takers who were venturesome and were sometimes perceived as eccentrics. Early adopters were often identified as more respected by their peers, and thus more effective as the change agents who facilitated

change for the organization. There was some literature that discusses the role of early adopters or merges the terms of early adopter with innovators (Austin, 2000; Gallant, 2000; Hall & Elliott, 2003; Wilson, 1998). There was little research that examined the specific role of innovators in the process of change toward adoption of online education in higher education. I anticipated that the innovators and early adopters would play a critical role in my analysis of how the online education initiatives developed at the institutions participating in this study. As a result, I made special efforts to identify the individuals in those roles at the institutions I was studying, and observed how they influenced the development of the online education initiatives at their respective institutions. Rogers' theory on the process of adoption was a primary lens for proceeding with this research.

Expectancy theory posits that people are motivated to behave in ways that produce valued outcomes for themselves. Vroom, who introduced the theory in 1964, indicated three important elements to motivation: (a) motivation is affected by the individual's expectations that a certain level of work will produce an intended performance goal; (b) motivation is influenced by the individual's perceived chances of receiving various outcomes as a result of achieving the performance goal; and (c) motivation is affected by the extent to which the individuals value the outcomes or rewards of achieving the performance goal (Kreitner & Kinichki, 2004). This research considered Vroom's expectancy theory as it related to the innovator and early adopters of online education at the participating institutions, looking at both the external influence and the internal motivation. Expectancy theory granted another lens through which to examine the influence of institutional innovators and early adopters.

Schein's (1992) writing on organizational culture provided a third lens for evaluating the cases in this research. Broadly, this research used Schein's working definitions of organizational culture. This research also used Schein's model for organizational change to help interpret the tools used to facilitate change in each of the organizations in this study.

The final lens which I used as a framework for this study was the findings of the pilot study for this research, in which I investigated the role of a faculty innovator of online education at a private university. In that study I developed a model, based on the innovator of online education at one Catholic university (Hansen, 2004). This model described four roles of the faculty innovator in developing online education as follows: (a) seeker, (b) advocate, (c) intrapreneur, and (d) statesman. The role of seeker related to the innovator's curiosity in behalf of the institution. The second role of advocate was an ongoing role throughout the remainder of the process. The third role of intrapreneur was where the innovator was the primary experimenter in the process. The fourth role was that of statesman. As the institution adopted a more formal online protocol, the innovator moved to the background, always advocating, but no longer taking the lead, nor feeling the need to lead.

This study was exploratory in nature in an area with very limited research available. Although these theories helped guide me, they were intended merely as a framework for investigation. Each lens provided some value in the discovery process. The research of Rogers and Schein played a critical role in the final analysis.

Significance of the Study

Adoption of online education may not be important to some private institutions of higher education. However, it is important to many others that are considering developing their own online programs. There has been little research examining how or why private colleges and universities adopt online education. By studying the implementation of online courses at private colleges, this research provided insights into both the opportunities and barriers faced by private colleges that are considering the potential role of online education at their institution. It provided insights into how to motivate and encourage organizational members to take the pioneering steps necessary for successful implementation of online education at individual institutions of higher education. This exploratory multi-case study within Catholic colleges and universities also provided a foundation for further research of how leaders can encourage change within the structure of higher educational organizations. It may add further insights into the specific needs of higher education in making changes in their institutions.

Background of the Researcher

This study is limited by the personal biases of the researcher himself. This is demonstrated in the researcher's subjective lenses, which include: (a) the personal lens of teaching both in traditional classrooms and in the online environment successfully; (b) an advocacy lens based on experiencing the positive outcomes of online education; and (c) the philosophy lens of the researcher which comes, first, from my business background, and, second, from my background in non-traditional higher education.

The personal lens is based on my experience in adult education that started in the field of business training in the late 1970s. I worked mostly with non-traditional adult

learners in my experiences as an educator in higher education. This experience tends to bias my views favorably toward online education, as opposed to the bias of a person who had spent their teaching experience working with traditional students. Why? Non-traditional adult learners I have worked with have been faced with the multiple pulls of education, working full-time, spouses, and children. Trying to help them find the means of continuing their education amidst these many pulls on their time influences my viewpoint.

In 1999 I was drafted to help develop online coursework at the college where I served as a department chair. My initial reaction was negative toward online education, but after teaching through the medium for two terms I saw the merits of online education for many of our students, who were again mostly non-traditional adult learners. Since that time I have served as both a developer of online courses and a teacher in online programs. I have gradually shifted from teaching exclusively in the classroom to nearly exclusively teaching online. I am a believer in online education and must recognize both my bias in favor of online education, and my inclination to advocate online education. I do, however, realize that online education does not fit every situation or environment.

My philosophical perspective is strongly biased by my background and professional experience. I began working in the retail industry under the tutelage of my father when I was 14 years old. I earned an MBA and was involved in several management turnaround projects that focused heavily on improving customer service. This business and customer service philosophy affects how I perceive that higher education should be. I perceive higher education as a service first and foremost. This again blends well with the expectations of online education.

Recognizing these subjective lenses should help me avoid excessive influence from these lenses. On the other hand, it is unreasonable to assume that they will not affect my interpretation of the data.

Organization of the Study

Chapter II reviews literature and research relevant to this study; specifically, it examines the history of distance education, resistance to the proliferation of online education, background of Catholic colleges and universities, and the conceptual framework that guides this research. Chapter III details the research methodology. Chapter IV provides an analysis of each of the institutions that participated in the study and discusses the process of implementing the online education initiative in each case. Chapter V introduces a model of understanding developed in the cross case analysis of the three institutions as a group, identifying and discussing common elements to all three institutions in their online education initiative. Chapter VI is a summary chapter which provides an overview of the preceding five chapters, summarizes findings of the study, and discusses implications of this study.

CHAPTER II

REVIEW OF THE LITERATURE

This study examined the process of developing online education at three private colleges and universities. This review of published literature provides the background needed to understand the issues and problems associated with this research and builds a framework to support the research design.

This literature review is divided into five sections. The first three sections are critical to understanding the foundation of this research. The first section examines the history of distance education and the historical factors that have influenced online education. The second section examines issues that affect the development of online education in the areas of faculty, organization, support, legal and governmental regulation. The third section examines the limited research available on the actual process of adopting online education in higher education. The fourth section provides an introduction to, and background information on, Catholic colleges and universities, which were the focus of this study. The final section expands on the conceptual frameworks of Rogers, Vroom, Schein, and the pilot study, and provides grounding in the lenses used to develop this study.

Online Education as a Form of Distance Education

This section will first introduce current trends and the status of online education in the United States. The terms *online education* and *distance education* are often

confounded, even in academic studies. Online education is a subset of distance education. Distance education includes any type of education that separates the teacher and learner. Correspondence programs are a form of distance education. Televised and video programs that are packaged for education are other forms of distance education. Online education is limited to education provided at a distance using computer technology and the Internet for delivery of the educational service. Throughout this study, I attempted to keep these terms separated, but in some instances the literature does not carefully differentiate the terms. This section will also examine the historic roots of distance education which contributed to the environment and issues that online education faces today.

Online Education

This study focuses on online education that is delivered to remote (outside the classroom) sites using computer technologies. The basic terminology can be confusing. The broader term, distance education, has been defined by the U.S. Department of Education for one of its primary studies on distance education to mean “education or training courses delivered to remote (off-campus) sites via audio, video (live or prerecorded), or computer technologies, including both synchronous (i.e., simultaneous) and asynchronous (i.e., not simultaneous) instruction” (Waits & Lewis, 2003, p. 1). In 2000-2001, 90% of the institutions reporting that they were offering distance education indicated that “Internet courses using asynchronous computer-based instruction” was a primary mode of delivery (Waits & Lewis, p. 11). However, 51% of the institutions also indicated that they were using two-way audio or audio/visual as a primary mode of delivery. Future plans of institutions indicate that 88% will expand their use of asynchronous computer-based instruction, while 66% of the institutions will expand

synchronous computer-based instruction. The institutions also indicated some growth in the areas of two-way video or audio, CD-ROMs, multi-mode packages, and pre-recorded video (Waits & Lewis). As asynchronous online delivery leads both the current primary means of delivery and the anticipated, future means of delivery, the term distance education is often used interchangeably with online education delivered either synchronously or asynchronously. Efforts have been taken to differentiate the two terms, however, in some cases the sources themselves are unclear on whether they are referring to the narrowed definition of online education or the wider definition of coursework delivered by other than traditional classroom instruction.

One-third of the 2- and 4-year colleges in the United States offered distance education courses in 1997-1998 (Osika & Sharp, 2002). Between 1995 and 1997-8 higher education institutions offering distance education courses rose from 33% to 44% of all institutions. The number of online degree and certificate programs doubled, with enrollments reaching 1.66 million students (Lewis, Snow, Farris, & Levin, 1999). By the year 2000, 56% of Title IV-eligible 2- and 4- year institutions were offering distance education courses with over three million students taking at least one online course (Waits & Lewis, 2003). The adoption of some form of distance education has grown much more rapidly at public institutions than at private institutions of higher education. Statistics preceding 1995 are sketchy, but the Department of Education has monitored growth on distance education by sector since 1995. Figure 1 demonstrates the growth rate between 4-year private and 4-year public institutions of higher education.

Figure 1. Public versus private distance education participation (Lewis, Snow, Farris, & Levin, 1999; Waits & Lewis, 2003)

There is a strong connection between non-traditional students and the expansion of online education. The definition of non-traditional students is somewhat ambiguous. Different states and different institutions define the term in somewhat different ways. The U.S. Department of Education suggests that nontraditional students have any of the following characteristics: (a) delayed enrollment, does not enter postsecondary education within one year of high school graduation; (b) attends school part-time at least for part of the regular school year; (c) works full-time while enrolled; (d) is considered financially independent for financial aid purposes; (e) has dependents other than spouse; (f) is a single parent; and/or (g) does not have a high school diploma, but rather a GED or certificate of completion (Choy, 2002).

Many non-traditional students are turning to online education because their schedules do not mesh with the traditional academic calendar (Collison, 1998). In a 2002

Department of Education study on the demographics of distance education students, Sikkora and Carroll reported that the total student population participating in distance education is between 8% and 10% of all students in undergraduate and graduate programs, respectively. For both undergraduate and graduate students, greater participation in distance education is tied to being married and having dependent children. Greater work intensity (that is working full-time versus part-time) also directs students toward distance education. At the undergraduate level gender is a noticeable attribute, as more females than males participate in online education. And, also at the undergraduate level, those majoring in education participated more in distance education than in other majors. Online education provides a flexible alternative. Asynchronous learning models allow students to access their courses at times that are most convenient for the student (Levine & Sun, 2002). The asynchronous learning model shifts the locus of control away from the instructor and toward the student.

Rather than attending traditional on-line campus classes, distance learning requires students to take the responsibility for prioritizing their own schedules to meet the knowledge objectives of the course. Because students receive instruction via a myriad of communication methods and media, they must accept more responsibility for learning. (Hebert, 2003, p. 19)

Forecasts indicate that distance education will continue to grow at rates in excess of 20% per year (Allen & Seaman, 2003; Waits & Lewis, 2003).

Numerous issues are related to the development and expansion of online education. Many of these issues find their roots in the history of distance education. To more fully understand the source of much of the debates concerning contemporary online education it is important to understand those historic roots. The following paragraphs describe key events and controversies in the historical development of distance education.

Historic Roots of Online Education

Distance education emerged in the United States in the early 19th century and developed through a series of entrepreneurial experiments that continued through the early 20th century. In many ways this was a natural outgrowth of conditions in the country at that time. Beginning in the mid-1820s the voting franchise expanded to a much broader portion of the population (although still limited to white males); individualism and self-worth were on the rise; and the pre-industrial move toward commercialism, mercantilism, and laissez faire market systems was growing (Atkins, 2001). This sense of personal value spurred an interest in adult education and provided fertile soil for distance education to develop in the United States. The market for distance education was established, leaving only the question, “Who would develop it?”

Higher education was undergoing the stirrings of change in the early 19th century as well. The role of higher education in the United States prior to the Revolutionary War was to prepare clergy and leaders. However, Cohen (1998) noted that: “By the end of the Colonial Era the defenders of classical studies were hard put to justify their favored curriculum as proportionately fewer graduates entered the clergy” (p. 28). Higher education was in turmoil regarding curriculum and mission. Faculty members were shifting from roles as low paid, noble, service providers similar to clerics (Cohen) to “a highly organized and narrowly self-selected guild of professionals, each something of a law unto himself” (Rudolph, 1977, p. 4).

During the period between 1820 and 1920 several substantive, private ventures were undertaken in the area of distance education. Four of these undertakings represent the movements and activities that occurred during this period: Josiah Holbrook in 1826

with the American Lyceum movement; Anna Ticknor in 1873 with the Society to Encourage Study at Home; Bishop John H. Vincent in 1873 with the Chautauqua movement; and Thomas J. Foster's innovation in correspondence that became International Correspondence Schools of Scranton Pennsylvania in 1891.

American Lyceum Movement

The American Lyceum movement traces its roots back to the Mechanics' Institution developed in England and France at the beginning of the 19th century (Bode, 1968). In 1800, Dr. George Birkbeck of the Andersonian University of Glasgow in Scotland began offering lectures to workmen in the mechanical sciences. Coursework gradually expanded to include the application of chemistry, astronomy, electricity and the French language. The mechanics institutes in England were subsequently created "to meet the need of artisans for technical education at low cost, in leisure hours, and with minimum preparation requirements" (Knowles, 1994, p. 15). The Mechanics Institute of London was founded in January of 1824. Later, that same year, the concept of a mechanics institute arrived in Philadelphia, Pennsylvania, as the Franklin Institute in Philadelphia. Along with mechanical knowledge the American version included in its mission "the encouragement of invention and discovery, and the education of the public in the achievements of science and industry" (Knowles, p. 15).

In October of 1826, Josiah Holbrook, a graduate of Yale College in 1806 who had spent more time in the labs of Benjamin Silliman than in honing his academic prowess (Bode, 1965), issued the "Manifesto" of the American lyceum system. Holbrook proposed to cover the entire country with a society for mutual education and contended that "lyceums would disseminate practical information, upgrade social morality, educating the

expanding electorate, and improve common schools, all at a minimum of expense” (Woytanowitz, 1974, p. 15). Holbrook started this venture in Connecticut but rapidly expanded it to 15 states between 1826 and 1832 (Watkins, 1991). By 1835 there were 3,000 town lyceums and over 100 county lyceum organizations (Knowles, 1994). Politics, demographics, economics, society, and culture all came together between 1828 and 1840 to support the lyceum movement. Professional educators supported the lyceum system during its inception, but their interest waned in the 1840s. Its influence as a tool for adult education diminished as the Civil War approached, but according to Bode (1965) “the lyceum in the sense of a local, public, adult-education movement was finished by about 1840” (p. 250).

Correspondence

Thanks in part to the development of the Penny Post (postal system) in 1837 Issac Pitman, who developed phonography (shorthand), established a correspondence course in England. His brother Ben Pittman brought the system to the United States in 1852 (Public Broadcasting System, 2004). Charles Toussaint and Gustav Langenscheidt formed a school in Germany to teach languages by correspondence in 1856 (Bittner & Mallory, 1933). This laid the groundwork for distance education by correspondence.

In 1873 Anna Ticknor created the society to encourage studies at home for the purpose of educational opportunities for women of all classes in the society. Printed materials sent through the mail were the main way of communicating, teaching, and learning (Nasseh, 2004). Although somewhat informal, Ticknor’s enterprise grew rapidly, “Although largely a volunteer organization, over 10,000 members participated in its correspondence instruction over a 24-year period. Ticknor became known as the

‘mother of American correspondence study’” (PBS, 2004). The system used home study groups, whose members worked from prepared guides. As the interests of the populace began to shift, the curriculum and format of the program remained static. As a result, the group foundered because of their “failure to adapt instruction to the ability and requirements of the students” (Noffinger, 1926, p. 5).

In the 1880s Thomas J. Foster was the editor of *The Mining Herald*, a daily paper in eastern Pennsylvania. He was concerned about mine safety and wrote a series of correspondence courses on coal mining, mine surveying, and mine machinery. By 1891, he had enrollments in these courses of over 1,000 students (Noffinger, 1926, p. 12) and established the International Correspondence Schools of Scranton (ICS). By 1923, ICS had enrolled over 2.5 million students in its courses (PBS, 2004).

Foster may not have been the first truly commercial venture in correspondence education for a profit, but he was certainly the most successful. According to Bittner and Mallory (1933), private correspondence schools in the late 19th and early 20th century had few limitations. There were no accreditation agencies, no federal regulations, and few state regulations. With few regulations in place, the quality of proprietary schools ranged wildly from quality training courses, like those offered by Foster, to “the latest mushroom diploma mill, which is purely a money venture and makes no effort to furnish a quid pro quo in the way of real instruction” (p. 27).

Watkins (1991) observed that colleges and universities in the United States stayed aloof of these early efforts to bring higher education to the common people. He noted:

The universities did not initiate the movement. It was not an attempt on the part of the institutions of higher learning to make knowledge less cloistral, less

aristocratic. Somewhat reluctantly the university left the calm of the world of scholarship to mingle with the hot and dusty turmoil without. (p. 2)

Efforts of colleges to move into the field of distance education were absent until the 1870s and later in the United States.

The Chautauqua Movement

Another milestone in the development of distance education occurred in 1873 (or 1870 by some accounts) when the Methodist Reverend John H. Vincent collaborated with Lewis Miller, a manufacturer from Ohio, to begin a Sunday school institute at Fair Point, New York on Chautauqua Lake (Noffinger, 1926). The Chautauqua movement quickly grew into a traveling program of religion, education and entertainment, encompassing reading circles, national summer meetings, traveling programs with public speakers, and correspondence degree programs with complete curriculum. All this was organized in 1878 into the Chautauqua Literary and Scientific Circle which Knowles (1994) calls “the first integrated core program of adult education organized in this country [United States]” (p. 37). The Chautauqua annual assembly quickly developed an extensive curriculum and public following. “In effect Chautauqua became a folk university and college instructors were called shortly to give courses on college subjects” (Schoenfeld, 1977, p. 24). The program enrolled as many as 60,000 students for home study, a portion of whom went on to earn degrees by completing the 4-year course of study, and had enrollments from 10,000 communities in the United States and Canada (Schoenfeld).

Dr. William Rainey Harper was well known for his lectures for the Chautauqua movement. Dr. Harper developed a correspondence method for teaching Hebrew in 1879. Dissatisfied with the format, he tried again with much better success in 1881 (Noffinger,

1926). In 1883 Harper began taking the correspondence courses to Chautauqua institutes, and in 1885 he wrote an extended essay codifying the elements of correspondence study (Pittman, 1995). Harper, however, felt that correspondence extension should be “organically related to a university” (Woytanowitz, 1974, p. 62). He continued to combine his advocacy of integrating correspondence education through universities and made it a core element of the mission of the University of Chicago when he helped form that institution.

Colleges and Universities

Prior to Harper’s work with distance education at the University of Chicago, study for off-campus students had a sporadic history in the United States. Success of such programs often tied directly to the longevity of the leaders who were willing to actively advocate and support correspondence and extension systems. In 1873, Samuel Fallows, president of Illinois Wesleyan College introduced distance education to higher education in the U.S. (Bittner & Mallory, 1933, p. 15). Fallows was the first to advocate university extension and his program grew to include a successful Ph.D. program and undergraduate studies. While at Illinois Wesleyan, Fallows proved a strong advocate in a storm of opposition:

This granting of degrees in absentia raised a small tempest. Some of the Methodist brethren, even, held up their hands at the innovation. Dr. Allyn, evidently some one of consequence in the educational world, indulged in a spasm of protest...He and the president had hot and heavy discussions in the press.

“This has never been done before in the United States,” argued the Doctor, voice of the conservatives.

“True,” said the President. “But could you have a better example than London University? The custom of that institution is to grant degrees in absentia. All that is necessary is to safeguard the high standard of the course and the examinations.” (Fallows, 1927, pp. 249-250)

Although Fallows organized the program, he did not remain at Illinois Wesleyan long enough to provide the long-term support it needed. The program ended in 1906 due to extended opposition from faculty and the Board of Governors (Bittner & Mallory, 1933).

In 1883, Cornell University organized The Correspondence University with a well-reputed faculty group. They established a mission aimed to serve students who were (a) engaged in professional studies, (b) graduates of colleges and engaged in advanced study, (c) tutors and younger teachers, (d) officers and men of the army and navy, (e) young men and women employed in shops and farms who could not travel, (f) persons preparing for the civil service examination, and (g) persons of any age wishing to pursue any particular study at home (Bittner & Mallory, 1933). The Correspondence University included a group of instructors from various colleges and universities in Ithaca, New York (Noffinger, 1926). Nonetheless, the program was short-lived and unsuccessful (Nasseh, 1997).

William Rainer Harper was more successful with his efforts to establish correspondence programs as part of the founding mission of the University of Chicago in 1891. In 1883, Harper started the correspondence programs for the Chautauqua organization which reached out to thousands of people in their homes (Goodspeed, 1916). Harper went so far in 1885 as to say,

The day is coming when the work done by correspondence will be greater in amount than that done in the class-rooms of our academics and colleges; when the students who shall recite by correspondence will far outnumber those who make oral recitations. (Watkins, 1991, pp. 92-93)

Harper "had learned of the success of the extension movement conducted in England by the University of Cambridge and expected wide usefulness for the enlarged and varied work in the university extension he contemplated" (Goodspeed, 1916, pp. 136-7). It was apparent from his views in the mid-1880s and early 1890s that Harper had a vision of combining the merits of both the Chautauqua movement and the English university extension system. In fact, in 1898 Harper attempted unsuccessfully to bring parts of the Chautauqua program under the University of Chicago umbrella (Storr, 1966).

Harper did not go unchallenged at the University of Chicago. Many members of the faculty were opposed to any efforts in the direction of offering credit for work outside the campus. Harper ultimately compromised.

Harper planned that credit should be given for work done in absentia and expected that a student would be permitted to fulfill up to half of his degree requirements in this way. The vehement opposition of Hale and Laughlin [the first two head professors of the University of Chicago] to Harper's intentions foreshadowed the more restrictive policy which actually went into effect: not more than one-third of the work toward a degree could be done in absentia. In the specific case of the requirements for a Master's degree, no study away from the campus was permitted. (Storr, 1966, p. 199)

In addition to Wesleyan, Cornell, and Chicago, the University of Wisconsin was also a pioneer in distance education. In 1884 the Regents of the University of Wisconsin "came up with a plan for practical short courses in agricultural subjects" (Schoenfeld, 1977, p. 26). The short course did not gain immediate acceptance, but the associated farmers' institutes did. During the first year, 50,000 farmers participated, and in 1887 "in-service training of teachers entered the picture through a Teachers Institute lectureship offered in 42 communities" (Schoenfeld, p. 27).

Frederick Jackson Turner, teaching at the University of Wisconsin, was a strong advocate of the university extension system. Turner viewed extension as a means of enhancing democracy. He also viewed it the responsibility of the university to spread the knowledge. “Turner and his colleagues threw open the gates of knowledge—if not the actual gates of the university—to everyone in the state” (VanOverbeke, 2003, p. 27). But as quickly as the university extension movement blossomed at the University of Wisconsin, it waned. “Reality and the pressures of university research and teaching... collided with Turner’s evangelical fervor and ultimately dampened his spirit” (VanOverbeken, p. 27). VanOverbeken noted that “Turner warned early in 1892 that university professors would “be unable, without assistance, to meet the demands of [the growing extension program] without detriment to their original investigation, if not to actual class-room work” (p. 37). The loss of enthusiastic support from popular and well-known faculty members led to the decline in university extension in Wisconsin.

In 1906, however, Wisconsin was able to resurrect its extension program under the guidance of another strong leader, Charles R. Van Hise. During that year, the state of Wisconsin conducted research to determine if there was any sense in the University competing with the commercial correspondence schools to divert the revenues from the private instruction to the public university. "Although McCarthy (secretary of the Wisconsin Free Library Commission) stated that the private schools, when properly conducted, did much good, he insisted that the University of Wisconsin possessed the facilities to do better work..." (Rose, 1991, p. 70). By 1909 Van Hise had rebuilt the extension system under the nomenclature, the “Wisconsin idea” (Knowles, 1994).

Distance education in the form of continuing education and correspondence courses moved on through the early and middle part of the 20th century. It achieved a quiet success in making higher education available to a much wider range of students than traditional higher education, but did so by maintaining a low profile (Edelson, 2001). Its second-class status in higher education was cemented by regulations in the Higher Education Act of 1965 that constrained federal financial aid to schools with large correspondence type programs (Higher Education Act of 1965).

Challenges to the Implementation of Online Education

The historic roots of distance education established the environment in which contemporary online education operates. This section will review several challenges that include: faculty concerns and fears, organizational capacity, technical support, and regulatory and legal matters.

Faculty Concerns About Online Education

In the late 19th and early 20th century, distance education was met with firm opposition by many faculty members from the inception of such programs. Malcolm Knowles (1994) observed that "also among Extension's critics were University professors who deemed its work unworthy, a disgrace to one of the greatest of the state universities" (p. 50). The best known, and perhaps most famous of the early critics of distance education was Thorstein Veblen, who rebuked the efforts of universities to be all things to all people, and questioned the very legitimacy of universities who attempted to enter such enterprises as "edification of the unlearned by 'university extension' and similar excursions into the field of public amusement, training of secondary school teachers, encouragement of amateurs by 'correspondence,' etc." (Veblen, 1965, p. 16). He

reaffirms this position by adding later “to comfort and edify the unlearned with lyceum lectures, to dispense erudition by mail order has no place with scholarship or science” (Veblen, pp. 191-192).

The criticism of Veblen and others was not limited to correspondence or extension alone, but it was a central point for arguing that universities, public or private, should not provide any type of practical service role in the community. Bittner and Mallory (1933) on this issue noted:

Many believe that correspondence instruction is not a function of college or university. Mr. Flexner, for instance, has an attitude that seems to reflect that of other less articulate critics of American universities who suspect any of the service functions that have been added to the old university of scholarly research and academic lecturing. The state university or even the endowed institution, it seems, should not engage in practical service to the wider interests of the community, or to the professions and occupations, except through a 'liberal' education of selected youth in college halls...Such an attitude is stubbornly maintained and will probably not yield to any argument but may yield to the necessity of dealing with certain facts. (pp. 2-3)

Abraham Flexner, who wrote *Universities: American, English, German* “pointed to a direct link between extension courses and the adulteration and dilution of the University of Chicago and Columbia student bodies” (Pittman, 1991, p. 115). Pittman also noted,

Within the American university, a negative attitude toward the correspondence methodology has endured—and too often prevailed. This attitude has resulted from traditional academic suspicion of and resistance to change, intellectual elitism, and the scandal-ridden history of proprietary correspondence schools. (pp. 109-110)

Pittman goes on to observe that many faculty members were quick to challenge the quality of instruction and material being offered through correspondence courses without investigating the merits themselves (Pittman, 1991). The quality issue was cited in efforts

to deny or reduce transferability of credits earned (Watkins, 1991). The successful efforts to block and stall giving university extension equal status with courses taken on the campus also de facto depreciated the value of such programs whether through proprietary schools or the universities themselves.

The following sections discuss three areas of concern raised by contemporary faculty members regarding the development of online education. The first relates to quality—is instruction and pedagogy sound? The second relates to power and spheres of influence. In some cases, power, or control, shifts from faculty members to students in online coursework. Further online education development is, in many cases, altering the traditional dual control, or power sharing, of administration and faculty that exists in traditional higher education institutions (Birnbaum, 1988). The third concerns faculty fears about their employment, tenure, and loss of time.

Concerns about quality. The pedagogy of online education delivery methods has been a subject of intense debate. Many question whether or not online delivery methods are, qualitatively as strong as traditional classroom instruction (Arnone, 2002; Carnevale, 2002; Olsen, 2002). Thornton (2002) noted that despite the clash, online education continues to expand,

While the trend of taking courses online has been roundly criticized pedagogically and even socially particularly by traditional, elite universities, which argue the quality of education will diminish with online offerings—the reality is that distance education is expanding exponentially. (p. 530)

In a report sponsored by the American Council on Education (ACE), four challenges to pedagogy are identified: (a) no specific pedagogy for using the Internet has been clearly established, (b) the faculty role in using this technology remains unclear, (c)

faculty remain unclear about “interactive and individualized pedagogy”, and (d) the process is much more labor intensive than the traditional practices (Levin & Sun, 2002). The faculty role can be further complicated by the introduction of instructional design teams (Carlson, 2003; Cook-Sather, 2001). These teams often include computer programming staff, technical support, library services, and in some cases instructional designers. To be successful, such a change may require a new way of looking at the system, a new way of doing things, and support from all elements of the organization.

Concerns about power. In the traditional classroom the instructor is master. “A faculty member teaching at the front of the room remains the predominant mode of instruction in higher education” (Levin & Sun, 2002, p. 4). With the exception of periodic observation by peers or department chairs, there are few limitations on the faculty member’s autonomy. He or she is free to make decisions about what, when, and how to teach. When teamwork is required to deliver online courses, the basic underlying assumptions of independence are challenged and forced to change, which for many faculty members establishes a threat to academic freedom (Distance Learning Issues, 2004). The American Association of University Professors (AAUP), defending academic freedom, has taken the position that faculty members should retain total control of all elements of the class including course development, determination of class size, and specifying who is qualified to teach the course (American Association of University Professors: Special committee on distance education and intellectual property issues, 2002). Who controls the development and delivery of online courses relates to the question of whether academic freedom is tied more to pedagogy or power. Bates (2000) noted, “... autonomy and power are considered necessary both to maintain academic freedom and to enable

faculty members to create new knowledge through research and publication" (p. 95). In a cooperative environment for a given course, power may be diffused throughout the team.

Faculty fears. Faculty members are not only threatened by a potential loss of power, but also by a potential threat to their very culture and existence. Levine and Sun (2002) noted, "Justifiably, faculty are concerned about the effects of distance learning not only on students, but also on their own careers and workloads" (p. 6). Levine and Sun added that faculty union groups voice concern of a "mass production engine without an adequate level of quality control, and could threaten the academic profession's academic freedom and workload standards" (p. 15). There is also fear that faculty may be replaced by either computers or adjunct faculty (Berge, 1998). Exploring the changes required to educational structure to adopt online education, Bates (2000) observed,

Fear is perhaps the biggest obstacle to change, and it leads directly to anger targeted at changes that feed the fear. It is important for managers advocating change to recognize that faculty members do have some justifiable fears and to strive to remove the justifications...The biggest fear is likely to be loss of tenure or replacement by a machine. (p. 104)

Although fear of replacement by a machine may be extreme, the reality of replacement of tenure track positions is observable in many institutions as they adopt online education.

It has been suggested that administration looks to cut costs [for online education] by replacing full-time teaching salaries with adjunct instructor salaries, which are significantly less costly. As of December 31, 2000, as much as 32% of all sections were taught by adjunct faculty in most post secondary institutions. (Gannon-Cook, 2003)

In a study about perceptions of administrators, faculty and support units on the adoption of distance education, Dooley and Murphrey (2000) reported that faculty perceived career and job security as the prominent threat of online education and believed that tenure and promotion policies needed to be revised in order to garner further support.

The opportunity cost of trading research or service time to develop online course-work is another serious issue to faculty members. Rockwell, Schauer, Fritz, and Marx (1999) observe that faculty are very concerned that time devoted to research will be sacrificed to accommodate distance teaching expectations (1999). Time concerns were also highlighted by the National Association of College and University Attorneys (NACUA) in its 2002 report listing seven issues of concern with the expansion of online education:

1. Will teaching load credit be given for course development?
2. Will faculty be expected to devote more time to the development of new courses after the successful launch of an online course?
3. How much credit for on-line course development will be given during the promotion and tenure process?
4. How much time will be allocated for preparation?
5. Will the institution recognize that course material preparation will be altered and delivery to different student audiences may increase the work load? Recognizing that on-line teaching requires the development of new skill sets for most faculty members, what type of technical support and training will be provided?
6. How will class size be affected by on-line instruction?
7. How will on-line instruction affect faculty office/contact hours? (p. 7)

Note that all seven concerns for faculty regarding the adoption of online education are either directly or indirectly related to time constraints on the instructor. Other studies identify sufficient time to develop and maintain course material as the primary concern of those who are teaching online courses (Wilson, 1998).

A potential solution for many of these fears may be to make professional development more broadly available to faculty members in the area of online education. However, such training is often not available or not utilized. In a study at the University of Southern California the following was revealed,

Less than five percent of college and university faculty use computing to aid classroom instruction or enrich student learning: Why? The learning curve is steep, there is limited technical support, and there is no direct reward or motivation for the faculty member to make the effort to incorporate computer technology into a course. This type of activity rarely counts toward promotion and tenure. (Wilson, 1998)

Supporting this concern, the American Association of State Colleges and Universities

(AASCU) (1999) observed:

Traditionally, faculty development has focused on support for refining content knowledge and research skills in order to gain tenure or promotion and continue a research agenda. Now, faculty must continually learn new skills and devote time and effort to refining curricula to make full and appropriate use of technology's capabilities. Faculty must become learning, teaching, and technology specialists in addition to being expert in a given discipline. (p. 28)

The AASCU goes on to predict that "Unless faculty skills, instructional materials, tools, teaching and learning strategies, and attitudes toward faculty development support technology-driven change, this goal [technically skilled workforce] will be impossible to achieve" (p. 28).

In summary, faculty issues include questions of pedagogy, control, time, and survival. The debate over the issues of pedagogy and control still rages. Time and survival issues may be addressed by effective institutional guidelines and communication.

Organizational Issues

Online education has caused significant change and challenge for educational institutions. Kinley (2002) noted, "Institutions, and the colleges and departments that comprise their makeup, are at the early stages of working through a transitional process from traditional classroom instruction to technology-based instructional delivery" (p. 46).

The earlier research of Gellman-Danley and Fetzer (1998) argued that:

Asking the tough policy questions in advance can mitigate future bureaucratic problems and roadblocks. Most educators know that even a minor mid-stream policy skirmish can draw the focus away from their most critical concern—teaching and learning. Policies can provide a framework for operation, an agreed-upon set of rules that explain all participants' roles and responsibilities. (Berge, 1998)

Researchers have identified organizational challenges in the areas of academics, governance and administration, faculty, legal, student services, technology and culture (Balancing quality and access, 2003; Gellman-Danley & Fetzer, 1998; Hansen, 2004; King, Nugent, Russell, Eich, & Lacy, 2000; Kovel-Jarboe, 1997; Waits & Lewis, 2003). The following sections will review each of these challenges.

Academic issues that organizations must address range from calendars to course and degree availability. Institutions may select to make their online schedule part of the regular rotation of class offerings or may develop online schedules totally independent of the traditional academic schedule and calendar. Organizations must deal with transferability issues. Some institutions still limit the number of online courses they will accept from students transferring into their institution. Organizations must determine how they will identify online courses in transcripts. Organizations must also consider how accreditation agencies evaluate online courses. They must also determine policies regarding student and course evaluations to maintain course integrity (King et al., 2000; Waits & Lewis, 2003).

Governance and administration. Amongst the governance and administrative challenges for institutions include questions about tuition rates and how to collect tuition from students who may be at remote locations. Some institutions charge technology fees per online class, others charge a system wide technology fee, while yet other institutions include all technology fees in the general tuition charges. Institutions must also determine

space allocation. In some ways online education can reduce the need for classrooms, but may require more space for expensive equipment labs. This in turn leads to the budgetary questions of how much equipment and how often to replace and update equipment? Online education also broadens the geographic area that an institution may serve. This creates new concerns about oversight, regulatory and accreditation, and advisory boards (Balancing quality and access, 2003; King et al., 2000; Kovel-Jarboe, 1997).

How to develop online courses and programs is a significant strategic challenge to institutions of higher education. Policies developed by administration tend to focus on a top-down framework for dealing systematically with the multiple policy issues represented by online education. However, this is only one of many ways that online education has emerged. In the balance of power between faculty and administration, curriculum and course development issues have been in the court of faculty. This has led many institutions to use a *laissez faire* approach, allowing individual faculty members to develop their own courseware independent of central administration. This type of development leads to multiple approaches that are not even loosely coupled. The approach has been referred to as the “lone ranger” approach (Bates, 2000; Hartman & Truman-Davis, 2001). Ranged somewhere in the strategic center of online development, between a top down strategic approach and the lone ranger approach, is the boutique strategy (Hartman & Truman-Davis) that offers a central technology center to support the development of online education, but functions as a resource center for customized courseware developed by individual faculty members. Budget constraints and strategic planning efforts have led many institutions toward the top down approach, wherein administration takes the lead in budgeting and managing a centralized online development program. In this type of

system, technical support and instructional design work in tandem with faculty to develop courses and programs based on a template system that is convenient for faculty and students, and cost efficient for the institution (Bates, 2000; Hartman & Truman, 2001). The strategic continuum for development at the institutional level, therefore, ranges from lone ranger, to boutique, to systematic top-down development.

Both faculty and organizational issues call attention to the need for technical support. As demonstrated in the continuum of development choices, technical support has issues that also need to be considered (Figure 2).

Figure 2. Continuum of online development choices

Faculty challenges. Another organizational issue for the institution includes the ongoing debate over fair compensation and workload. Institutions must decide if they will change the mix of full-time and part-time instructors and how this will affect tenure policies. Faculty development must be expanded in order to develop effective online courses. Faculty must learn not only how to use technology, but also how to effectively communicate using that technology. Additional faculty issues include the question of how to perform faculty evaluations, at what level should monitoring occur, and how such changes affect existing union contracts (Balancing quality and access, 2003; King et al., 2000).

Legal challenges. The literature also identified two legal issues of concern for institutions developing online education. These include: (a) intellectual property rights, and (b) faculty, student, and institutional liability. Intellectual property rights focus on the questions of who owns courses that are developed for delivery and what materials can be shared on the Internet without violating copyright, and in some cases patent laws. This leads to the concern of institutional liability, especially when students or faculty violate the copyright laws (King et al., 2000).

Student support services. Research indicated that student support services can be underestimated when an institution decides to develop online education. An institution may think that the key issue in software development is to develop a communication channel between faculty members and students. To complete the communication loop though, software to create student support services that include: advisement, counseling, library access, materials delivery, student training on the use of technology, testing protocols, computer accounts, registration, financial aid, and labs are the unseen development problems that can slow the development of a successful program (Balancing quality and access, 2003; King et al., 2000; Kovel-Jarboe, 1997). Whether an institution contracts this software and/or support services through an outside provider or develops the software and services in-house through software development can be a critical juncture in the budgeting process.

Technical support challenges. The literature identified technical support issues that organizations needed to address ranging from connectivity to budgeting replacement. Technical support must be able to support both the hardware and software of equipment onsite, and in dozens if not thousands of remote sites where students are located with

varying levels of technological competence. Institutions face questions ranging from whether or not to require students to use a specific software program, such as Microsoft Word to how to organize the technical support staff (should the technical support staff be independent or part of each department)? If an institution is offering asynchronous online delivery, the institution also may need to provide 24-hour-a-day technical support for students (King et al., 2000; Kovel-Jarboe, 1997; Waits & Lewis, 2003).

Cultural challenges. The literature identified cultural challenges as a fundamental issue that generated resistance to change. Institutions must determine whether or not the opportunities and threats of adopting online education fit within the mission of the organization. If it is determined that online education does fit within the mission of the organization, then they must develop strategies to facilitate the adoption of innovation and acceptance of online education. The institution must assure that the programs developed are consistent with the institutions role and mission (Balancing quality and access, 2003; King et al., 2000; Waits & Levine, 2003).

Four themes emerge from this section of the review of literature. Almost dominating some of the research is the theme of infrastructure (Balancing quality and access, 2003; Gellman-Danley & Fetzner, 1998; King et al., 2000; Kovel-Jarboe, 1997). As opposed to the modern proverb, “If you build it, they will come” is the research indicating that if you don’t build it (infrastructure), it will fail. A second theme, that overlaps the first, is the need for information technology strength within the institution. If the institution does not have strength in technology or financial commitment to technology, then the process is unlikely to succeed. A third theme that emerges is the importance of culture. Does the institution have a mission that meshes with online education? Is the

organization flexible and adaptive toward change? Finally, considering the magnitude of the process identified within the research it becomes clear that strong leadership efforts are needed for a successful transition to online education programs.

Technical Support Issues

In *Managing Technological Change*, Bates (2000) laid out a strategy for moving colleges and universities into online education. He observed a need for stronger technical support stating, "Faculty members need much more support and encouragement than has been provided to date for their use of technology for teaching and learning" (p. 3). Bett's study (1998) of faculty at George Washington University supports the need of faculty for assurance of technical, administrative and financial support. The recommendations from Brown's (2000) study of 145 faculty members teaching asynchronous learning network (ALN)-based courses emphasize the need for adequate technical support.

Opening with an illustration from a study by Willis and Alexander examining 16 course development projects that failed, Gallant (2000) indicated "The development-by-default route, and other routes where development paths are not carefully designed may lead to many institutional, teaching and learning problems." She later added how infrastructure support can "ensure that changes are driven by learning and teaching issues rather than by 'the imperatives of economic rationalism or the 'silicon veneer of technological determinism'" (p. 72). Additional evidence supporting the importance of technical support is provided by researchers who have attempted to identify factors that contribute to the success of online education. Bennett, Bunker, and Rowley (2002) identified from the literature (Table 1), factors that contributed to successful online programs, then followed up with a series of interviews identifying success factors (Table 2) within the

Department of Defense distance education programs. Technology and support issues were raised repeatedly. Interviews identified other factors as well, but still called strong attention to support and technology issues.

Technology and support issues also dominated responses to a survey of 532 faculty members at George Washington University (Betts, 1998). Faculty members made five prevalent recommendations for policy consideration in adopting online education programs: (a) the assurance of technical, administrative and financial support; (b) the assurance of quality courses and programs with evaluations; (c) the opportunity to attend workshops and seminars provided by GWU; (d) the implementation of feasibility studies, data, and information explaining advantages, disadvantages, cost benefits, and student benefits for distance education; and (e) the option to participate or not to participate in Distance education (Betts, 1998).

Table 1

Factors for Successful Implementation of Online Programs from Literature

From the literature

1. Adequate financial resources to support the system
 2. Involvement of appropriate organizational levels in developing the program
 3. Appropriate organization for technical support
 4. An organization-wide strategy for use of technology in teaching and learning
 5. Adequate organizational support for learners and instructors
 6. Positive attitudes toward the use of technology in programs
 7. Human resources capacity to support online programs
 8. Strong technology capabilities within the institution
-

Source: Bennett, Bunker, & Rowley, 2002

Table 2

Factors for Successful Implementation of Online Programs from Interviews

From Bennett et al. interviews

1. Management issues related to project planning and management techniques
 2. Management issues related to integrating development teams
 3. Development process issues
 4. Human resource issues
 5. Course design issues
 6. Technology issues
-

Source: Bennett, Bunker, & Rowley, 2002

Technical support for the faculty is imperative to successfully motivate faculty members to adopt online education. Sifferlan (2003) noted that instructional technology support includes research and development related to incorporating technology into the classroom. He indicated that coordination between instructional technology support and academic areas must occur by developing professional relationships with faculty members to help monitor emerging technologies; identifying tactics to implement those strategies; and taking the responsibility to identify, in conjunction with the faculty, promising areas of instructional technology to meet future needs.

Although technical support is clearly identified in the literature as critical to successful implementation of online education, there are few studies that indicate what successful technical support should look like. Ned Siefferlen (2003), president of Sinclair Community College in Ohio, outlined the following guidelines for technical support:

- The institution should provide academic support for everything.

- Technical support should develop and maintain support for all business and web-enabling systems.
- Instructional technology support should include research and development related to incorporating technology in the classroom.
- The information technology director and staff are responsible to coordinate between instructional technology support staff and academic areas including: developing professional relationships with faculty members to help monitor emerging technologies; identifying strategies to implement those technologies, identifying, in conjunction with faculty members, promising areas of instructional technology to meet present and future needs; and provide time to meet faculty needs for working with information technology staff.

Gallant (2000), likewise, emphasized the importance of technical support providing professional development opportunities. She recommended the development of centers for instructor development, indicating that such centers “may provide multi-skilled teams to guide teachers in the development of learning materials and the use of new teaching technologies” (p. 72).

Technical support can provide the help that someone who knows nothing about technology may need to get started in online delivery. It can provide higher end support to faculty who want to generate complex graphics and add on materials. Technical support can provide the coordination between the student, faculty, and services needed to create a seamless environment for learning. And technical support can provide these services 24 hours a day 7 days a week in the best circumstances.

Regulatory and Legal Issues

The development of online education at an institution is also influenced by accreditation policies of accrediting bodies and by federal and state laws and policies. This section will examine literature on the challenges for institutions posed by (a) accrediting bodies, (b) federal regulations and laws, and (c) state regulations and laws.

Accrediting bodies. In 2002, the Council for Higher Education Accreditation (CHEA), which represents the 17 accreditors who accredit 5,655 of U.S. institutions of higher education (Accreditation and Assuring Quality in Distance Learning, 2002), published a report on assuring quality in distance education programs. In the organization's research they identified three major challenges to accreditation: (a) assuring that alternate design of instruction sustains the standards of existing instructional methods; (b) assuring that alternate providers of higher education meet quality standards of the organization; and (c) determining whether or not the expanding focus on training should come under the purview of accrediting bodies (Accreditation and Assuring Quality in Distance Learning, 2002). CHEA reported that they were well positioned to handle these challenges (p. 15).

The United States General Accounting Office (GAO) published their research on quality assessment in 2004. They identified the role of accrediting bodies as critical if the Federal government were to relax its rules on eligibility for Title IV funding in favor of distance education programs. The GAO, referring to the seven major accrediting bodies in the United States reported,

All seven agencies had developed standards, policies, and guidelines for reviewing distance education programs; however, there were differences in the extent to which their approaches ensured that distance education was included in assessing the quality of a school's educational program. (p. 6)

The GAO reported that only one of seven accrediting agencies reviewed could satisfactorily comply with the criteria the GAO had set to evaluate successful review procedures.

The dichotomy between the reports of the CHEA and the GAO reflect the difference between knowledge and application. It appears the CHEA knows what must be done to assess programs involved in distance education. The 2004 GAO report suggests that although CHEA knows what must be done, they have not yet successfully implemented strategies fully to assure that quality programs are maintained. This implies that institutions cannot rely solely on accreditation bodies to assess whether or not the institution's plans are adequate.

Federal regulations and laws. At the federal level, regulations and laws focus on two primary areas in regard to distance education: Title IV funding regulations and copyright laws. Federal Title IV funding for institutions through financial aid programs pushed the Federal government into the assessment model of higher education, which had previously been in the hands of State government. This funding mechanism was created by the Higher Education Act of 1965.

The United States Congress, in the 1998 reauthorization of the Higher Education Act of 1965, authorized a distance education demonstration program to help determine the best way of delivering quality education through distance education, and to determine what changes, if any, would be appropriate in Title IV student financial assistance for distance education programs through statutory and regulatory requirements of the Higher Education Act. Ultimately 107 institutions participated in the test program.

In their preliminary report, the U.S. Department of Education found that "The Internet is a promising tool for learning. With the will and the means, we have the power

to expand the learning horizons of students of all ages (The power of the Internet for learning, p. 14). They called upon the Congress and Administration to “embrace an e-learning agenda as a centerpiece of our nation’s federal education policy” (p. 16). The report called upon the U.S. Department of Education, state and regional education authorities “to remove barriers that block full access to online learning resources, courses and programs...” (p. 17). They did not suggest eliminating accountability for taxpayer dollars. But they do state definitively:

The question is no longer if the Internet can be used to transform learning in new and powerful ways. The Commission has found that it can. Nor is the question should we invest the time, the energy, and the money necessary to fulfill its promise in defining and shaping new learning opportunities. The commission believes we should. We all have a role to play. (p. 18)

Even stronger was the second report to the Congress in 2003, when they stated in their conclusion that:

The current rules that define education delivered via telecommunications and videocassette or disc recordings as correspondence education if the total of such courses and correspondence meet or exceed 50% of the courses provided need to be revised or eliminated. (Paige, Stroup, & Andrade, 2003, p. 20)

Unlike the unregulated correspondence courses developed by unscrupulous entrepreneurs in the early 20th century, online programs face state regulators, federal oversight, and accreditation bodies. Abuse is possible, as in any industry including public higher education, but the auditors are in place to assure that the abuse is limited.

Ownership and copyright issues. The AAUP identified ownership and copyright issues as critical issues to resolve before an institution proceeds with online education initiatives. They have taken the position that the original faculty member developing a course “should exercise control over the future use and distribution of recorded

instructional material” and further that “A teacher's course presentation should not be recorded without the teacher's prior knowledge and consent. Recordings of course material are academic documents, and thus, as with other works of scholarship, should have their author or creator cited accordingly” (American Association of University Professors, 1999). Administration frequently challenges this position as in many cases the institution is investing “extraordinary amounts of resources, both human and fiscal, in development of distance learning materials that are easily reproduced and distributed to mass audiences” (Cole, 2002, p. 39). Policy revisions have aroused faculty opposition both from the stance of lost academic freedom and potential of lost publication revenues. The American Council on Education (ACE) has suggested a six-fold recommendation on this issue:

1. The institution should clarify what is intellectual property and the circumstances under which the institution will assume the costs of protecting the property.
2. The institution should define inventor and author rights including revision, adaptation, reproduction, display and ownership.
3. Identify when and how the institution can use intellectual property developed by faculty.
4. Clarify how faculty will be compensated and how course development affects tenure.
5. Identify who will administer intellectual property policies, what is the default, what is the recourse for dispute resolution.
6. Clarify when author can use institution's trademarks, etc. when commercializing the work. (Developing a Distance Education Policy for 21st Century Learning, 2002, p. 4)

The National Association of College and University Attorneys (NACUA) has taken a positive view of expanding distance education with many reservations.

Intellectual property rights are highlighted in their review of distance education:

Most institutions will find that a revision of their intellectual policies will be necessary because distance education intellectual property issues cannot be neatly

governed by any one of those single policies. Faculty often argue that materials prepared for distance education courses should be governed by an institution's copyright policies which typically vest ownership and other rights in faculty, while others focus on the costs to the institution and argue that the institution's patent policy should govern because of the significant institutional resources and support that typically are invested in an on-line course. (Developing a distance education policy, 2002, p. 3)

Intellectual property right issues within the institution have taken an interesting twist as some institutions, including MIT, are defusing the issue by sponsoring OpenCourseWare, putting virtually all lecture notes and resources online and available to anyone. MIT has taken the position that free access to curriculum materials is the future of higher education (Vest, 2004).

State regulations and laws. Institutions of higher education are also affected by state regulations and laws when determining their policies regarding distance education. Each state functions as the gatekeeper of higher education in their respective state, operating under its own rules as it relates to higher education within its borders. "The term 'operating' historically coincided with 'physical presence': the institution was physically within the state" (Goldstein, 2002, p. 380). State authority is being eroded in the area of distance education by the interstate delivery of courses and programs. It brings into conflict the Reserved Powers Clause and interstate commerce under the Commerce Clause of the Constitution (Goldstein, 2002), leaving in question, who is in charge of distance education when it is being delivered in a multi-state environment.

NACAU identified several challenges for state government with respect to physical presence. They noted that there is no consistency among states on a definition of physical presence. "Generally, if students are 'aggregated' at a site by the institution, states will hold that an institution has a physical presence in that state. Students that don't

aggregate, but work on courses from home or office create a point of contention” (p. 8). Many states have taken the position that a student studying from home creates a situation where the educational institution does not have a physical presence and therefore does not merit a charter to operate within the borders of their state. However, educational institutions based in outside states but offering programs that are taken by students within a ‘foreign’ state take the position that a state lacks the authority to “block services offered in interstate commerce unless there is a compelling state interest which supersedes the federal interest in promoting interstate commerce” (Distance learning issues, 2000).

Regardless of the acceptance of online education by institutions and government, the final barrier to successful implementation remains in the motivation and attitudes of the faculty members. As previously noted in Chapter I, “The interest, support and enthusiasm of the faculty is required if distance education is to be successful, regardless of its technological sophistication” (Willis, 1993, p. 39).

Summarizing literature on issues that have created resistance to the adoption of distance education demonstrates a continuing debate in the areas of faculty, the organization, support, regulation and legal matters. With the continuing expansion of online education, some of the ungrounded fears are beginning to disappear as others emerge. The fulcrum for change is the institution itself, but no program can be successful without the support of the faculty members.

Prior Research on the Implementation of Online Education

Limited research has been conducted on the implementation of online education at institutions of higher education. Austin (2000) and Feller (2002) provide insights into the implementation process. Kinley (2001) examined the implementation process from

the perspective of department chairs. French (2001) and Lindquist (2004) also offer insights into the implementation process, but are both limited by the fact that their research was focused elsewhere. Added to my case study in 2004, these represent the core of research located on the implementation process for online education in this study.

Austin (2000) conducted a multi-case study examining factors involved in creating distance education programs at three community colleges. Her research found that faculty innovators played an indispensable role in the change process required to implement program changes. She also identified communication and coordination as key components in expanding online programs throughout the college community. Finally, Austin found that four organizational factors were important, including: financial stability, flexibility of the organization, openness to change, and the availability of a large pool of talented faculty. Austin's work was in the community college setting, and in all three cases the institutions were large, supporting multiple learning centers with substantial resources. Her findings, especially regarding the organizational factors, leave a major question about how online education can therefore successfully be implemented in smaller private institutions.

Feller (2002) conducted action research on the process of creating an online graduate degree program at a small private university. Feller indicated that there was pressure from two ends to move forward with online education, including the president of the university's state of the university address in the fall of 2001, and "slow, steady pressure from students" (p. 73). Four threads emerged from her research for the successful development of the program. The first thread was the graduate degree proposal itself. This became a touchstone for dialog. "...the proposal was used as a discussion piece

across the campus community to discover attitudes, concerns, and so forth” (p. 66). It provided an opportunity for gradual buy-in by the stakeholders in the organization. The second thread was a cross between networking and serendipity that Fellers described as Business-COTH relations. She explains that the dialog process generated contact from another department in the university that was also interested in expanding online education. She met casually with the Dean of Business while teaching a course in London. “At one point, the Dean leaned over, pointed his finger in my direction and said, ‘You could be the Hundredth Monkey at PLU with this stuff’” (p. 69). This references an old proverb that suggests that once you have taught the 100th monkey how to do something it becomes part of the system. The third thread she identified was the general university community moving toward online education. Feller’s key point reiterated the supportive message of the president in 2001. “...with a strong administrative tone set, the climate became friendly to discourse on online learning at PLU” (p. 72). The final theme that Feller identified, she indicated was missed in the first round of her research, was students and online education. Within the theme of student support, she makes strong reference to upgrades in the technical support of the university that made online education more attractive to students and faculty alike, “With the summer of 2001 upgrade of PLU’s eCourse system, the online classroom became user-friendlier to students and faculty alike” (p. 74).

Robert Cobb French (2001) conducted research within the State University of New York (SUNY) system, where 36 institutions within the system were participating in the SUNY Learning Network, which was a consortium of colleges and universities within the system. French’s research provided limited insights into the actual process of

implementing online education. His research focus was on eight theoretical propositions for a framework for research on encouraging participation in online education and did not focus on the actual implementation process. However, his interview with participants related to barriers to participation does provide some insights into the rollout process in the SUNY system. Among the comments he reported were:

This is not necessarily my feeling, but there is a very cynical opinion among some faculty that the administration just wants more students, more money. (p. 107)

My dean will not allow us to offer this on-line as part of a regular teaching load. I'm teaching my course for free! I'm not even getting paid for this course this semester. (p. 107)

The president is very high on this, and he wants to see us get into on-line development, but there's a lot of resistance to it. We've got at least one dean who is very much against the use of our full-time faculty to teach distance courses. There are other agendas that she has for her school that are legitimate, and she expects the full-time faculty to be involved in. So I think you really have to get it to a point where the institution makes a commitment. (p. 107)

As a department chair, I'm trying to build a program on-line, and I have no administrator resources to draw on.... Right away, you see that evidently it's not a very high priority for this college. (p. 108)

French's research suggests that the online thrust in the SUNY system was developed without wide consultation with faculty or even administration in many cases. The interviews identified some confusion as to purpose and agenda. The interviews also indicated that in many cases there were no peer advocates who had taken a lead in the process.

Lindquist (2004) conducted qualitative research at two North Dakota universities examining how faculty and administrators' perceptions differed about their institutions' efforts to develop online education. These two institutions had developed online education programs through the previous decade. The observations of both faculty and administration members again provides some insights into the implementation process.

The research identified two critical areas of dissonance: the motivation for developing online education in the first place, and the planning process. The following are some of the observations of faculty and administration participants. First, perceptions about why the institutions became involved:

Administrators cited the need to increase student access as the primary incentive for their institutions to become involved in online education. Casey, who was directly involved in the initial effort at Centerville, described the effort as a response to a grant opportunity that would provide health education to students in a remote area who would not be able to come to campus: 'The opportunity presented itself... and that really was the kind of trial and error mechanism. And those first courses that went ok, they were okay, they were effective.' (p. 47)

Many faculty participants and some administrators (Leslie and Dana) believed the primary motivation to offer online courses stemmed from a desire to realize a profit. Kelly phrased her perception succinctly: 'I still don't know what the goal of distance ed is. The goal at that time was pretty clear cut: to get [a] massive amount of students to get money.' (p. 48)

Honestly, I think they got into it to make money. They thought they were going to make a killing. They went into it without planning; it was half baked. They didn't understand the medium. They didn't understand the quality issues, and they certainly didn't provide any adequate training for faculty.... If I look at our institution, it's probably the worst possible way you could have gotten involved in online, for all the wrong reasons. (p. 48)

Comments about the planning process included:

A serious issue for many participants was their institution's lack of planning before becoming involved in online education and the failure to consult with faculty before embarking on the endeavor. Jordan described the initial process of becoming involved in online learning as 'the lemming approach,' characterizing the institution as rushing blindly over a cliff, heedless of the rocks below. Some administrators acknowledged the threat of competition as a possible motive behind their online offerings, including Casey, who said 'if we don't get on board, somebody else is going to do it, and then we're vulnerable to the changes in population and changes in programs, so to me it's critical that we are involved in distance ed.' (p. 50)

Kelly was not optimistic about the possibility of more stakeholder involvement in future discussions, noting that distance education in general had suffered from poor planning in the past. She did not believe this would change in the future at

her institution. Jordan's frustrations were particularly evident in this area: 'Now they're finally moving into that [taking a step back to consider how the college wants to be involved in online education]. To me it's so ludicrous that now [said with pronounced emphasis] we're going to have a philosophical discussion... We should have been doing this all along.' (p. 51)

Lindquist's research indicated that administration made a decision to move forward with online education excluding dialog, and appears both in comments from administrative personnel and faculty personnel to have lacked vision.

Kinley (2001) conducted a mixed methods study concerning the implementation of distance education from the viewpoint of department chairs at a sample of 400 public institutions across all Carnegie categories. Kinley's study found that the two strongest motivators for department chairs participating in technology-driven distance education were the desire to provide greater access for students (90% of respondents) and the desire to provide greater flexibility for the students (82% of respondents). His research also identified four keys for successful implementation of distance education programs which included: (a) collaboration and shared goal setting between all participants; (b) support and facilitation; (c) encouragement and resource allocation from administrative sources to development and implementation; and (d) chair participation as role-models and mentors. Kinley confirmed, within the framework of his study, that faculty ownership, buy-in, control and shared direction setting is critical to the success on any online program. His research also concluded that technology development was a significant issue for department chairs. He observed that department chairs felt that "technology must continue to evolve, providing a "more robust and rich learning environment characterized by seamless multi-media" (p. 291). Within the criteria of administrative support his research concludes that, for long-term survival of a program, "administrative and institutional

support must be resolved in such a manner as to provide the distance education friendly environment needed to sustain a faculty willingness to participate” (p. 292).

Higher education is faced with the challenge of choosing a course toward or away from the adoption of online education in the form of courses and programs. The research on the implementation of online programs is limited, and nearly silent about private colleges where implementation of online programs has proceeded at a relatively slow pace.

In 2002, I began teaching online courses at a small Catholic university. This institution had developed a successful online program enrolling over 3,000 students in 2003-2004 (Hansen, 2004). Most research on distance education has focused on larger colleges and universities. By the very nature of being a small university, the institution had limited financial resources and talent resources to draw from in order to develop online education.

In a 2004 case study of the institution, I found confirmation of Austin’s (2000) assessment that an institution needs to be flexible and open to change. Kinley’s (2001) observation that chairs were motivated by providing greater access and flexibility for students was confirmed in this case by the innovator of online education at the institution, who was motivated by the opportunity online education offered for student success and teacher improvement. Feller’s (2003) research at a small private college shows some similarities to my research at the small Catholic college. In both cases the president and administration provided a strong, early statement of support, but then delegated the action to a faculty advocate who built support for an online education initiative. The strong support from administration created an incubator for development. The work of French

(2001) and Linquist (2004) identified lack of dialog and vision as anchors that have created drag in both systems where they conducted their studies. The existing literature and pilot study for this research suggested that broad dialog prior to implementation, verbalized support from administration, and a strong advocate (innovator), in the developmental stage, enhances the potential for successful implementation of online education at an institution. There is some evidence that the best candidate for the role of innovator is someone not in the executive circle of the institution.

Catholic Colleges and Universities

In the United States there are 219 Catholic colleges and universities (Pastoor, 2002) enrolling 690,000 students (Kaporch, 2002). Of these 200 plus institutions there are 26 law schools, 17 schools of engineering, 81 schools of nursing, 177 schools of education, 29 women's colleges, 3 research universities, 13 doctoral universities, and 1 aviation program (Kaporch, p. 45). Although Catholic colleges and universities accept a common ecclesiastical authority in the form of the Roman Catholic Church, they have a long history of being very independent and resistant to efforts to centralize or coordinate the institutions as a group (Eden, 2002). Their associations tend to bring loose connectivity and communication between the body of the 200 plus institutions.

Catholic colleges and universities share some common characteristics that make these institutions a good group to look at within the private higher education sector. Like many private institutions, they were founded based on religion with the primary purpose of training future clergymen (Karporch, 2002; Greeley, 1967; Power, 1972). Their focus shifted somewhat during the 19th and early 20th century to serve as a center for protecting immigrant Catholic beliefs from the more common protestant movement in the United

States (Eden, 2002). In part, because of their constituents, they have focused more on local and regional communities than many other institutions of higher education (Eden, 2002). With some exceptions they have generally remained small with enrollments averaging fewer than 3,000 students. Many of these institutions have been faced with ongoing financial difficulties (Greeley, 1967). Finally, there have been two shifts in the relationship of the colleges to the Catholic Church resulting in a strengthened divide between forward-looking faculty members and administrators on the one hand and those wishing to maintain tradition on the other. The first event was the Second Vatican Council in 1965, which encouraged creative, academic freedom and initiatives that were not necessarily planned for by the action (Eden, 2002). The second event occurred in 1990 when the Vatican issued the *Ex Corde Ecclesiae* that “universities around the world be reshaped to fit inside the predetermined rules” (Hellwig, 2001, p. 24). The *Ex Corde Ecclesiae* was revised and clarified refocusing American Catholic colleges and universities on their Catholic roots and religious nature. Although neither of these events was directly tied to distance education or online education, the former event tended to favor innovators, while the more recent *Ex Corde Ecclesiae* shifted the culture back toward traditionalists.

While nearly 90% of all public institutions of higher education have adopted at least some form of online education, two-thirds of Catholic institutions have not yet adopted any form of online education, and another 13% of these institutions have only developed one to five courses (Figure 3) (Maxwell, 2001). These numbers are similar to the national trends for private institutions.

Figure 3. Number of online courses offered at Catholic institutions (Maxwell, 2001, p. 109)

Conceptual Frameworks

As this study was exploratory in nature, using a qualitative, multi-case study research methodology, the conceptual framework was intentionally flexible. However, a conceptual framework was developed to provide a “theoretical lens or perspective” to guide the study (Creswell, 2003). This study drew its framework from four sources: Rogers’ theory of diffusion of innovation, Vroom’s expectancy theory, Schein’s theories on organizational change in mature industries, and an experimental model of innovators of online education developed in the pilot study for this research.

Rogers’ Theory of Diffusion of Innovation

Rogers’ (1995) model for the adoption of innovation breaks the adoption process into five stages: innovators, early adopters, early majority, late majority, and laggards. Based on Rogers’ model, the innovators are venturesome, rash, and willing to take risks (p. 264). The early adopters in Rogers’ model are more mainstream and respected by

their peers (Rogers, p. 264) and are more likely to adopt online education to see how it might help the process of teaching and learning (Gallant, 2000). They are willing to experiment for the good of the student and the profession. The early majority in Rogers' model are deliberate. They are willing to adopt innovations but seldom lead (Rogers, p. 265). Based on Rogers' model, the remaining 50% of adopters of innovation fall into the last two categories of late majority and laggards (p. 262). The late majority makes the change toward innovation as a result of internal and external pressure (p. 265). The late majority tends to have doubts and is cynical about innovations. They tend to adopt the innovations when they feel that there is no risk with the technology and are pushed by their peers and administrators to adopt the system (Gallant, 2000). The final group, the laggards, tend to live in the past (Rogers, p. 265) and will hold to the status quo at all costs (Gallant).

The Rogers' model has been tested on the adoption of online education by faculty members (Hagner & Schneebec, 2001). Hagner & Schneebec's research shrinks the faculty adoption process into four stages:

1. The first wave: Entrepreneurs, who are the innovators and risk-takers. They tend to be committed to teaching and learning, have technology competencies, but tend to be idiosyncratic, with weak peer influence.
2. The second wave: Risk averse faculty, who are also committed to quality teaching, but need to be sold on the effectiveness of new ways of doing things. They further need support to facilitate their transition. Their focus is on teaching rather than technology. Their adoption of the process is inversely related to the amount of effort they must expend in order to join the process.

3. The third wave: Reward seeking faculty, who adopt the process when they view adoption as having positive impact on tenure, promotion, and salary decisions.
4. The fourth wave: Reluctant faculty, who may be computer illiterate and/or firm believers that traditional models of learning are superior. There is no level of support or coercion that will bring these faculty members on board.

Hagner and Schneebec believe that the adoption of online education is dominated by the first and fourth waves. This may influence the process of adoption of online education beyond the immediate range of faculty members.

In the 1999 National Study of Postsecondary Faculty, the field tests indicated that the vast majority of postsecondary administrators believed that online education would continue to grow rapidly and that the quality of education through online delivery would match or exceed classroom instruction within 3 years. In the same report, 60% of faculty members accepted the value and legitimacy of online course delivery, but 40% of faculty members perceived it as an inferior form of instruction (Zimbler, 2000). These figures would suggest that aggregate faculty attitudes toward adoption of the innovations of online instruction are somewhere between early majority and late majority in Rogers' model (Rogers, 1995, p. 262).

David Jaffee, examining institution resistance to adopt asynchronous learning networks, applied Rogers' diffusion of innovation to how online education has moved into many higher education institutions. Jaffee identifies the "innovators" and "early adopters" of online education as:

...campus 'techies' who are intrigued by new developments in hardware and software and are able to use the technology independent of any institutional assistance or support... the second group... 'early adopters', who are viewed as the 'visionaries' combining an interest in and competence using technology with a desire to incorporate these new technologies into the teaching process. This group is also quite self-sufficient in the use and application of the technology. (Jaffee, 1998, p. 22)

There is some evidence that faculty innovators and early adopters of online education tend to be younger faculty members and mavericks within their departments. These faculty members have a tendency to have a sense of "altruism toward the nontraditional learner" (Dooley & Murphrey, 2000) and are cast as "lone rangers" (Bates, 2000). In his research on the adoption of online education in a national effort in Finland, Tammelin noted that although enthusiasts have been working on developing courseware since the early 1990s, there remained a significant gap between early adopters and mainstream faculty (Tammelin, 2001). There is little research on the adoption process where an administrator is the innovator in the process.

Vroom's Expectancy Theory

Motivating faculty and administrators to adopt online education and technology was studied here based on the research of Vroom and expectancy theory. Vroom postulated that if an individual's expectation is success and the perceived value is high enough, the individual will want to succeed (Vroom, 1964; Kreitner & Kinichki, 2004). Additionally, Vroom indicated that no matter how great the reward the individual will not be motivated if he/she has no chance of success. This model suggests that participants will be motivated to adopt and accept online education to the degree that three conditions are met.

First, motivation is affected by the individual's expectations that a certain level of work will produce an intended performance goal. So, participants must be convinced that

online education will meet the educational goals of the institution. It further means that they must have confidence that the technology will work consistently and that they are capable of learning how to use it.

Second, motivation is influenced by the individual's perceived chances of receiving various outcomes as a result of achieving the performance goal. For early adopters these goals might simply be to make it work. But late adopters are more likely to be examining such issues as "what's in it for me?" Will adoption lead to promotion and tenure? Will this require more of my time or will it save me time to do other things?

Finally, motivation is affected by the extent to which the individuals value the outcomes or rewards of achieving the performance goal. Including adoption of online education as a condition of tenure may be of little value to faculty members who have already achieved tenure. Up-front time commitments may not entice administrators who need or want their current time left unfettered by new technology, even if it may save them time in the future. Based on Vroom's theory, innovators and advocates of online education should be motivated based on the criteria of Expectancy theory in their efforts to develop online courses and programs at their institutions.

Schein's Theory of Organizational Change in Mature Industries

Edgar Schein (1992) defined culture as "those elements of a group or organization that are most stable and least malleable. Culture is the result of a complex group learning process that is only partially influenced by leader behavior" (p. 5). Organizational culture within Catholic colleges and universities is well established. The institutions are steeped in the traditions not only of their institution, but also in the culture of the Roman Catholic Church.

Argyris (1997) noted that members of an organization will tend to fight change if they perceive that it will threaten their security. To a great degree, higher education has been successful in maintaining its status quo. However, this can lead to serious problems. As Burton Clark noted, "The university-environment relationship is characterized by a deepening asymmetry between environmental demand and institutional capacity to respond. The imbalance creates a problem of institutional insufficiency" (Clark, 2001, p. xvi).

Schein (1992) observed that when trying to change behavior there is a tendency of those who must change to resist the change "at a level that seems beyond reason" (p. 4). He added that we "observe departments in our organization that seem to be more interested in fighting with each other than getting the job done." Schein posited that the "evolution of culture is therefore one of the ways in which a group or organization preserves its integrity and autonomy, differentiates itself from the environment and other groups, and provides itself an identity" (p. 298). Culture is the 'glue' of an organization in its early years, but can become an unmanageable block as an organization matures and the members of the organization take the organizational culture for granted. Most Catholic institutions of higher education have existed well beyond the years of their founders and would be defined as mature organizations. Schein identified five change mechanisms that can work in the mature stage of an organization:

1. Change through infusion of outsiders
2. Unfreezing through scandal and myth explosion
3. Change through turnarounds
4. Change through coercive persuasion
5. Destruction and rebirth. (p. 304)

The balancing act for a leader in any of these options demands extensive communications skills. In each strategy, the leader must provide disconfirming information about the status quo, and induce a level of guilt and anxiety; and at the same time, communicate enough psychological safety to encourage movement and action toward the needed changes. This research considered the influence of the organizational culture as it has affected the innovators and change agents within the institution.

Experimental Model of Innovators of Online Education

This model was based on a case study examining the faculty innovator of online education at the participating institution. The participant was identified through inquiry to staff members of the participating institution who were directly involved in the online education program at that institution (R. Nash, personal communication, April 5, 2003; J. Kickul, personal communication, April 2003; J. Washburn, personal communication, April 1, 2003). The information was verified through public documents identifying the participant as the individual who “spearheaded the university’s first online program, which became one of the first MBA online programs offered in the country” (USF begins year with new deans, 2004). The participant has maintained a continuing interest in online education since 1997 and has presented several papers on the topic between the years of 1998 and 2002. The participant continues to work for the participating institution and has recently been promoted to Dean of the College of Business.

The research indicated that the participant served four roles in the development of online education at the participating institution (Figure 4). First, he took the role of a seeker in behalf of the university. He claims that any senior faculty member could have done what he did, but they did not. The starting point was curiosity. He attended a

conference on technology in 1996. He selected a session that “sparked” his interest. He began to connect the possibilities for his institution. The second role that he took was that of advocate. He talked about online education constantly with people at all levels. He talked with the president of the university; he talked with support organizations and students about trying the program. He continued to communicate with faculty members and the board of trustees to sell the product. His third role was that of intrapreneur, working within the organization. Again he took a risk. He risked his reputation with his peers and superiors by advocating something new. He risked his time to experiment and bring the idea to fruition. He found alternate resources when funding was not available to solve problems. His fourth role was to move from the limelight to senior statesman, or one who supported the program without leading the program as the early adopters and early majority followed. This shift from limelight to backstage, with no apparent regrets, suggested that other rewards such as power or fame were not primary motivators for the participant.

Figure 4. Experimental model of innovators of online education (Hansen, 2004)

The participant who took the role of innovator was well established at the university, having taught there for over 15 years by 1996. He had established a good relationship with support elements of the university and had direct access to the president of the university. The university had made a significant investment in education by correspondence over the years and had experimented with various forms of distance education delivery. The participant also clearly stated that the primary mission of the university is teaching excellence and confirmed that position throughout the interview, indicating that it is an internalized mission of the university or at least of the participant.

Combining the theories of Rogers, Vroom and Schein with the pilot study to this research provided four lenses through which to examine and search for themes in the participating institutions. Rogers' lens provided a framework to examine the process of adoption when innovation or change occurs within an organization. It provided a general theory of what motivates the participants to adopt the change at various stages along the developmental process. Vroom's lens provided a look into the psychological makeup of the participants and the likely responses to various motivational efforts by the implementing team. It revealed an important relationship between the support and communication of leadership and the likelihood of individual adoption. The Schein lens looked more broadly at the entire organization in its current developmental level. This lens provided a perception on the informal forces and influences that affect the change process. Finally, the Hansen lens provided a potential template of how the change process may work. The pilot study theorized a pattern or process of development that could be affirmed or refuted through this research.

Summary

This literature review served to present appropriate background, critical issues, and a framework for studying the role of faculty innovators of online education at private Catholic colleges and universities. The existing research reveals a complex combination of factors ranging from the technical to emotional that affect the development of change within these institutions.

The history and issues for online education predate the advent of asynchronous online courses in the early 1990s. The development of correspondence courses and the relationship of these courses to mainstream higher education have, to a great extent, created the environment that online education must deal with, and helps to identify the issues that online education must overcome if it is to become a mainstream part of higher education.

The background on Catholic colleges and universities demonstrated that changes associated with online education may arouse the fears of secularization that have been a source of debate since the 1960s. The changes in the position of the Roman Catholic church, especially between the Second Vatican Council and the more recent *Ex Corde Ecclesiae*, have the potential of creating additional friction in efforts to develop online education within Catholic institutions of higher education.

This chapter has reviewed literature and research relevant to this study. Chapter III will introduce the research methodology intended for the study.

CHAPTER III

METHODOLOGY

There is some research on the implementation of online programs at public institutions of higher education, but limited research on the development of online education at private colleges. The rate of adoption of online education has been much higher at public institutions than at private institutions. An investigation of what led these private colleges to adopt online education may shed light on why these institutions buck the trend and how the adoption process at these institutions proceeds. Therefore, the purpose of this study was to examine, from the perspective of those who were involved, why and how online courses were initiated at three Catholic colleges.

This study investigated one broad question: how did online education get started and what was the process for development within the institution? As the research proceeded, this question served as a touchstone for other questions and topics that emerged from the research and that led to a journey of discovery about each institution.

Limited research is available regarding the process of adopting online education in private institutions of higher education. This leaves few resources upon which to devise a theory for study. Research on topics about which few prior analyses have been conducted is of necessity exploratory and best carried out with qualitative research methods (Creswell, 2003). These methods allow the researcher to study the thoughts and behaviors of participants through an inductive approach. This approach to research

presumes that knowledge is emergent rather than objective and that knowledge is produced through observation rather than deductive study based on the testing of hypotheses. According to Stake (1995), “Quantitative researchers have pressed for explanation and control; qualitative researchers have pressed for understanding the complex interrelationships among all that exists” (p. 37).

This research proceeded as a multi-case study. Stake (1995) identifies two types of case studies: intrinsic and instrumental. An intrinsic case study might be used to evaluate an in-house program, because the researcher has a vested interest in the problem. An instrumental case study is interested in broader potential application in need of general understanding. This multi-case study proceeded as an instrumental case study exploring a research question that led to a better understanding of the process of adopting online education programs at three Catholic institutions of higher education. The size of the sample does not lend itself to generalizability.

According to Yin (1994), case studies are an advisable research method when the research is focused on how-and-why questions, when the strategy of investigation does not require control over all behavioral events, and where the research is focused on contemporary events. This study satisfies Yin’s criteria in that it seeks knowledge about how an organization can effect change to adopt online education. As for the second condition, distance education in higher education has evolved into a dramatic growth market for institutions of higher education in the U.S. This process is complex and can be studied without the observer controlling the process. Third, distance education course offerings, led by online courses, doubled between 1994 and 1998 and again between 1999 and 2002 to over 127,000 courses with continued growth expected (Lewis,

Alexander, & Farris, 1997; Lewis, Farris, & Levine, 1999; Waits & Lewis, 2003). This is clearly a contemporary issue of great concern.

Pilot Study

In 2004, I conducted a study at a Catholic University investigating the faculty innovator of online education at that institution (Hansen, 2004). Insights gained in that study inspired me to continue the research and revealed the need for this study. In addition, the methods I used in that research became the model for the methodology employed for this study.

I used qualitative research methods at that institution. I contacted the department overseeing online education at the institution and asked for their cooperation in the study. Using a snowball technique, I asked various members of the department who led the online effort at the institution. Several members of the department identified the same individual as the innovator of online education at that institution. I then made arrangements, including appropriate IRB approval, to more formally interview several members of the institution to study the online effort at that institution. Interviews were the main tool used in this research. I used other qualitative tools to confirm the preliminary findings of the interview research. These tools included a review of available archived documents and a site visit to the institution that allowed me to observe personnel, equipment, and facilities and see how they tied to the online education effort of the institution.

I contacted the participant identified as the innovator of online education at the institution on two occasions by telephone and twice by e-mail prior to the formal interview. The interview with this individual lasted approximately 90 minutes. The interview was recorded with the participant's permission. The recording was transcribed and a copy

of the transcript was sent to the participant for his review and member check. The participant was again contacted when the analysis was completed to review and comment on the content.

This pilot study answered questions about the role of the innovator at one small, private institution of higher education. It also led to additional questions about the process of implementing online education at private colleges and universities. Was the process unique to this institution? Was a faculty innovator the key to successful implementation? Could non-faculty members be the innovators of successful programs? Does a model for success exist, and is it similar to or different from what the research suggests for larger public institutions of higher education?

In addition to answering some questions and creating others, the pilot study also provided experience in, and a framework for, the qualitative research methods that I chose to use in this research. Interviews with individuals identified through a snowball technique were the key to the study and were augmented by archival records and site visits. This led directly to the research design for this study.

Research Design

This study employed a multi-case study approach, relying primarily on interviews with key stakeholders, to examine the implementation of online courses and programs at three private institutions. Additional and supporting evidence was gathered from documents and archival records, a site visit to each institution, and a reflective journal. The next section explains how I narrowed the case selection to Catholic colleges and, then, to the three individual colleges that were involved.

Case Selection

According to Stake (1995), it is as important to identify cases that are accessible and cooperative as it is to find ‘typical’ cases that might lend themselves to generalization, even though case studies are not meant to produce generalizable findings in the first place. Because the intent of the study was to examine the process of implementing online courses at private institutions, it was important to find institutional cases that met three criteria. First, colleges selected for inclusion in the study must offer online courses or programs. Second, the colleges needed to offer more than a handful of online courses; the online instruction offered by the colleges needed to represent a true institutional effort, not the lone efforts of individual faculty members—the “lone rangers” discussed in Chapter II—who are pursuing their own interests. Finally, it became apparent after starting my search that the colleges selected for inclusion in the study needed to have been relatively recent entrants into the work of online instruction, thereby maximizing the probability that those involved in the implementation of these courses or programs would not have retired or left the institution for other employment.

In order to select institutions that met these criteria, I followed a multi-step procedure. First, I decided to narrow my focus to Catholic institutions. Because my pilot study had been conducted at a Catholic university, I was familiar with these institutions. In addition, the approximately 200 Catholic colleges and universities in the United States provided a manageable subset of the nation’s private higher education institutions. This subset was small enough for me to examine each institution’s potential as a case in the study, yet large enough to assure that I could ultimately find institutions that would be willing to participate.

The next step in selecting participants for this study was finding Catholic colleges and universities that met the three criteria for inclusion identified in the first paragraph of this section. I was able to locate an online source that compiled information about the 177 members of The National Catholic College Admission Association (NCCAA) (National Catholic College Admission Association, 2005). This represented between 80% and 90% of all Catholic colleges and universities in the United States. This online source (website) included self-reported profiles of all NCCAA member institutions. Each institution reported, in a yes/no statement, whether or not it offered distance education. The web page also provided a link to each college's home page, and an e-mail contact. No additional details about the distance education programming at the institutions was provided. Based on the NCCAA website, I identified 59 institutions that reported offering some form of distance education.

The next step in the process was to determine whether or not these 59 institutions, that reported offering distance education, actually offered distance education in an online education format. In order to do this, I reviewed their web sites. In 17 cases, I was able to verify that on-line courses or programs were provided and identify the names of contact persons associated with online education at the institutions. I sent an e-mail message to these contact persons at the 17 institutions. However, because I was concerned that institutional websites might not always note the provision of online courses, I also contacted the remaining 42 colleges, usually sending an e-mail message to the admissions office. Thus, in the end, I contacted all 59 institutions with a message that read:

Hello, my name is Alan Hansen. I am preparing my proposal for dissertation research about pioneers in online education at Catholic colleges and universities. Could you please send me some background information about how [institution

name] got started in online education, how the programs are currently going, and what you see the future of online education to be at your institution? Also could you please provide the name and contact information for any further communication about online education at your institution? Thanks for your help, Alan Hansen. (Journal, January 24, 2005)

Eisner (1991) indicated that in selecting a site for qualitative studies, access is a key to successful research. To this end, institutions that were non-responsive or difficult to communicate with were eliminated from the selection pool for this study. Of the 59 institutions contacted, 10 responded, indicating that they offered numerous online courses and were receptive to further discussion. Five of the 10 institutions provided a telephone number for a person I could contact for further information about online offerings, and five provided e-mail addresses. In 7 of the 10 cases, the person I first contacted for information referred me to someone else at the institution for further discussion.

In the process of discussing the study with the contact people at the 10 institutions, one institution was dropped as a potential case, because the individual who was knowledgeable about the implementation of online courses had left the institution and indicated that he would not be willing to participate in the study. Two institutions were eliminated because of staff turnover; people involved in the start-up of online education at those two institutions had moved on and could not be located. The online education at yet another institution was not as fully developed as I had anticipated; online education at that institution was mostly in the hands of only one individual. A fifth institution was eliminated because it was letting the program languish, indicating that “‘time, money, and inclination’ had eroded”.

Five institutions remained in the pool of candidates, meeting all criteria for inclusion. Because of time and money limitations, my intent was to include three institutions

in the study. Four of the five remaining candidates were in the New England and Atlantic states, and the fifth was in Florida. Although the institution in Florida was positive about participating in the study, I chose to eliminate it from the study because of logistical constraints. Another institution was eliminated because key contacts had left by the time the proposal for this study was approved. This left three institutions in the Atlantic and New England states, identified in this study as: Bluff College, Lake College, and Redbud University.

Bluff College is located in the Atlantic states and enrolls approximately 2,500 students. The institution was organized in the 1920s and now offers 30 academic majors at the undergraduate level and several master degree programs including nursing, education and business. I was able to interview four participants at this institution, including the Director of Distance Education, the former Vice President of Academic Affairs, one of the faculty members credited with being a faculty innovator of online education at the institution, and the Director of Technology Training and Support Services. The institution offered 163 online courses, mostly hybrid courses in which part of the instruction was offered in the classroom and part of the instruction was offered online. Hybrid online courses have been a central part of the strategy of Bluff College since they rolled out their first course. Although the institution does offer a few courses that are online only, the vast majority of their online strategy involves a mix of classroom and online instruction. Typically, students meet in the classroom some days and have online activities and assignments for other days. Although there is a range of adoption in each class that uses online education components, it is substantial in nature.

Lake College is located in the New England states. The institution was organized in the early 20th century. Lake College now enrolls 5,000 students, with 80% of those students enrolled in online programs. The college offers a full range of bachelor's degree programs and several master's degree programs. I was able to interview four participants at Lake College, including the former Vice President of Graduate and Professional Studies, the director of instructional design, a faculty member involved in the development of the first online courses at the institution, and the assistant dean for operations for Graduate and Professional Studies. The online program at Lake College evolved from a strong continuing education division that was initiated in the 1970s.

Redbud University is located in the New England States. It was founded in the 1960s. It enrolls 5,000 students and offers a number of undergraduate and graduate degree programs. The university has an overseas presence and is a highly ranked institution for the quality of its master's degree programs. I was able to interview the innovator of online education at the institution who is now the Dean of the Business College. I also interviewed the Dean of University College, the Director of Instructional Technology, the University Librarian, and a digital learning support technician. Redbud University offers numerous online courses, but at this time no fully online degree programs.

All three institutions met the criteria of offering numerous computer based online courses, having personnel coordinating the online education enterprise, and still having people available with knowledge about the origins and development of online education at each of the three institutions. The institutions also conveyed a willingness to participate in the study.

Interviews

A snowball technique was employed to identify participants to interview. I asked the contact person at each of the three institutions who I should be talking to at that institution in order to understand the process their institution had employed to implement online education.

A search of Bluff College's web site for information on online education led me to several contacts both for specific departments and general questions. I used the "general questions" e-mail address and was connected to the Director of Distance Education. He was able to help me determine that Bluff College would be an appropriate case study for this research. He was also the key contact at the institution for this research. He had responsibility for the success of online education at the institution, had been at the institution for several years, and knew enough of the history of the online initiative to identify other critical participants in the study. After several e-mail and telephone exchanges I arranged to conduct a preliminary telephone interview with him. From these discussions I was able to arrange additional interviews with the former Vice President of Academic Affairs and the Director of Technology and Support Services. I later visited the campus and conducted hour-long interviews with each of these three individuals that were recorded and later transcribed. In the process of the interviews I became aware of two other critical individuals involved in the developmental process. I asked if it would be possible to interview either of these individuals. The first of the two individuals, a division chair, died of cancer before I had a chance to interview her. The second individual was a full professor at the institution, and I was able to conduct a brief (20 minute) face-to-face interview that was recorded and transcribed.

At Lake College the website was well developed, and a person to contact via e-mail was identified. The contact person quickly replied and provided a telephone number and extension for follow-up discussions. He put me in contact with the Director of Course Development and Learning Technologies. The Director became the key contact for the ongoing research. He was able to confirm that the institution was involved heavily in online education. He coordinated online education at the institution on the academic side. He had been with the institution since the early development of the online education initiative, and he knew the key people who had been involved in the development of online education at the institution. With his assistance I was able to identify and contact additional participants for the study, including the Associate Dean of Graduate and Professional Studies, a program director who developed the first online course at the institution, and the former dean of graduate and professional studies. When I visited the campus I was able to interview the first three of these participants face-to-face, record the interviews, and later transcribe the interviews. Each interview lasted approximately one hour. I was able to do brief telephone interviews with these same three participants prior to my visit. I transcribed these interviews while I was conducting the interviews. The fourth participant, the former dean of graduate and professional studies, had left the state but was willing to be interviewed via telephone. I conducted this interview, transcribing while I was conducting the interview. These interviews led to observations about a fifth individual who was described as the innovator of online education at the institution. I was able to locate the individual but was unable to arrange an interview.

At Redbud University the university website clearly identified its online education initiative, including contact information. The contact person at Redbud University was an

assistant in the university college, which was the continuing education division for the institution. She directed me to the Director of Instructional Technology. This individual became the key contact for research at the institution. He was comparatively new at the institution, having been there for approximately 3 years, but he knew what was happening at the institution, relative to online education, and he knew the key participants in the development process. He helped identify participants, and provided introductions that allowed me to set up appointments with the other participants in the study. A preliminary telephone interview with him helped provide background for the research I conducted while on the campus. The other participants who were identified and agreed to participate in the study included the Dean of University College, who had previously had the responsibility for online education at the institution; the Dean of College of Business, who was the innovator of online education at Redbud University; the University Librarian, who had current authority over the online education programs; and a digital learning support technician who interfaces daily with faculty members and students in the online education initiative. I was able to interview each of these five participants face-to-face at the institution and record the interviews, which were later transcribed.

Across all three institutions, I conducted a total of 6 telephone interviews and 12 face-to-face interviews. I was able to interview each of the key contacts on two occasions (once by telephone and once in a face-to-face format). Table 3 illustrates the participants, types of interviews, and number of interviews conducted at each institution.

Table 3

Participants Identified in the Snowball Technique in This Study

Institution	Participant (pseudonym)	Position of participant	Telephone Interview	Face-to-face Interview
Bluff College	Sister Mary	VP of Academic Affairs	0	1
	Samuel ^a	Director of distance education	1	1
	Michael	Philosophy professor		
	Jonathan	Director of technology support	0	1
			0	1
Lake College	Emma	Former Dean of Grad & Professional studies	1	0
	Daniel ^a	Director of course development	1	1
	Ron	Program director	1	1
	Bonnie	Asst Dean for operations	1	1
Redbud University	Ian	Dean, College of Business	0	1
	Miranda	Dean, University College	0	1
	Elijah ^a	Director, Institutional Technology	1	1
	Hugo	University librarian	0	1
	Bill	Support technician	0	1

^aThese participants were the key contacts at each institution.

I scheduled a site visit to each of the three institutions for several purposes: (a) to conduct face-to-face interviews; (b) to observe the setting and, as much as possible, interactions that could help me understand the acceptance or lack of acceptance of the online initiative at each institution; (c) to examine artifacts (specifically technology and support set-up); and (d) to gather any archival documents that would shed light on the process of development and help substantiate analysis from the interviews. Although some of this research, such as document retrieval, could have been done remotely, I believe the site visits provided insights I would have otherwise missed and created a more positive

relationship with the participants in the study. This led, hopefully, to more frank assessments of their perceptions than I would have otherwise been able to obtain.

All on-site interviews were taped and transcribed. I scheduled one hour for each of the taped interviews. There was one exception to this. At Bluff College an additional participant was identified during the onsite interviews. I was able to meet with this individual on very short notice and conduct and record a 20-minute interview. The setting for the interviews affects the trust that can be developed. In all but one case, the taped interviews were conducted in either the office or classroom of the participant. In one instance, the former Vice President of Academic Affairs was interviewed in the office of another participant. Telephone interviews lasted approximately 20 minutes each, and I transcribed these interviews during the interviews. In addition to the preliminary telephone interviews and taped in-person interviews, further information was gathered through e-mail and some telephone follow-up conversations. The interviews created a picture of the process for the development of online education at each institution and helped me understand what motivated participants to involve the institutions in online education.

I started each interview (telephone or face-to-face) reading the informed consent letter to the participant that described the study and the rights of the participant. All participants agreed to the conditions set forth in the informed consent letter and agreed to voluntarily participate. Interviews consisted of open-ended questions. Three questions guided each interview:

1. Tell me about yourself and how you got involved in online education;
1. Tell me the story of how this institution got involved in online education and;
1. Tell me how the online education program has evolved or changed since it started.

These questions examined why and how the institution and individuals at the institutions got involved in the development of online courses, the support and opposition they experienced, the roles that the individual participants took in the process, and their perspectives on the transformation of the institution and stakeholders in the institution.

I provided an opportunity for participants to conduct a member check of their own interviews. After the interviews were transcribed, a transcription of each interview (telephone or face-to-face) was sent to the participant, and he or she was invited to provide input on accuracy and asked if there was anything that needed to be changed. Some participants responded, and others did not. Those who responded indicated that the transcripts of their interviews were generally accurate, but they occasionally made corrections on details such as names and dates. These corrections were made to the transcripts.

Observations

In the pilot study I was able to function as a participant observer. I was both a participant in the research and an observer of the processes. I had taught for the institution as an adjunct faculty member and had participated in the institution's strategic planning process. However, in this research I was unable to be so emerged in the three participating institutions. Instead, I studied the institutions from the observer-as-participant role. In this role participation "derives from a central position of observation. In other words, the agenda of observation is primary, but this does not rule out the possibility that researchers will casually and non-directively interact with participants" (Lindlof & Taylor, 2002, p. 149). Observations included the interview process itself, meeting with people in their working environment, touring facilities, and viewing the hardware support systems and related work areas. This allowed me to get a sense of the physical set-up of the institution,

the setting for the administration of the online initiative and its current operations, and the resources available to support that initiative.

Reviewing Documentation and Archival Records

I expected that documents and archival records would be relevant to the case studies. I examined memos, agendas, announcements, statistics, administrative documents, formal internal studies, news releases, strategic plans, task force plans and recommendations, and university websites that were available. According to Yin (1994), documents are not valuable as a source of eliminating biases, because they are biased themselves. However, they are valuable in corroborating evidence gathered from other sources, including interviews and observations. From this perspective, reviewing available documents and archival records was an important element of this study. Lindlof and Taylor (2002) recommend that researchers attempt to access original documents whenever possible and that the “researcher should try to describe the document’s origins and history, who issued it, when and how it was circulated (or read), and how it was used in communicative action” (p. 118). I was able to access some original documents, but in many cases the documents available and provided to me were copies of materials that I was able to remove from the site.

Reviewing Physical Artifacts

Physical artifacts played a limited role in this study. The computer systems, work areas, the online classroom, and related support materials served a role in analyzing the research question. It was hoped that analyzing the physical artifacts would provide insights into the technical operations of the colleges and might also provide insights into the acceptance of the online programs at the respective institutions.

Reflective Journal

I kept a reflective journal for this research. Lindlof and Taylor (2002) note,

Keeping a journal can be a highly practical project: it can help to manage a rising tide of data by recording field site visits, names of persons met and persons interviewed and so on. It can also provide a means of reflecting about procedural problems and their solutions. (p. 167)

Using qualitative methods requires interpretation. A reflective journal enhanced my ability to understand the process by which I arrived at categories while coding the transcripts and interpreting other sources of information (such as documents or observations). Stake (1995) observed that, “Standard qualitative designs call for the persons most responsible for interpretations to be in the field, making observations, exercising subjective judgment, analyzing and synthesizing, all the while realizing their own consciousness” (p. 41).

The reflective journal was valuable, especially as an aid in synthesizing information, which is a dynamic process, and as a control to my own “consciousness”. The reflective journal provided a history of the research. In exploratory research of this nature, it is important to document the path that is followed, because some aspects of the research may change during the process. As noted by Dane (1990), “Because you may be formulating additional hypotheses after completing your observations, you cannot be sure what will and will not be important at the time you make your observations” (p. 162). My reflective journal has provided an extra memory for names and data in the analysis process. It has also helped me reflect on the evolution of the analysis and find meaning in the research itself.

Analysis

The focal point of research and analysis was the interview. As the interviews were completed, they were transcribed for analysis and coding. Open coding was used to begin conceptualizing the phenomena in the research (Strauss & Corbin, 1998). Because this research was exploratory in nature, the data analysis procedures I employed utilized an explanation-building process (Yin, 1994). This process is iterative in nature and was derived from an open-coding process in analyzing the interviews and other relevant data. Open coding is part of a data reduction process. This means “that the use-value of data is prioritized according to emerging schemes of interpretation” (Lindlof & Taylor, 2002, p. 211). Using unrestricted coding, I sought pieces of information that conveyed meaning. These pieces could be ideas, passages, paragraphs, and ideally stories that revealed the process of adoption. I was the only one to have access to the electronic files that were created. I reviewed the tapes and transcripts for accuracy.

The first institution I analyzed was Bluff College. I searched for patterns in the transcribed telephone and face-to-face interviews. As I began this process, I identified 11 potential themes for coding. However, I had to go through the transcripts several times before I was satisfied with the themes that emerged from the transcripts. An example of this process is taken from my reflective journal:

Well I started looking at the work via themes. I looked first at planning. It does certainly give a more focused perspective. A couple of things that popped out by the time I got done:

- I was already aware that planning was a key here, but it is interesting to note, in background that forward looking in the 20s leads to planning in the 60s and 70s.
- In this case faculty innovation is taken to planning, but then in effect taken over by planning, alienating the innovator.

- Central planning defines clearly what they want to do, and finds the person (Participant 2) to do it. Once they're satisfied though they seem to bow out other than wanting to be in the loop, and providing less direct control. (June 8, 2007)

Once I identified preliminary themes, I went back through the interviews and began sorting passages and paragraphs that supported the respective themes. This process led to collapsing some themes and identifying others. For example, again from my reflective journal:

I looked at an emerging theme today, which was volunteerism. What do I mean? There was a strategic decision to have only volunteers work on the development of online education at Bluff College. Participant 2 had to find these people, and perhaps entice them (i.e., stipend) but think about the implications of a system that is developed totally by volunteers within the confines of the specified big top tent (central plan). Who would think that volunteers are going to have anything negative to say about the program. You would for certain curtail the opposition by using this technique. Of course it also creates a certain randomness to the evolution, consider the communications department Participant 2 noted in his 3/5 interview (pp. 13-14). It could be developed more quickly by mandate, but this certainly has been a clever plan and an effective one in their own self-reporting. (June 9, 2007)

As the coding proceeded and as I started to see patterns and processes, I began reviewing the documents and support information from the campus. Bluff College provided excellent records for support, including minutes from meetings dating back to 1994, planning and reporting documents, and catalogs. The observations from visiting the campus, of course, were already influencing my thought processes regarding the research question for this study.

I followed the same process for analysis at each successive institution. I attempted to look at each of the institutions without bias. Nevertheless, some themes were already rooting in my mind. I anticipated that planning would be particularly significant as I continued the analysis, but it was not as relevant at Lake College. In fact, in one instance, a participant noted that they had prepared a draft of a strategic plan and that the new dean

discarded it. As I continued through this process, I began to see things that were different about how each of the institutions' adopted online education, but I also began to see common themes.

Cross-Case Comparisons

I approached the analysis for this multi-case study in two steps. The first step involved analyzing the cases individually. As I completed the analysis of one case, and began evaluating the next case, my reflective journal entries became useful as I started to informally note emerging theories and themes. Merriam (1998) noted that, "A qualitative inductive multi-case study seeks to build abstractions across cases" (p. 195). A challenge was managing all the data (Merriam). I used a matrix design to draw comparisons between the cases after I had completed the initial analysis of the second case. I reviewed and revised the matrix after completing the third case. Although the multi-case format has the potential to be more compelling and robust than a single case study (Yin, 1994), it does not demonstrate quantitative characteristics of sampling. In other words, the results are not generalizable beyond the scope of these three cases. However, in each of these three cases, common themes related to engines, innovators, and bridge builders emerged that may be useful for other colleges and universities to understand before they begin their journey toward developing online education. If they are in the midst of developing online education, this understanding may help them identify problems; and then solutions to the problems they might employ to address these problems.

Informed Consent

This study was conducted with appropriate IRB approvals from Illinois State University. The participants were informed of the purpose and intent of the research. The

researcher made efforts to maintain the confidentiality of the participants in the study. The risks to the participants in this study were minimal, but efforts to keep their identifies confidential were exerted. I was the only person who had access to the transcripts. The identity of the institutions was masked, and participants were identified in this study by pseudonyms rather than their real names.

Validity

In this study I attempted to accurately report and provide understanding of the process of adoption of online education at three institutions. According to Creswell (2003), validity in qualitative studies is a strength of the methodology. Validity in the context is used to determine “whether the findings are accurate from the standpoint of the researcher, the participant, or the reader” (pp. 195-6). Lindlof and Taylor (2002) note that many challenges are involved in the interpretation of data and that based on numerous, plausible interpretations can be derived from the biases of the researcher, or the interactions with the participants. Creswell suggests using one or more of eight possible strategies to improve the validity of qualitative research. I used several of these strategies in this study. First, I made efforts to use triangulation. Lindlof and Taylor describe triangulation as involving “the comparison of two or more forms of evidence with respect to an object of research interest” (p. 240). In each case I was able to interview at least four participants. This provided one means of triangulation when evaluating themes and searching for meaning. In addition, I examined documents and records, and visited each institution to help provide corroborating evidence of the analysis I was finding from the interviews. Second, I used member checking. I provided participants with transcripts of their interviews to determine whether or not they felt the transcriptions were accurate. In

addition, I provided a preliminary analysis of my findings at each institution to the key contact to determine whether or not I had missed any key ideas in my analysis. I had limited success in this effort, receiving a response from only one of the three participants. Third, I attempted to provide rich descriptions including quotations and narratives that would help draw in reader into the story. Finally, I clarified my biases entering the study.

Summary

This research employed a multi-case study design to observe, describe, and analyze the adoption of online education at three private Catholic institutions of higher education. The study searched for key thematic categories that might support a theoretical model of the adoption process that might be tested in further research. The next chapters detail the study findings and describe, on the basis of those findings a tentative model of how the colleges adopted online education.

CHAPTER IV

ANALYSIS

This study sought a better understanding of how private Catholic colleges and universities were able to successfully develop online education within their institutions. Studies by the Department of Education demonstrate that public institutions have adopted online education at a much faster pace than private institutions (Lewis, Snow, Farris, & Levin, 1999; Waits & Lewis, 2003). However, some private colleges and universities have successfully executed online education initiatives. This study examined three Catholic colleges and universities that had successfully implemented online education initiatives.

Each of the three institutions in this study enrolls 5,000 or fewer students. Each institution has unique qualities and histories. They each have employed online education in their own manner, fitting the needs and desires of their respective institution. They each have taken their own journey, not without bumps, along the way. Those bumps, in some cases, helped to define the critical common elements in the journey each institution has taken to achieve successful initiatives in online education.

As mentioned in the previous chapter I used an open coding process to conceptualize the data gathered from the interviews, supported by documents and observations. I focused primarily on the transcriptions from the 18 interviews. I proceeded by examining each institution separately and making a cross-case comparison. I identified the three

institutions in this study as: Bluff College, Lake College, and Redbud University. In this chapter I will introduce the institutions and the themes that emerged in the interviews with individuals at those institutions.

Bluff College

Bluff College is in the Atlantic states. The college is located on a ridge, providing a picturesque view of a major river. The college enrolls approximately 2,500 students, mostly from the region within 100 miles of the institution. The institution offers 30 academic majors at the undergraduate level and multiple master degree programs in nursing, education and business.

The campus is a mix of old and new. It has buildings dating back to the early 20th century and new construction expanding the campus into the 21st century. Renovations are underway in student housing, and a new technology campus building is under construction. The buildings are well maintained and well equipped with current technology. The campus is located away from commercial or industrial enterprises, and it is surrounded on three sides with a neighborhood area of mostly older residential buildings.

The institution traces its local roots to the late 19th century. A local Catholic priest in the community asked the Dominican sisters in New York City to open a school for children in the community. In response, the Dominican sisters opened an elementary school and eventually a high school on the site that is now Bluff College.

The community itself is not without its history. It is noteworthy for several historic events from the Revolutionary War through the innovation of 20th century city management systems. It has a heritage of being progressive. It has also struggled with diversity, facing race riots in the 1970s. In addition, it has experienced structural shifts in

the U.S. economy, losing numerous manufacturing plants. The city has the feel of a place with a history that has been by-passed by the present. The population in the 1890s was around 25,000; today the population is still around 25,000.

Online Education at Bluff College

Technology abounds at Bluff College. It was one of the first wireless Internet campuses in the United States, which is still a touchstone of pride at the institution. The Director of Technology Training and Support Services merges the concepts of smart classrooms, campus technology and online education into one inclusive whole. Online education, in the form developed at Bluff College, is now part of its culture and pride. As an example, Sister Mary, in commenting on the institution's move to a wireless campus stated: "It was so revolutionarily that the *New York Times* heard about it." She then added that the *New York Times* sent a reporter who wrote a full page story about "this small college...that had wireless computers." In the interviews I conducted at Bluff College this story came up in and out of interviews and is clearly a source of pride.

Bluff College offered "163 courses via the Internet" in 2005-2006 (Annual Report, Office of Distance Education). To put this in perspective, the institution has 70 full-time faculty members and about 130 adjunct faculty members. Sister Mary, former Vice President of Academic Affairs for the college, indicated that about half of the full-time and half of the adjunct faculty members use online education in some format.

The institution made a strategic decision in the late 1990s to focus on hybrid course development. This means that very few courses are delivered exclusively online. Most of the courses at Bluff College have an in-class component as well as Internet instruction. The balance of in-class to Internet or online varies by course and instructor.

The institution also made a strategic decision to offer courses online, but not complete programs online. The program has grown steadily, between 5% and 20% per year, since 1999 when the institution offered between 6 and 10 courses with a mix of classroom and online components. In 2006 the institution increased the number of online course offerings by another 18% over 2005, indicating that the institution is still growing its online education initiative.

Samuel, Director of Distance Education, noted that online education in its current format is now commonly accepted at the institution. According to the 2005-2006 *Annual Report* of the Office of Distance Education:

During 2005-2006, there has been a major attitude shift among faculty in support of the use of distance education. Division chairs who, in years previous, had expressed reservations about the use of distance education by teaching faculty are now encouraging faculty to use distance learning as a vital part of their pedagogy.

The demand from divisions, departments, and individual faculty members to learn or improve their online skills has been noted both by Samuel and staff members in the college's Technology Training and Support Services. Jonathan, the Director of Technology Training and Support Services, noted that the IT department has seen an influx of faculty members seeking out additional training to start or enhance their ability to deliver online education.

I've seen that [requests for assistance] go up quite a bit. They know it's there, they know they can get it from somebody who's going to teach them something of quality and they do seek it out. They want to know how to do more and more things. [Samuel] is giving them more sophisticated concepts to work with. (March 5, 2007 interview)

When Sister Mary, the former Vice President of Academic Affairs who initiated the planning process for online education at Bluff College, reflected on the question of whether or not the program was successful, she responded:

I think our expectation is always more than what we reach. But I think my response would be that it's where we anticipated that we would eventually reach. So I'm satisfied with it.... I think it allowed the college to compete with surrounding colleges that are also seeking non-traditional students. (March 5, 2007 interview)

This line of reasoning was expanded on by Sister Mary

I think [online education's] impact would be that we are being seen as technologically up to date. No one wants to come to a college that operated 30 years ago. We have smart classrooms, a lot of computer labs, a wireless campus. I think that is the greatest influence on enrollment increases. We are seen as a technologically savvy school, keeping up with the times.

As measured by these statements, success might be interpreted as increasing enrollments and enhancing the image of the institution. The participants in this study feel that the institution has achieved what it set out to do.

Participants in the Case Study

Sister Mary is a Dominican Sister of the Catholic Church. She is now coordinating archival work at the institution. She came to Bluff College in the 1960s. She predates the Vatican II changes and remembers them well. She was assigned to earn a doctorate degree in Educational Psychology. She was invited, in 1974, to become the Academic Dean of the college and later the Vice President of Academic Affairs, a position she held for 30 years. She has been a proponent of online education throughout its inception at the institution. She clearly admires the forward-looking nature of the institution. She links the idea of sending sisters to get doctorates in the 1920s to developing online education in the late 20th century. Sister Mary tied the history of progressive change to distance education as follows: "Now, how does all of that tie into distance learning? Because, I think that the sisters were so well-educated that they read the signs of the times" (March 5, 2007). Later she adds, "This idea of technology just builds on

that willingness to risk, commitment to study, because all of this came out of our planning. The college has been doing long-range planning since its beginning”

Samuel, the Director of Distance Education, worked in the public education system as an assistant superintendent for over 20 years. During that tenure he developed an online program for the school district using live television. After retiring from public education he accepted a position at Bluff College as the coordinator of student teachers, but he was quickly identified as the person the institution wanted to lead its online education development by Sister Mary because of his background with technology and his strength and credibility as a teacher at the institution. Samuel has been with the institution for 9 years and serves as the Director of Distance Education. He is driven by curiosity about technology and the application of technology to higher education. His diverse background allows him to be an IT guy with the IT department, a faculty member with faculty, and an administrator with administration.

Michael teaches philosophy at Bluff College. Samuel indicated that Michael was the faculty member with the credentials needed to provide credibility among the faculty members during the implementation phase for online education at the institution. According to Everett Rogers’ (1995) framework, Michael would be identified as an innovator of online education at the institution. He was experimenting with online education before the institution formally pursued online education. He organized some instructors and made a formal proposal to the institution to develop some experimental online courses. He was a fairly new faculty member when the process of development began. He has retained his experimental interest in online education, but he seems somewhat withdrawn from what is now the mainstream online protocol on campus. Discussing

the institution's approach and platform, he stated, "I feel confined in that environment so I've moved my webpage off campus so that I have more access and control" (March 5, 2007 interview). Although he has removed himself from the institution's organized approach, he still acknowledges that the online initiative has been successful.

Jonathan is the Director of Technology Training and Support Services. He has a background in theater, but he developed an interest in technology while working on his master's degree in media studies. He arrived at Bluff College in 1998, shortly after the institution decided to develop online education. In describing his responsibilities he states, "This job encompasses the web resources of the college, which includes faculty and other websites, and supervision of the people who support WebCT, and some training for WebCT" (March 5, 2007, interview). Much of his work involves supporting the large amount of hardware and technology located around the campus. He is clearly a proponent of online education and has many insights, but tends to stay away from the limelight.

Emergent Themes at Bluff College

An analysis of the interview transcripts and of pertinent documents related to online courses at Bluff College led to five themes: (a) innovation, (b) central planning, (c) volunteerism, (d) identifying and overcoming opposition, (e) coordination. The following paragraphs will discuss each of these five themes.

Innovation. In the 1920s, the Dominican sisters started the move that would lead to their developing an institution of higher education. In the 1920s they began assigning and sending sisters of the order to universities to get undergraduate and graduate degrees to improve the quality of instruction and credentials of the teachers. Sister Mary noted the

forward-looking nature of the institution even then: “They believed so strongly in education that back in 1920 they were sending their members, their sisters, into universities to get the doctorate, which was unheard of in the 1920s, especially for women” (March 5, 2007, interview). Sister Mary explained that in the 1930s they created a teachers college. Then in the 1950s they took steps to move the institution from a 2-year teachers college, to a 3-year institution granting a liberal arts degree; it became a 4-year college in 1959. The institution opened its doors to lay students in 1960. In 1964, the institution saw a need for a new program and began offering coursework in the field of special education well before most other institutions of higher education.

The heritage of the institution created a fertile environment for innovation-related to online education. Samuel noted that the “IT department has taken pride in being innovative; we were one of the first wireless campuses in the nation” (February 6, 2007, telephone interview). Samuel also stated that Sister Mary “was the visionary” for the online education initiative. “She was not real aggressive. She also wasn’t knowledgeable in technology. But she was a steady influence. You could bring people into her office and she would share the vision” (February 6, 2007, telephone interview). In a later interview, Samuel observed that Sister Mary “spearheaded a number of meetings to implement [online education]” (March 5, 2007, interview). In addition to a culture that was receptive to innovation, and a senior academic leader (Sister Mary) who spearheaded the movement to adopt online education, individual faculty members also stepped forward with proposals to experiment with online education. Michael was one of those faculty members. He recalled:

I got interested in [online education] because I started looking at technology ways to do philosophy and there wasn't a whole lot out there 8 years ago. I had come across the idea of doing distance learning and I thought, this is a neat way to do it, you can force the students to write more, they can be involved, and you're not tied to a time and place to teach. (March 5, 2007, interview)

Michael and others became involved in the planning process. They helped develop and implement the first online courses at the institution.

This combination of a culture encouraging innovation, academic leadership spearheading the innovative process, and individual faculty members wanting to try new ideas was an important theme in the development of online education at Bluff College. This innovation was managed and controlled by central planning, the next theme that emerged from the study.

Central planning. When Sister Mary (the Vice President of Academic Affairs at the time) wanted to examine the opportunities in online education, she organized a task force to research those opportunities. She identified the role of central planning as a key to the process of new idea development within the institution. "This idea of technology just simply builds on that willingness to risk, commitment to study, to see, because this came out of our planning. The college has been doing long-range planning since its beginning" (March 5, 2007, interview). The move into technology that allowed the institution to become one of the first wireless campuses in the nation came out of ideas developed by the planning team. Samuel, the Director of Distance Education, was hired on the recommendation of the planning team. Funding for development was recommended by the planning team.

When Michael wanted to act on his innovative ideas to develop online education, he went to the planning committee with his proposal:

What I did was put a proposal in our planning process to just develop several courses that would be done this way... I went to someone in education, someone in math and computer science, someone in business, and a person in the arts and letters division. We developed a proposal to do it from the faculty moving forward, giving us some release time and money to develop a certain number of courses. (March 5, 2007)

He was soon appointed to the committee and was involved in the discussions to develop the online education initiative.

The strength of central planning was its capacity to provide financial and personnel resources that allowed online education to gain a broader and more important reach within the institution. However, once central planning became involved, it also created the boundaries within which online education would develop and flourish at the institution. Michael agreed that the initiative fits the mission of the institution, however, he would have liked to have seen it develop into a more open system.

I think if it had been done from a faculty initiative and allowed them to explore it, it would've branched out more because they could have then said 'oh, I see what we can do now' and it would've flooded through more of the faculty than what it does now. (March 5, 2007, interview)

Without central planning, online education would never have gotten off the ground at Bluff College, but it also limited the scope for future development. Michael observes that if the institution had followed his vision focused on a faculty initiative, it would have "allowed them to explore it, it would've branched out more because they could have said, oh, I see what we can do now, I see it" (March 5, 2007, interview). The institution chose instead to limit instruction to WebCT and focus on adult learners.

Part of the intent of central planning was to reduce or eliminate resistance to this new initiative. Two additional themes both influenced and were influenced by central

planning: volunteerism and identifying and overcoming opposition. These two related themes are addressed in the next two sections.

Volunteerism. The theme of volunteerism clearly emerged in the interviews, although it is closely related to the theme of identifying and overcoming opposition (discussed below). The institution set some boundaries within which faculty could develop online education, most notably, limiting faculty members to using the WebCT platform. Within these boundaries they encouraged participation based on the personal interests of the faculty members. Jonathan referred to this as flexibility, allowing faculty members to utilize the online capabilities of the institution for course supplement or multiple blended courses.

Samuel discussed the importance of volunteerism to the process of implementing online education at Bluff College. In responding to why the online program initiative had been successful at Bluff College he stated, “Some of the reasons we have been successful? We would only work with volunteers” (February 6, 2007, telephone interview). He added that quality concerns were resolved in two ways:

First, faculty was never required to participate. Then many were convinced the quality was equal after a couple of faculty members were successful in using the material, and stated that the quality was not lost and the material was pretty good. (February 6, 2007, telephone interview)

By working exclusively with volunteers, the desire to make the program work was latent in the actual participants. In a follow-up, face-to-face interview on March 5, 2007, Samuel reiterated that the primary way the institution overcame skepticism about online education was, “Number one, we only had people work online who volunteered, we did not make anybody do this.”

Thus, the tool of volunteerism was used to ameliorate some of the faculty concerns about online education identified in Chapter II. This theme was a major piece of the larger strategy for identifying and overcoming opposition, which is the fourth theme identified at Bluff College.

Identifying and overcoming opposition. The final report of the Distance Education Task Force on June 16, 1995, arrived at several conclusions. The fourth of these conclusions was:

That the investigation of the feasibility of implementing distance education at Bluff College should focus on a time-phased, incremental approach so as to permit taking full advantage of institutional resources while overcoming various anticipated obstacles. (p. 2)

Central planning facilitated the development of online education at Bluff College, but the planners also were concerned about, and took action to identify and overcome, opposition. One tool the institution used to overcome opposition was volunteerism, discussed above. Samuel indicated that the college was aware of potential faculty resistance to online education based on concerns about the quality of courses, academic property rights, and pay for additional work (February, 6, 2007, telephone interview). Central planning took steps to address these concerns and reduce faculty resistance. Samuel provided details about this process as follows:

In the beginning, despite the fact that there were some faculty who wanted [online education] the biggest opposition was from faculty. There was a lot of skepticism about whether you could have the same rigor in online education as you could have in face-to-face education. Could you have secure testing? Some people were threatened by the fact that they just didn't want to get into this and that they'd be forced to do something they didn't want to do. Some people were threatened by the fact that maybe they'd be replaced by this sort of thing, and of course their fears were unfounded, but we did address those. Number one, we only had people work online who volunteered, we did not make anybody do this. We also made the decision to try to make most of our classes a blended format, that is both face-

to-face and online, and not do too many totally online classes because we felt one of our strengths here was we're a small college, a caring college, we know all the students by name and they know all the faculty by name, and we don't want to lose that to online. So we do very few classes totally online. So we got over that and then we had the issue of intellectual property, the faculty was concerned about if they developed programs online, who owns it? And we say we'll apply the same standard that we do to a face-to-face class: the faculty owns their materials with one exception. That exception is the course outline that they must submit at the beginning of each semester to administration. That becomes college property. The same thing is true for an online class- their course outline becomes college property. Other than that they own their material. Another issue they brought up was who is going to pay us for the time we have to put in? Because there will be more time than the regular face-to-face class. So we developed a stipend of \$240 for training and \$350 for their first time they prepare a certain class. We did limit that to graduate classes and the adult non-traditional classes—we do not pay those stipends for traditional undergraduate classes because we felt like we wanted to entice people to teach online for the adults and not necessarily for the undergraduates. So having answered those questions, many of the faculty began to come on board and got rid of their opposition. The rest of the opposition was more in a sense of being uncomfortable with technology. And, over the years we've provided a lot of training sessions and word-of-mouth from one faculty member to another saying, it's really not so hard and I'll help you out, sort of a buddy system, so we've overcome that sort of thing. Some people were still uncomfortable and they don't teach online. And we keep telling them: this is a tool, if you choose to use the tool, we will train you. If you choose not to use the tool, that's your decision. So we've kind of overcome the obstacles and are at a point where online education is now integrated into the college like science labs are integrated and other teaching tools are integrated. (March 5, 2007, interview)

Central planning also identified the role of administration in the process as a potential obstacle that would need to be overcome. Samuel noted, "And then of course that creates another problem, the faculty then see administration is so interested in this, [that they think] maybe it's not a good thing" (March 5, 2007, interview). Administration recognized that their overt presence in the process of adopting online education would be an obstacle to implementation. As a result, they backed away from overt leadership in the process once they got it started. Samuel added, "The administration has sort of backed away once it got started and left it in my hands and the hands of the faculty to develop."

Sister Mary, as Vice President of Academic Affairs, continued to facilitate activity by organizing regular one-on-one meetings in her office between Samuel and various faculty members, academic and administrative leaders to keep the initiative going (March 5, 2007, interview with Sister Mary).

The final element of opposition that Samuel indicated the institution was aware of and wanted to eliminate was the potential negative interpretation that faculty and staff might associate with the online initiative—the possible perception that they were in it for the money. The concern that the institution had regarding this possible perception is identified clearly by Samuel:

We also avoided the idea of putting whole programs online. We do not give degrees online. We teach classes online. We do not give degrees that are totally online. We did not get into the for-profit situation that a lot of the bigger schools were trying to do at the time, and many of those have fallen flat on their face anyway. So the faculty never saw us advertising a course for thousands of dollars or a program for thousands of dollars. They never saw anybody be replaced or even fired or even be evaluated according to what they were doing online. (March 5, 2007, interview)

This identifies one of the reasons that the institution decided to focus on blended courses, and avoid courses and programs that were fully online. They wanted to avoid giving the perception that they were in it for the money. This is particularly interesting when reflecting on some of the problems in faculty perception's about the motivations of administration to develop online education that were identified by French (2001) and Linqvist (2004) in Chapter II, where faculty members perceived the motivations to be driven by possible financial windfalls.

Identifying and overcoming opposition was a dynamic theme at Bluff College. The role central planning played in orchestrating the online education initiative reflects a

managerial culture. However, as central planning attempted to engineer the online education initiative, the shape that the initiative took was very much affected by the committee's perceptions of the form that opposition to the initiative would take, especially by faculty members. This led directly to the institution's focus on hybrid courses, rather than totally online courses. It also led to identifying and hiring a full-time coordinator. This leads us to the final theme, coordination.

Coordination. The move from planning to implementation of the 1995 online education initiative got off to a rough start. The institution had to invest heavily in technology in order to have the infrastructure needed to develop their online strategy. Samuel indicated that, by the time of his arrival in 1999, Bluff College had already made one unsuccessful attempt at start up:

They had tried earlier [to start-up online education], with a person assigned and it didn't go anywhere. A faculty committee had laid out plans for online distance education. They asked if I'd be interested. Their idea was to develop online education at Bluff College. (February 6, 2007, interview)

Sister Mary described the process for selecting Samuel as the Director of Distance Education at Bluff College:

Samuel came out of retirement from the public school district, and he had been working for us part-time as an adjunct. But when this opening occurred, which we're going to get into in a minute, I just knew he was the perfect person. Now he competed, but he came out head and shoulders above everybody else that was available and interested and prepared for the position. (March 5, 2007, interview)

"Head and shoulder above everyone else" is a strong statement, but the criteria for this evaluation are vague. We get a little more insight into Sister Mary's thinking in this statement:

Samuel at that time was working at the college as the coordinator of student teaching. But I knew his background. And he actually started the technology and

everything that went with it, in [a K-12 school district] where he was working [as assistant superintendent]. So he had the background. He had the record. He had the interest. Again, he was just the perfect fit. (March 5, 2007, interview)

Some of the criteria that can be identified here include a background in education, a background in implementing technology, and a background in administration. The task that Samuel was given was to move the initiative from one or two courses being offered at the time to the more the 160 courses being offered as of 2006.

Samuel noted that once he was selected he was given a small office and went to work.

I went about advertising internally to faculty members. I went offsite to learn about it [online education] myself. I was brand new. It was like going back to kindergarten when you're 62 years old. We started off slowly with just a handful of interested faculty members participating.

Initially his responsibilities included promoting, communicating, and advocating the online program with faculty members. He had some credibility in this position because of his background in education. He indicated that he was accepted to some degree because he had experience teaching at Bluff College. Another important factor that can be observed from his statement is that, despite a background in technology, the type of technology application that was being implemented was brand new to him; "it was like going back to kindergarten." Tone of voice is difficult to interpret in text, but it was also clear that Samuel enjoyed "going back to kindergarten." He had a true love of learning new things.

Samuel had another very important role in facilitating the development of online education at Bluff College. He had to be a bridge builder, in the sense that he had to build connections between the various constituencies involved in the online education

initiative. These constituencies included the IT department, administration, and faculty. In this role, he offered several strengths. His background in K-12 administration, gave him understanding and credibility with Bluff College administration. His experience teaching in K-12 education, teaching at Bluff College, and administering the Student Teacher program at Bluff College gave him credibility with faculty members. His interest and experience gave him understanding and credibility with the IT department. He used this credibility to build bridges. "A challenge has been to bridge the gap between IT and faculty. There has always been a lack of trust and 'they don't understand' on both sides. I've been a bridge between the two" (February 6, 2007, interview). He described this process of bridge building with the IT Help desk:

When we started the IT Help desk would get questions, and they would defer all the questions to me. I went to the IT people and showed them some of the answers. Then I convinced them to send a couple of people to conferences that I was attending (on WebCT). As they improved their skills they have gotten to the point where they are as knowledgeable, or even more so than I am. They were then able to help people out. Once they got comfortable with the knowledge I invited them to participate in the group training, which they did (February 6, 2007, interview)

The coordinator provided help and communication to promote the online education initiative. He consistently worked to get faculty members to team up, to collaborate, to create 'buddy systems' to expand the program within the college. Without the coordinator and the bridge building that he facilitated the program would likely have languished much as it did prior to 1999.

Summary

The hierarchal structure of a religion-based liberal arts college combined with a heritage of forward-looking administration over the course of the past 80 years is the

setting that must be considered when reflecting on the journey of Bluff College toward successful implementation of their online program. This culture set the boundaries within which the seeds of innovation and new ideas could germinate and grow within the Bluff College environment.

The planning team played a central role in moving online education from an idea to a reality. Through the leadership of the Vice President of Academic Affairs, the Distance Education Task Force was established. This was a task force of both faculty and administration but was strongly driven by administration. This led the institution to a very systematic, but time-consuming, process for development as illustrated by the fact that although the planning process began in 1994, the first consistent online course offerings did not begin until 1999. That might be considered a weakness, especially in a very fast moving global economy. The caution was tempered by strong, long-term administrative support and substantial portions of the operating budget for an extended number of years being directed toward the online education initiative.

Although innovation was a critical part of the institutions heritage, the processes established had some negative implications for independent innovators, as was demonstrated by the reflections of Michael who was identified as an innovator in the process. With respect to the development of online education, the institution defined the parameters within which innovation would take place and assigned a coordinator to encourage development. However, in some ways this decision also tethered development to the scope defined by administration.

The planning process systematically identified and worked to overcome obstacles and conflicts. Aside from the issue of the strategic threat of competition, the Distance

Education Task Force identified two other obstacles the institution would have to overcome if they wanted to successfully implement online education: (a) technology infrastructure, and (b) faculty opposition. The institution chose to retain outside consulting services to evaluate their technology infrastructure needs. Once this was completed, the institution committed the resources necessary to build the infrastructure per those specifications. The institution combined an incremental approach of adoption with a strategy of working only with volunteers to overcome faculty resistance to the program. To further reduce potential opposition to the initiative, administration hired a coordinator for the initiative then withdrew from direct involvement to encourage faculty to participate in the program without fearing heavy administrative oversight. Another strategic choice the institution made, at least in part to reduce faculty opposition, was to focus almost exclusively on hybrid courses (using both in-class and online technology together).

With all of these things in place, the selection of the right coordinator to shift from planning to implementation was critical. Samuel, who took this role at Bluff College, started with two valuable assets. The first asset was a professional background that was accepted by all of the often conflicting parties. He was accepted by administration, faculty, and the IT staff because of successful experience in all three areas. The second asset was that he had support that added credibility to the program. These included Sister Mary, the long-time Vice President of Academic Affairs who was perceived as the visionary for online education; the Division Chair of Education, who was a strong, vocal advocate of the program; and Michael, a well respected professor, who had both academic and writing credentials that were admired across campus.

The online initiative at Bluff College has been successful within the parameters set forth by central planning. Reiterating an earlier statement,

There has been a major attitude shift among faculty in support of the use of distance education. Division chairs who, in years previous, had expressed reservations about the use of distance education by teaching faculty are now encouraging faculty to use distance education as a vital part of their pedagogy. (Annual Report, Office of Distance Education, 2005-2006)

This statement is supported by the fact that the number of courses using online technology increased to 163 courses in that year, nearly one course for every full-time and adjunct faculty member at the college. Online education is now part of the pedagogy of Bluff College, but the future holds many challenges. Technology continues to change rapidly. The college is evaluating what platforms to use in the future. What hardware will students be required to use in the future? Does the institution have the manpower to shift toward full online programs in the future?

Lake College

Lake College is in the New England states. The college sits on over 300 acres of land that once was part of a personal estate. It is located on a lakefront in Pineview, a resort area of the state. The college enrolls approximately 5,000 students. However, only about 20% of these are traditional students, who take courses on campus. The college offers a full range of traditional bachelor's degree programs and several masters' degree programs.

The campus has postcard potential, nestled in a wooded area on a major resort lake in New England. Much of the campus has a feel of 1950s and 1960s construction. However, the college, with a limited endowment, has had consistent construction projects since it moved to this location in the 1950s. The participants in this study had up-to-date

computer equipment in their offices and were knowledgeable about what was happening in online education both on their campuses and across the nation in the field of online education. They adhere to the national “Quality Matters Project” (Quality matters, 2006), including 750 institutions nationwide, focused on creating coursework for web-based instruction that meets quality standards accepted by all participating institutions.

Lake College has not always been located in Pineview. The Sisters of Mercy organized the school in a major city, about an hour from Pineview, in 1883. From that time forward, they worked toward the objective of establishing a college. The school was chartered by the state as a college in the early 20th century. The college grew consistently, and expanded its curriculum through the mid-20th century. In the early 1950s it became apparent that the college had outgrown its original facilities, and it relocated to Pineview.

The institution was founded as a women’s college, but in 1970 became a coeducational institution. This led to further expansion and increases in enrollments. However, in the mid-1970s Lake College faced the same financial challenges that many small, private liberal arts colleges were facing: how to survive in a world of subsidized state colleges and universities? The college did not and does not have a major endowment, although it has been successful in raising funds for a steady expansion of campus infrastructure over the years. In 1976, Lake College chose to expand into continuing education, through correspondence courses. The programs in continuing education were very successful, actually dwarfing the enrollments of the traditional students at the college.

The community of Pineview is not on any maps that I could find. It is a community clustered in several small communities, only one of which, along with the lake, can be found on a map. Access to the area is by two-lane highway. Although the

population of the area is small, it offers plenty of shopping, tied ostensibly to the tourist trade. In March, while most of the country is in bloom, it can be bitter cold in Pineview. When I visited Lake College the wind-chill adjusted temperature was 20 degrees below zero.

Online Education at Lake College

Continuing education evolved as a separate division of Lake College. It developed its own systems for administration and support, and it retained its own faculty, made up almost entirely of adjunct instructors. It eventually became what is now known as the Division of Graduate and Professional Studies. In the 1970s, it was a correspondence program by mail. Materials were mailed to students, who worked independently to complete the work. As the students were not on campus, were usually non-traditional, adult learners, and had needs quite different than the traditional students who lived on, or near, campus, the division developed its own staff for processing applications, financial aid, transfer credit, and so forth. The division also developed its own ongoing student support system. They divided the responsibilities of teaching and advising between adjunct faculty members and full-time, on-site student advisors. As I will discuss later in this section, the on-site student advisors became an important link between the student and institution.

Internally, the division was very concerned about quality. This impression comes from multiple sources and suggests a culture that evolved, partially as a defense mechanism against general opinion about the quality of correspondence education, which conforms with what Edelson (2001) discussed in Chapter II about the secondary role that correspondence education had taken in the United States. Ron, a faculty member who had been with the institution for nearly 20 years, provided insights into this possible motivation:

For years we fought the whole correspondence label, you know, the picture on the back of the matchbook thing, and students would consistently [talk about it] when they came to campus for the summer. We had focus groups and we'd sit and talk or I'd talk in class. And their biggest frustration was convincing their boss and their peers that this was a legitimate program. And I asked them, what did you do? Fairly consistently the answer was, I showed them my homework. One student in an undergraduate strategic planning class I was teaching mentioned this when talking about her husband, who was getting his MBA at the Wharton School [of Management], and she said, the course you're teaching me is tougher than what he's getting at Wharton. And it is. The quality is there. All of a sudden we went online and the stigma went away. The exact same thing they'd been doing but the correspondence was legitimate because it was online. It frustrates the hell out of some of the students just because of that. They'd been fighting it all that time and now all of the sudden its okay. (March 8, 2007, interview)

As noted by Ron, shifting toward online education actually had the impact of providing a stronger legitimization for the institution's programs. He believed that the quality of the curriculum did not improve instantly, by converting from a correspondence format to an online format. In this case, it appeared that simply changing the technology (from mail to Internet) improved the perception of the quality of the courses being offered by Lake College through distance education. Even so, the institution delayed moving into online education for 3 or 4 years longer than the participants in this study felt was appropriate. Nothing happened until the arrival of a new dean, who both promoted online education, and identified grants to fund the initiative. I will discuss this later in the section.

Lake College now offers numerous courses and programs online. It offers certificates, bachelor's degrees, and master's degrees totally online. The courses and programs have evolved directly from the correspondence courses the institution began developing in 1976. The process of change began with simply converting a paper-based correspondence course to an online process that involved a rudimentary discussion board and e-mail capabilities. The division continued to offer the paper-based correspondence courses

in tandem with the online system. This has changed. As of July 1, 2007, the institution no longer offers any paper-based courses. All courses in the division are now online only.

The online courses are asynchronous in two ways. First, the courses are asynchronous in that a student can participate in a course anytime of the day. Second, students taking online courses at Lake College progress through the course independently. There is no cohort class within which a student progresses. In a given section of a class, students may start at anytime within a 6-month window and complete their coursework for a course at their pace, as long as they complete the work for a course within the time frame allotted for completion (at one time the time frame was six months). This allowed tremendous flexibility for non-traditional students. Rupert described this as follows:

We are asynchronous with no cohorts at all. We start on the 15th and 30th of the month. Each student moves through the course at their own pace. There is no time-space relationship. As the time frame is self-paced we recommend that undergraduate students take two courses at a time and that graduate students take one course at a time. Students were allowed 6 months to complete a course. Within the last year we have changed the time frame to be 15 weeks, and allow students to pay for an 8-week extension if they need to. (February 21, 2007, telephone interview)

The narrowing of the window for completion in coursework is tied to several factors. First, turnaround between the time students send their homework and the time they receive their grades has changed. According to Bonnie, Assistant Dean for Operations within the Division for Graduate and Professional Studies, turnaround time averaged 3 to 4 weeks when the programs were correspondence based. Now, 5 days is a more common turnaround time. Another reason for the change is tied to retention. By shortening the window for a given course, Rupert believes that retention will increase.

The discussion boards in the online courses have created a sense of community that was lacking with independent studies. Students like the interactive nature of the discussion boards and often request live chat segments as well. Describing the discussion boards, Rupert observed:

That has matured over time. Within each of the 4 or 5 study units we included a study question that each student had to post and then read other student postings. A lot of students wanted to do this. In an informal way, we had live chats, but not officially. We did not make it a requirement. A discussion board could be open for years when we started. (February 21, 2007, telephone interview)

Ron went on to describe how things have changed. He noted that instead of faculty members using a standard set of questions for the discussion board, “that many faculty [members] are posting new topics at least monthly and often weekly.” He shared the following example:

Now as an example a faculty member opens a new question every week. Now a person might be a beginner and ender student discussing the same question. As of right now the question stays up until the discussion board is so full that the instructor chooses to purge it. Students are starting to behave more like a cohort even though they really aren’t assigned as such. (February 21, 2007, telephone interview)

Ron sees this shift as positive. It also strongly reflects the institution’s focus on quality and student-centered pedagogy.

Daniel, the Director of Course Development and Learning Technologies, confirmed that the institution has moved beyond a conversion of paper-based correspondence to a pedagogy that embraces the broader opportunities of the Internet and online delivery. The focal point of this development always centers on the students—their access and their time constraints. He also indicated a reluctance to exceed the technical capabilities of the students. The student-centered approach has helped develop the institution’s strategy:

I think you have to strike a balance between what your students want and the appropriate technologies that are going to allow you to deliver the highest quality course with the resources that you have. So in other words, you can deliver a truly high quality course using text as your primary technology. (March 8, 2007, interview)

Rather than focusing on technology enhancements they have focused on content. They are more concerned with the content and quality of the content, than they are on cutting edge technology, such as live animation or real-time chats.

Lake College has evolved in many ways. Instead of a Distance Education Program, that is correspondence based, it is now called the Graduate and Professional Studies division that is online based. It has narrowed timelines for course completion. It has moved totally away from correspondence to online platforms. But it has retained its asynchronous, flexible schedule and its total focus on student needs.

Participants in the Case Study

Emma is no longer at the college. She served at Lake College for 12 years. She was one of the few full-time faculty members working in continuing education when the institution saw an opportunity, in 1997, to apply for a Sloan Foundation grant to open the doorway to online education. She wrote the application for that grant and wrote proposals for subsequent grants. She eventually became the Dean of Graduate and Professional Studies, a position she held until a recent opportunity took her to a major university, also in New England.

Daniel earned a master's degree in English literature at a major university. He was hired at Lake College in 1998 as an academic advisor. The timing was fortuitous. Three months after he was hired the institution was hiring an instructional designer to support its first Sloan grant. He reported:

In effect I was hired at just the right time. I was not cut out to be an academic advisor, so about three months after I came on board they were hiring an instructional designer to support the efforts of the grant. So, I was hired to do instructional design work. The definition of instructional design was still very vague at that time. (February 7, 2007, telephone interview)

Daniel was mentored by Emma. He was promoted successively to project manager, then to Director of Course Development and Learning Technologies. Eventually all coordination for paper-based correspondence and online education was combined under his authority. He continues to coordinate these activities at Lake College.

Ron was a hospital administrator for 25 years. Sometime in that career he began teaching as an adjunct faculty member at another institution. He moved around to various assignments in New England, but wanted to relocate to the state where Lake College is located. He speaks of his roots at Lake College as follows:

I've been at Lake College for 18 years. I came as adjunct [professor] teaching health administration in graduate and undergraduate programs. They were all paper-based courses at that time. Over time I got interested in long-term health-care administration. I got involved in designing the undergraduate program which eventually absorbed the undergraduate healthcare program. When I started we had a separate graduate healthcare program, undergraduate and graduate long-term healthcare programs and a radiological science program. There were four directors. Gradually they were all absorbed under one director, me. (February 21, 2007, telephone interview)

Ron has a good sense of humor about himself. He thinks of himself as the old man and is generally self-effacing about his role in the genesis of online education at Lake College. He continues to serve as the Director of the Graduate and Professional Studies' largest program, which has over 1,000 students in multiple majors.

Bonnie has been at Lake College for 18 years. She joined what was at that time referred to as the External Degree Program, taking on the role of director of operations. When she started in 1989, the correspondence coursework from students was all sent to

her department first. Her staff logged all assignments and then sorted them for faculty grading. After the faculty members completed their work, her department would record the grades and send the material back to the students. She has observed and participated in the evolution of the distance education program at Lake College from a strictly paper-based operation in 1989 to a totally online operation in 2007. Her title and responsibilities have also evolved. She now serves as the Assistant Dean for Operations and is responsible for advising, enrollment, and operations for the Graduate and Professional Studies division.

Emergent Themes at Lake College

I interviewed all participants at Lake College as outlined in Chapter III. Emma was the only participant in the three cases that I was unable to meet with face-to-face. Daniel provided several documents including materials related to the grants received by the institution as it started the transition from correspondence courses to online courses. I was able to visit the campus and review documents, which were used to support the content and analysis from the interviews. Following the same analytical process of open coding by which I developed categories at Bluff College, I identified five themes that included: (a) relationship of administration and continuing education, (b) existing infrastructure, (c) climate, (d) innovation, and (e) bridges and coordination. In the following sections I will discuss each of these.

Relationship of administration and continuing education. A theme that clearly emerged in this research was the relationship between administration and continuing education. The Division of Graduate and Professional Studies evolved into a semi-independent division of the college.

In 1976, Lake College organized distance education in the form of a paper-based correspondence program. None of the participants were at the institution when this decision was made; however, they have clear and consistent views on what motivated the institution to take this strategy—survival. According to Ron, “Back in 1976 the college got into this to save it from financial disaster (March 8, 2007, interview). The move toward distance education was established to help the institution survive by generating additional revenues to support the traditional academic unit of the college.

Daniel elaborated on what he considered a consistent perspective about distance education in liberal arts colleges:

We have a very small endowment at this institution, which means that we continue to [maintain] the viability of this institution based on tuition. And so for Lake College’s that was why we got into distance education in the first place back in 1976, was because the college was having difficulty generating the revenue that it needed to support itself. Talk to any institution that delivers distance education and they’ll tell you distance education is a cash cow for the institution. It generates substantial revenue with return for the parent institution. And that is true at every institution I’ve talked to. (March 8, 2007, interview)

The initiative to develop correspondence courses was very successful in generating revenue and enrollments. But the institution was struggling to use its existing system to process and manage the new student population.

The students who were participating in distance education in the 1970s were professionals seeking to complete health-care related credentials. They typically brought a variety of educational backgrounds with them, which resulted in challenges in evaluating transfer and experiential credit. The institution decided to provide registration, admissions, and other administrative support through the division itself. As a result, the administrative functions started to evolve within the division to directly handle all

administrative functions independent of the institutions central organization. Bonnie commented about then and now:

[Then] My job at the time [1989] was to oversee the student support or operations procedures, day-to-day support of students. I started overseeing the academic advising area, and back then we had academic advisors for all of our distance students...with these degree completion programs a lot of students were coming in with a lot of credits in transfer. So instead of working with registrar they would send transcripts to our center. We had people trained to evaluate credits specifically. (February 22, 2007, telephone interview)

[Now] Our division is very separate from the on-campus traditional program. We have some traditional students who will take a few courses with us, usually juniors and seniors who might need a course along the way or looking to graduate a semester early. The online and on-campus programs are like two parallels going along doing their own thing. (February 22, 2007, telephone interview)

This separation, or independence, from the primary campus provided a great deal of autonomy. It also has led to a stronger concentration of internal power within the division that is more bureaucratic than collegial in nature.

The faculty members of the Division of Graduate and Professional Studies are also separate from the faculty members of the traditional courses on campus, with very little cross-over. Emma provided an anecdote that helps explain why the crossover between main campus faculty members and online education faculty members is almost nil:

There is not much spillover to traditional. I'll tell you what happened. When I started there the faculty there had to approve each of the courses. Then we had a new academic vice president come in. Many of the traditional faculty members were complaining about teaching too many courses with too much prep. So he said he'd reduce the course load. We actually paid faculty to write the courses. Let's say their course load was 6 or 7, he reduced teaching loads to 5 or 6. Then they came over and said they could teach another course for us [continuing education]. Many had been offering to teach extra courses for extra pay. He said, "they can't do that." (March 8, 2007, interview)

As a result, full-time faculty members on campus do not teach in the Graduate and Professional Studies division. The program directors have taught in the past, but typically function more in administrative roles today.

The evolution of a quasi-independent division that operated independently of the mainstream campus is an important element in the development of online education at Lake College. This structure led to the next important category in this study, existing infrastructure.

Existing infrastructure. The participants of this case study are unified in their perspective that a key, if not *the* key, ingredient for their success was the infrastructure of the division of continuing education. Rupert confirms, “We had the advantage of going the other way around. We had the system. We had the infrastructure, the support system, and added the technology to it” (March 8, 2007, interview). This infrastructure included more than just a dean and program directors. It included administrative services and full-time academic advisors for the students in the division.

Daniel is perhaps most succinct in his observations about the significance of the infrastructure that the continuing education division had built to the success of its online initiative:

The key reasons that I think we have been successful in online education include:

- We already had a national program in place. We did not have to build from scratch.
- We already had a strong student support piece in place.
- We already had an academic support team to help students succeed.

(Daniel, February 1, 2007, telephone interview)

Daniel reiterated that the Division’s 20 years of experience in distance education prior to the introduction of online education made a dramatic difference—one that gave the

institution an advantage over many other colleges:

We had all of the infrastructure in place. So we had a pool of adjunct faculty that could be called in to teach online courses. We had our own admissions department that could handle recruitment and the initial enrollment of students. We had our student support team, and our academic advisors. (March 8, 2007, interview)

The academic advisors are a particular strength of the Division. Because the faculty for distance education consists primarily of adjunct instructors, the Division decided to separate the responsibility for teaching from the responsibility for advising. Faculty members are responsible for teaching and grading work, but do not have advising responsibilities. The adjunct faculty, however, do not have advising responsibilities. In order to handle this aspect of teaching, the Division hired full-time academic advisors. Emma, who now works at a major university outside of the state, lauds the system as “unique” and powerful. She observed:

Lake College has quite a unique academic advising system that personalizes that education more than most other places I know of. It is proactive. They regularly call their students. IT [information technology] comes up in a queuing system. They will call students on a regular basis. They track all student enrollments for years.... They were doing it back in 1993. There is a personal touch there that helps make it more successful. (February 26, 2007, telephone interview)

Much of the strength of this system comes in the consistency of communication available to the student, who may never meet any of their instructors face-to-face.

The frequent contact of academic advisors with the students often means that the students build stronger bonds with the academic advisor than they do with individual faculty members. The advisors are local and must have a bachelor’s degree. They tend to stay with the institution. Rupert observed,

They stick with the student all through the program. They don’t leave either. They are all local folks who must have bachelor’s degree. They carry up to 900 students at a time. They are there if a student has any questions. They will react

proactively. They will call the student and see how they're doing if they haven't been active in the class. If a student is having a problem with an instructor the student will usually go to academic advisor (student advocate). About the only turnover among the academic advisors is where they've been promoted. I've seen situations where a student will have something very good or bad going on and the first person they contact is their student advisor. (February 21, 2007, telephone interview)

Communication, concern, consistency, and longevity provided the stability that many students need as they work through years, and sometimes decades, of study to reach graduation. At Lake College this existing infrastructure was a critical component of the online education initiative. Another key category that I was able to isolate in the open coding was a climate of cooperation, enthusiasm, and support that existed within the division of continuing education.

Climate. Personnel in the continuing education division had evolved into a close team in the mid-1990s. The full-time, onsite personnel were few in number and had limited office space, operating out of a portable building. Rupert remembers:

I think being in close proximity [enhanced interaction]. A lot of folks are calling it a family. We were a small enough group we talked to each other, we bounced ideas off each other, and we generally got along with each other very well. The closeness being not only in the trailer but away from the maddening crowd helped some too. We weren't distracted by too many other things. We were doing our thing. (March 8, 2007, interview)

Emma concurred with Ron's recollections as she reflected on the period just before the online initiative was undertaken, "It was something we talked about a great deal at lunch. There were five of us housed out in a trailer. We would talk about, we need to do something different, what will it be?" She then added, "I think that in terms of the survival of Lake College they had to have the distance education and we knew we had to go to something other than correspondence courses" (February 26, 2007, telephone interview).

Based on the reflections of the participants, the climate was ripe for change.

Emma talked about everything coming together, tied to climate, “If you put the fact that the Sloan [foundation] had some money, UBC a product we could afford to use, and we had people willing to see if we can do it. That *let’s try it attitude*” (February 26, 2007, interview). That “let’s try it attitude” is reflected by several of the participants both in their own actions and in their observations about the adoption of online education from inception to the present:

We have some faculty who given a little rope are pushing us. Example, one faculty member saying why can’t I do this, why can’t I do that? This is a good thing and a good phase. (Ron, March 8, 2007, interview)

We had a man there who knew html and Red Hat who could program the computer. So we all learned html and put our courses up on the web. It was very primitive and it was a lot of fun. We had a lot of glitches along the way, and we learned a tremendous amount. (Emma, February 26, 2007, interview)

One of the faculty members got so excited about it, who had never used a computer before, that he had the students do the exam in the chat room. People did get excited. (Emma, February 26, 2007, interview)

I love the future. I think that what I’m looking forward to is being able to implement a student data base that will allow us to offer students a portal that they can use to access a lot more of their personal course and program information from their home computer... I see that as exciting and want to be part of that implementation. (Bonnie, March 8, 2007, interview)

I almost retired a year ago but I still find it fun. Learning we can do things we didn’t think we could do has been exciting. Now rather than me pushing [adjunct faculty] they are dragging me along. (Ron, March 8, 2007, interview)

Proximity, communication, sense of family, a can-do attitude, and delight in learning were all part of the climate of the continuing education division. This sense of excitement was in place at the initiation of online education and remains in place today. Combined with the division and the infrastructure, these three categories or elements of the institution provided a fertile environment for innovation.

Innovation. By the mid 1990s the program managers and leaders of the continuing education division, now the Division of Graduate and Professional Studies, realized that they needed to make a change. From a perspective of viability, and even survival, they knew they needed to move on to online education. Rupert observed:

We would have liked to have gotten into it 3 or 4 years earlier. Lack of funding and the ability to generate the resources (money and people and time) to put it all together slowed us down. If we had gone to administration [directly], I don't think they would have bought it or been able to give us the money to get it going. (February 21, 2007, telephone interview)

The question of when to make the change was clear—yesterday. The questions of what technology to use, and how to pay for that technology made the conversion problematic.

The need to move to some type of technology-based distance education was being explored, but with limited success. Emma noted:

We knew and had known for some time that the correspondence had to go to another level. There were some other types of [distance education] being done, example live television. That was too expensive for an institution like Lake College, so we had to look at other ways to move correspondence courses to some other level. As the web grew, the direction it was going matched with what we knew we had to do. (February 26, 2007, telephone interview)

Knowing what direction to take helped, but the institution still needed a catalyst of some sort to make a transition.

Participants interviewed at Lake College gave most of the credit to Emma, who is no longer at the institution. They describe her as being the innovator and the moving force that enabled the division to move into online education. However, Emma tells another story:

Jane is a super creative person. When she came, I was the only full-time faculty member, and she asked me if I'd be associate dean. I'm not a super creative person. She was the one who could see all the pieces you could pull together here. I'm more the operational person. If you give me the idea I'll tell you how we can do it. (February 26, 2007, telephone interview)

Emma had knowledge about the division and credibility within the division. She could see the need to make the transition. She was an enthusiastic early adopter who used her people skills and her knowledge of the institution to drive the vehicle to its destination. But the individual catalyst for starting the engine was Jane, a dean for the division of continuing education at Lake College.

Jane not only turned on the engine, she also knew where to get the gas for the engine. Emma continued:

We taught exclusively correspondence until...another 4 years. Let's see... up til 1997. Jane came in as the dean and she came from a major university and had done a lot of grant work there. So we knew the Sloan Foundation was providing some funding. So we applied for a small grant which we received. We put I think, eight courses online with that \$30,000. (February 26, 2007, telephone interview)

At this point several things came together; the existing infrastructure and support systems were in place and the management structure was organized to support such a change.

Jane brought the spark and gasoline.

Innovators by their very nature are not always beloved or respected. The situation was no different in this case. Daniel and Rupert lend their perspective on Jane and her role in the transition:

Jane was certainly very dynamic. She was a powerhouse. She came in and had a lot of ideas about how to bring the division forward. You'll see when you talk to her. She goes about 100 miles an hour all the time. She's a force. She's just a very strong personality, very powerful personality. And I think you needed somebody like that, I mean she had vision and she is forward thinking. (Daniel, March 8, 2007, interview)

Jane was the Dean of GPS before Emma actually became dean. Emma was a faculty member at the time. Jane was here for several years. We branched off in a number of new directions, many of which didn't pan out, and it was all Jane. (Ron, March 8, 2007, interview)

Jane certainly was acknowledged as an innovator by all participants who discussed her. The range of emotion was from neutral to hostile. Yet, without her innovative spirit it seems unlikely that the institution would have made the move to online education when it did. With the innovation underway, the other critical category that I found in the open coding was bridges and coordination.

Bridges and coordination. While there was some initial confusion in determining who the innovators were for moving Lake College toward online education, there is no confusion about who the coordinators were. Emma, Ron, and Daniel, all were important early adopters. Emma was the front person. She wrote the grants, led the division, and ran interference with college administration. Rupert was well respected in the institution, knew the transition had to occur, and wrote the first online course for the institution. Daniel built bridges between the computer department and faculty and developed the vision of what online education is at Lake College today.

The leadership of Emma is lauded by those still at the institution. Daniel described the significance of Emma as follows:

Emma was always very humble too. Emma was always one to give away credit wherever possible and never take full credit for the things that are hers. There was no question that the success of the Sloan grant and the success of online learning at Lake College rest very largely on her shoulders. It was really Emma's leadership and Emma's involvement in this project that allowed it to happen.
(March 8, 2007, interview)

Ron reaffirmed the significance of Emma calling her the "spark plug for the Sloan grant." Emma referred to herself as not creative, but as a person who could run with an idea once it was given to her. She clearly demonstrated this in writing grants, building a program, and defending it with superiors.

Ron is very self-effacing, referring to himself as the old man, and downplaying his role in the development on online education at the institution. Nevertheless, he was the faculty member who worked to get the first course up, and shares the following story:

I can't take any credit for that at all. But being where we were, Daniel, that I believe you talked with, was across the hall from me, and in the trailer across the hall is just slide the chair back a couple of feet and yell at each other. He was doing the course development. I was just very enthusiastic that we start doing something online because I think we all could see it coming and we knew it was going to come. I pestered Daniel to the point where he pestered me and turned around and said okay, let's you develop the first course. So with him we basically did. (March 8, 2007, interview)

Ron has continued to support the development on online education throughout its development. He discussed ways they've developed and improved the courses. Perhaps most reflective of his support is his statement, "I almost retired a year ago, but I still find it fun. Learning we can do things we didn't think we could do has been exciting" (February 21, 2007, telephone interview).

I address Daniel last in this section because his role as a coordinator and bridge builder has been so strong. Emma, who supervised Daniel, referred to him as "the one whose vision has taken it [online education] a long way... the furthest" (February 26, 2007, telephone interview). The foundation for this strength came from an early move by Emma to make Daniel's position an academic, rather than a technical staff position:

They [Information systems department] wanted to take this position so that I would be reporting to IS [Information systems department]. Emma and I thought it was more of an academic function and so it should reside under the supervision of the dean of the position, which is ultimately what happened. This was a big issue at the time. (February 1, 2007, telephone interview)

Daniel had the responsibility to "work with faculty to take print-based materials to convert to an online environment" (February 1, 2007, telephone interview). He was also

responsible to do all faculty training and provide all student support. He had to teach the teachers “how to teach effectively in the online environment.” Keeping Daniel in academics enhanced his credibility with faculty members.

Daniel shared the following story about the bridge building he performed in the early stages of the online education development at Lake College:

When I was first brought into my initial role as project manager for this grant, I would call faculty and their first assumption was that I was with the IT group. And I would say, I'd like to work with you to move your course online and their initial response was, 'I don't really want to talk because you're one of those IT folks and you're going to talk down to me. You don't get it.' And for most of those people, being able to say, I'm not in the IT group, I actually was hired into this position because I have teaching experience just like you. I understand what it's like to be in the classroom and I can help you take the work you do in your classroom. In other words this position is an academic function; it's not an IT function. And that did more to change the minds of faculty because... it wasn't the IT/faculty relationship that tends to be a little frustrating for a lot of faculty. It was the colleague to colleague relationship where it's one instructor talking to another instructor about different ways of helping students learn. And that really helped me get a core group of initial faculty that were interested in seeing what they could do with technology to take the work they were doing and deliver it in new ways. (March 8, 2007, interview)

As Daniel took on more responsibilities and gained more authority, he was not averse to recruiting faculty members who were both interested in developing online courses and well respected in their academic community. He enthusiastically communicated his vision of taking online education to a higher level at Lake College, and he didn't hesitate to act on that vision.

The bridge builders at Lake College were not limited to these three individuals. In particular, the division intentionally and successfully recruited opinion leaders to develop early courses. Without the bridge builders the program may have failed and would certainly not have the strength that it does today.

Summary

Administration organized the continuing education division in the 1970s to help generate revenues for the institution. This led to the decision to develop a paper-based continuing education program. This also led to a strong foundation for work with adult learners. By the time the institution was considering a move to online education, it had 20 years of experience working with students at a distance.

The continuing education division had a strong management culture that delegated teaching and grading to adjunct faculty members while assigning advising responsibilities to a staff of full-time professionals. The hierarchal nature of the Division of Graduate and Professional Studies meant that when the key members of the Division recognized the need to change, they were able to mandate changes with the faculty group.

The program at Lake College has evolved from a handful of online courses added to the mix of paper-based courses offered by the Division, to a merging of the two separate course development groups (paper-based and online-based) under the authority of the online developer, and (finally) to the total elimination of paper-based courses in 2007. The transition from a paper-based course format to a simple, online-based course format has been relatively easy.

The infrastructure itself provided a ready-made platform of support for the transition to online education. Within the infrastructure academic advising is handled by full-time local personnel. These individuals have a strong retention rate and are the individuals with the strongest bonds to individual students. This strategy by the division has provided the type of continuity and support that is difficult to create when an institution

first tries to develop online courses. Student focus has been a self-proclaimed strength of the institution.

Although the Division was aware of the need to develop more technology in its programs, and although it had an infrastructure that was suited to making this change, it had neither an innovator who could get the project off the ground nor the requisite funds needed to make the transition until Jane (the innovator) came to the institution. She advocated for the change and found the sources of funding. Grants played a critical role in the development of online education at Lake College.

The innovator in this case was transient; she left the program before it got seriously on its feet. A parallel might be drawn to the very first distance education program at a college in the United States, discussed in Chapter II, where Samuel Fallows was the innovator of correspondence-based programs at Illinois Wesleyan College. He departed not long after starting up the program. The program was successful, but it nonetheless died without his support several years later. In this case, the program has grown and is thriving. This appears to be directly connected to the presence of the bridge builders. The bridge builders at Lake College developed their own vision of where the institution should take online education. The process continues to be dynamic. Participants, 10 years later, are still 'having fun.'

The division still operates independently of the main campus. This has limited the potential synergy that could be drawn into the institution if there were more collaboration between the Graduate and Professional Studies division and the main campus. Nevertheless, the institution and the division are both operating successfully today.

Redbud University

Redbud University is located in the New England States. It was founded in the 1960s. It enrolls approximately 5,000 students offering a number undergraduate and graduate degree programs. The university has an overseas presence and is a highly ranked institution for the quality of its master's degree programs. I was able to interview the innovator of online education at the institution (Ian), who is now the Dean of the Business College. I also interviewed the Dean of University College (Miranda), the Director of Instructional Technology (Elijah), the University Librarian (Hugo), and a digital learning support technician (Bill).

The university was founded in the mid-1960s by an area Catholic bishop during the Vatican II initiative. It boasts of its strategic foundation in being led and staffed by laity, independent of direct church administration. The intent of the founding bishop was to provide a locally oriented institution to serve the needs of the region. It currently offers over 50 degree programs, ranging from the associate's degree to doctoral degrees in various disciplines.

Although the institution is proud of its lay authority, the university does not ignore its Catholic roots. It operates centers that promote religious thought, and it "spearheads" conferences and publications related to its ecclesiastically-rooted mission. It assertively promotes community service and provides training for men and women for "pastoral and catechetical work and other Church ministries" (University website).

The area surrounding the college feels suburban and affluent. It is the type of area where it would not be surprising to find a newer community college. It is near a major thoroughfare with easy access to major, nearby cities. The close proximity of

neighborhoods and expensive real estate has resulted in a somewhat compact campus design on less than 100 acres. In its strategic plans for the past 10 years the college has acknowledged concerns with classroom, housing, and parking problems. The institution has also taken a strategy of no deferred maintenance. This strategy is apparent on campus, as buildings are in good repair and have good curb appeal.

The university is highly ranked in the region and nationwide, as a master's degree-level institution. It has grown consistently through its relatively short history. It is also highly regarded as a wireless campus in the U.S. Full-time undergraduate students and full-time faculty members receive a new laptop computer every 2 years.

The university has four colleges: Arts and Sciences, Business, Education and Health Professions, and a University College. The Arts and Sciences College is twice as large as either the Colleges of Business or Education and Health Professions. The University College, which was established to support part-time and adult learners, has no faculty of its own, drawing instructors from the other three colleges.

Within the confines of the space available, the institution continues to grow. It has recently constructed a multi-story, multi-purpose building to house the College of Business, and plans are underway to build a new library.

Over three quarters of the full-time faculty members have the highest degree available in their field. The campus faculty includes nearly 200 full-time faculty members and 300 adjunct faculty members.

The community was founded in the 17th century. It was a hotbed for insurrection and defiance during the Revolutionary War; it was burned to the ground by an invading British force during the war. It has grown steadily since the early 20th century, from a

population of less than 10,000 to over 50,000 people today. The city is headquarters for a major global corporation. The city has also been ranked as one of the best places to live in the United States because of its affluence, low crime rates, excellent school systems, and access to major cities in the Northeast.

The university's focus on technology, its space limitations, and its efforts to encourage continuing adult education created a springboard for innovators at the institution to move forward with the development of online education. The strategic plans for 1998-2003 and 2003-2008 indicate that the institution wanted to continue to grow aggressively, but that it was faced with problems associated with building and parking restrictions. The stage was set for the spark of innovation that would be necessary to move the campus into online education.

Online Education at Redbud University

Redbud University is ranked as one of the top 20 wireless campuses in the United States. It has invested heavily in IT infrastructure and its administrators are strong advocates of technology in the institution's programs. As indicated earlier, every full-time student and full-time faculty member is issued a new laptop computer every 2 years. The 2003-2008 strategic plan states that, "At Redbud University, education will take place within an environment in which the use of technology is an integral part in the living and learning of students." This approach to higher education appears to be firmly rooted in the university's culture today.

Online courses are also well established on the campus. Approximately 80% of current full-time students have taken at least one online course. Miranda noted that online course offerings have grown 1,800% since 1997-1998 when the institution offered 129

credit hours in online instruction. The university offers between 60 and 80 online courses every semester. Miranda indicated that online courses in the summer are popular with residential full-time students:

We started offering two sessions over the summer of online courses. The students who go home for the summer, who were taking summer courses at local institutions are now taking the courses online. As soon as some of those courses go up on the system, they are already filled with students. Students just clamor for them. They just really like the opportunity of taking a course over the summer at home. (March 7, 2007, interview)

During the fall and winter semesters demand is also high, but the university has put limitations on the number of online courses students can take. Miranda explains, “We were afraid they would end up sitting in their dorm rooms and never venture out into a classroom, and lose that whole college experience” (March 7, 2007, interview). Some exceptions are made in the interest of the students and the university; for example, online courses are sometimes provided for student-athletes who travel extensively during a given semester.

Although the demand for online courses exceeds the university’s willingness to offer those courses, the institution has not yet developed any wholly online degree programs. It does offer some degree completion programs, but stand-alone programs are still seen as something for the distant future. Part of this is tied to the way online education evolved at the institution. The institution encouraged faculty-driven development of online education with limited administrative oversight. Hugo discussed the outcome of that system of development at the institution.

What was happening was in 2003, the regional accrediting agency came through town, [performing an] accreditation review of the university. One of its criticisms of the university was they felt, wait I have the exact wording (pause to find document). “We needed to better provide effective administrative oversight of

distance education programs.” The curricular aspect is not too much of an issue for them. The content of the course and that sort of thing, even perhaps the delivery were okay. We have a very robust blackboard environment here, and the faculty seems to know how to use it, although there is always room for the development of the faculty. They suggested inadequate administrative oversight. (March 7, 2007, interview)

This lack of administrative oversight resulted in a system in which some faculty members were involved extensively while others did not even know they could participate in online course delivery. The quality of the courses was inconsistent, ranging from courses that employed only simple e-mail exchanges to courses with extensive multimedia components. In 2003 Hugo volunteered to oversee instructional technology, and he ultimately offered administrative oversight. In 2005, after two searches, he hired Elijah as the Director of Instructional Technology.

The department of instructional technology now includes three people. Elijah leads the effort. He is supported by two part-time support staff members. Bill, who works in the department, described the department as follows:

It’s small. I believe it’s in its second year. The director was hired last year, [working] by himself. This last year he hired myself and another person. There are three of us in the office of instructional technology. From what I’ve heard it’s come a long way. I’m on the technological end, and the other support technician is on the educational end. So when we get together and mix, we can provide nice support in the education field. She is also an instructor at another institution so she brings higher learning to the table. (March 7, 2007, interview)

The department focused first on instructional technology for all courses, followed by online education efforts. Online education offerings are extensive at the university, but the institution has not expanded to offer fully online education programs. The move to programs that are fully online has been hampered by the administrative oversight problems of the past.

Participants in the Case Study

Ian is the self-proclaimed innovator of online education at Redbud University. Prior to coming to the university he spent 14 years at another university. He spoke glowingly of the entrepreneurial nature of that University in distance education efforts while he was at that institution. He shared an example of the type of work he was involved in there:

One of the programs that we had was a program designed to integrate technology in the classrooms, for K-12 public systems. That had started some years before I got there actually, when Apple computer was trying to get into all public schools. They funded teacher training centers. And we ran three centers for them. Through that, we had this program that we moved into a number of states. So I was around technology and education for a long time. I sort of watched the computer industry grow up around that. (March 7, 2007, interview)

The entrepreneurial nature of the institution where Ian previously worked seems to have inspired Ian to try something new. He stated, “I had done about what I was going to do at [the former university] and I was young enough that I thought that I needed another adventure. So, we packed up the family and decided I would take another job someplace” (March 7, 2007, interview). Family constraints came into play, and despite other offers from other major universities, he chose to come to Redbud University as the dean of University College 10 years ago. He was actively involved in the strategic planning process for the institution in both 1997 and 2002. He now serves as the Dean of the College of Business at Redbud University.

Miranda referred to herself as “one of the old timers.” She has been at Redbud University as an employee since 1982. She arrived with an associate’s degree in gerontology. She worked for the registrar as a data-entry clerk for a number of years. She

shares the following story about technology at the institution while she was working as a data-entry clerk:

At that time we had one mainframe Burroughs computer, not these little computers on everybody's desk. So we did everything from imprinting the courses into the system, running labels, reports, doing all the registrations, everything. Out of that one office the Registrar and I did all the work on the computers. I don't even know how we did it all by ourselves but we did it. (March 7, 2007, interview)

Meanwhile she continued her education, earning her bachelor's degree in business, and continuing on to graduate studies over the years. She left the institution briefly, after she earned her bachelor's degree, but was offered the assistant registrar position just a few months later. She has progressed internally through the institutional hierarchy. She worked as an admissions coordinator, director of admissions, interim dean, and now serves as the Dean of University College.

Hugo is the University Librarian at Redbud University. He has been with the institution for 5 years. He is an organizer and planner. He has been involved in the construction of three new library facilities prior to coming to this institution, and he is preparing for construction of a new library at Redbud University. He was initially invited to visit the campus to provide some consulting advice regarding the possibilities of a new library building. Several months later he saw the advertisement for a University Librarian at Redbud University and thought, "that was quite a nice place, maybe I'll apply" (March 7, 2007, interview). Not long after he was offered the position to direct the library he developed a 10-year plan for the development of the university library. In the long-term he wanted the library to include all learning resources and instructional technology, but he was provided with one opportunity sooner than he had expected:

When we began the discussion of bringing back a Director of Instructional Technology, the vice president of academic affairs was reluctant to take on the

responsibility of having it directed toward him. So I leaned back in my chair and said, “I’ll take it.” I was really too early in my progress at the library to take on anything more within the bounds of the 10-year plan. But I couldn’t pass up the opportunity as I thought it would pass this way but once, and I needed to take it. That was in 2003. (March 7, 2007, interview)

He moved forward, quickly opening a search for a Director of Instructional Technology in 2004. Hugo understands the concepts of collegiality and loosely coupled systems, but he assertively works to get things done. In this sense he seems more comfortable in the managerial culture than the collegial culture.

Elijah is the Director of Instructional Technology at Redbud University. He has been at the institution for 2 years and is just starting to see the results of his efforts. He works under the supervision of Hugo. Elijah was trained as a biologist. His doctorate is in microbiology. He went into teaching after finishing his Ph.D. and was attracted to technology both for himself and his students. Once he got involved, this moved from avocation to career focus. Redbud University is the third institution at which he has had the responsibility for instructional technology. Why Redbud University? He indicated: “The institution offered the best mix. The campus was ready to try some new things. I didn’t want a position where I was just going to be maintaining. I think that developing something new is where I excel” (February 16, 2007, telephone interview). He indicated that when he came on board the provost asked him to take a look at what they were doing with online learning and try to improve it. He has taken the role of building bridges seriously, as he has created a vision for both student and faculty support.

Bill is a digital learning support technician. He has been with Redbud University for one year. He was hired by Elijah, and works directly under Elijah. He earned his bachelor’s degree in communications and fell in love with the notion of bringing audio

and video editing to the web. He moved on to an electronic media graduate degree program in another area university. During that time his course of study “focused on web design, web structure, writing for web and copyright issues... all pertaining to websites” (March 7, 2007, interview). Although the projects in his program led to a growing personal professional practice, he wanted to work in the education field. He felt the opportunity at Redbud University was a good match. When asked if he was considering going on to earn his Ph.D. he was hesitant, indicating that he was getting better training under the tutelage of Elijah.

Emergent Themes at Redbud University

At Redbud University I conducted a preliminary telephone interview with Elijah that lasted approximately 20 minutes. I transcribed this interview while I was conducting the interview. I later sent a transcript to Elijah to check for accuracy. I actually interviewed six individuals on campus at Redbud University, however one of the interviewees, although informative, did not provide insights into online education at the institution and was therefore omitted from the study. I interviewed four of the five individuals in their own offices. I interviewed Bill in a conference room, which is also where he works. All interviews on site were face-to-face, and recorded. I sent transcripts of the interviews to each of the participants to check for accuracy.

In order to identify the themes at Redbud University, I studied the transcripts of each interview. I also reflected on the site visit and documents provided by the institution. Using an open coding methodology, I developed five themes relevant to the progress and success of online education at Redbud University. These categories included: (a) planning, (b) innovation, (c) collaboration, (d) chaos, and (e) bridge building.

Planning. Founded in the 1960s, Redbud University was originally a commuter campus that was trying to bring higher education opportunities to students in the area. It did not develop a residential program until 1990 (University website). As a relatively young institution it has positioned itself as innovative. In its own words, “We believe in making groundbreaking choices and achieving impressive results” (University website).

The 1994-1999 strategic plan included several goals that provided a foundation for the development of online education at the institution. Three of these goals are:

- Develop new academic programs and enhance existing academic programs at the undergraduate and graduate levels that by their distinctiveness and quality will contribute to the strategic positioning of the University.
- Strengthen the position of the University to respond to the current and emerging needs of adult learners.
- Utilize emerging technology in the fulfillment of the mission of the University.

Although not clearly referencing online education per se, these goals identify emerging technologies and adult learners as important aspects of the institution’s future.

The 1998-2003 strategic plan identified the “use of instructional technology to assist in learning” as part of the University’s emerging future. This plan repeatedly communicates the importance of fostering an environment “of creative and innovative academic program initiatives.” It is at this point that the institution established an objective to “determine the strategic role of distance learning and develop and implement a plan as appropriate.” These objectives are tied directly to the institutions goal of enhancing academic programs and being responsive to the changing environment to support the strategic positioning of the institution.

In the 1998-2003 strategic plan, the institution also sought to maintain its computer infrastructure at a high level and to support increased use of instructional technology in the classroom, including but not limited to distance learning processes. These objectives were to support a goal of strengthening the “university’s capacity to lead in the application of information systems for academic, administrative and student use.”

Based on a review of these and other documents, the primary motivations for the institution to develop online education were three-fold. First, the institution wanted to build a strong reputation with external markets in the area of technology. Second, it wanted to enhance pedagogy at the institution through instructional technology. Finally, it wanted to increase enrollments. The technology infrastructure of technology was in place. What remained at this juncture was the spark of an innovator to put the process in motion.

On the other hand, lack of planning also played a critical role at the institution in the actual development of online education at the institution. This is discussed in detail in the later section on chaos.

Innovation. Since the initiation of online education at Redbud University some of the history of online education has been lost in transitions. This loss was obvious in some of the interviews with participants who had come to the institution only recently. However, in interviewing all the participants the story of innovation comes together. Ian played a critical role in developing online education at the institution.

In 1997 Ian came to Redbud University as the “founding dean for University College” (Ian, March 7, 2007, interview). In this capacity he was responsible for all continuing education programs, adult learning programs, and all satellite campuses the

university administered. He was informed that part of his responsibility was to manage “experiments in education.” This is what he felt was the authorization to explore online learning.

Ian had been actively involved in the development of distance learning and technology prior to coming to Redbud University. He stated, “One of the last things I did at [former employer] was develop a proposal, actually a feasibility study, as to whether or not we should do online education” (March 7, 2007, interview). He came to Redbud University knowing that online learning presented obvious advantages to the former institution where he had been employed, and he knew what potential there was for the development of online learning at Redbud. Miranda, who was at the institution when Ian arrived, observed,

In the beginning [online education] was very scattered. We’d offer a course here and there. At the time our dean, was Ian, who is now the dean of the Business College. He really took a personal interest in this. He did faculty workshops. He had a group of faculty who worked hand-in-hand in designing their own courses and getting them up online. (March 7, 2007, interview)

Elijah and Hugo came to the institution much later and are unclear on the origins of the program they currently manage. Hugo observed the following:

My guess is it would have been a combination of interests that made online learning, even the first online course possible. We had an academic support system, like Blackboard that has since gone out of business. They brought that in with the intention of hybridizing some courses I suppose. Then the dean of University College, Ian, now the dean of the college of business was very much in favor of online learning and still is obviously. I suspect there were some members of the faculty who saw this as either an opportunity or prospect of a different paradigm of instruction and wanted to try it. That might be the way it went. (Hugo, March 7, 2007, interview)

And, Elijah’s interpretation of the genesis of the program was:

The initial conception of online learning here was really geared to try to make an opportunity to open up a market we hadn't been tapping into. We saw other schools go into online learning and get some students in the door. So they thought they would try it here. So it really started as a small pilot. Eventually it became a marketing tool for our University College division for our part-time and adult learning population. They were basically given some budget to work with to spur interest in the development of online courses. (March 7, 2007, interview)

Although others may be unclear on whom the innovator of the program was, Ian is very clear. He believes he was the innovator:

It was all me. I think that the vice president of academic affairs, when I told him that I was going to do this and what it was, when he saw the growth in it, and we did put up a lot of courses pretty quickly, and they kept getting better and better and more people were interested, and when he saw, he and the president saw, the external interest in the fact that we were doing online and what did that mean, etc. they supported it. (March 7, 2007, interview)

Ian's reflections on the process of the start up of online education at Redbud University support his belief that he was the innovator of online education at the institution.

The zeal that Ian brought to developing online education at Redbud University was important. The institution provided very little budget for development; it was, after all an experiment. Through the University College a budget line was provided to faculty members who developed an online course and some additional stipends for faculty members to teach a course. Other direct funding was absent. Ian realized that some indirect support was available. He took advantage of the strong technology infrastructure on the campus. The IT department was willing to lend support as needed. It also provided the servers necessary to start up the online courses. The library was very supportive in providing help-desk support and other library resources. Still the direct funding was very limited. Ian shares the story of visiting [a major] University to see its initiative in online education:

You probably remember that [a major] University had this giant subsidiary that was not only using their faculty to produce courses that were multi-media [but also had tremendous financial resources]... Through a mutual contact, they had myself and some other people from the university go down and see what they were doing and all their people and how they used the multi-media, and their production studios, and all this other stuff. So we did a show and tell. They showed us how they used their internationally famous faculty to teach history to anyone who wanted to pay online. It was quite well developed. I then got access for them to our online courses, and showed them what I was doing. What we were doing. And literally the director of that company, that is now defunct. They had millions in this thing. They had more production people than we have faculty to give you an idea. Anyway, he asked me, 'How many courses do you offer online?' And I told him. And he asked me what my budget was, and I told him. He actually said to me, 'don't say that in front of my boss'. Literally we did start it that inexpensively. We had to. (March 7, 2007, interview)

Ian credits Redbud University's successful delivery of numerous courses to the sense of community he was able to create through workshops and forums on campus.

The results of Ian's efforts were quantitatively substantial. The institution quickly moved from no online courses to numerous online courses being offered to students. The vision he shared with faculty to motivate them was one of collaborative learning which is the next theme that I identified in the open coding.

Collaboration. In Ian's vision of online education it was never about the technology. His views on the role of technology in education are very clear, "In an online course the software shouldn't be the star; it's like a referee in a game, the less visible the better" (March 7, 2007, interview). The focus of his vision was tied to collaboration on adult learning and research. He started by promoting a once-a-month forum to bring interested faculty members together to discuss issues related to adult learning.

Creating this community that was cross-discipline, that people met other people, that they made other contacts, that they shared and learned about teaching and about using technology in a non-threatening way, was again much more important than the technology or teaching online. Most of the stuff we talked about we

could have talked about if we weren't doing online except when we got to the technical part. (March 7, 2007, interview)

In this group he found the faculty core for exploring and developing online courses. He used a snowball approach to expand his proselyting effort:

It was really like recruiting for church. Congregations grow because a minister finds a right family, then the minister finds the next right family, and then the family finds the next right family, and not [being] disappointed when you only have three of them and you have this vision that its going to get bigger and you let it snowball. (March 7, 2007, interview)

He identifies three strategies he used to successfully expand his non-threatening approach to developing online education at Redbud University:

1. It was never about technology, but about pedagogy and learning.
2. He worked hard to create a community.
3. He recruited 'poster children'.

Ian's poster-children strategy involved finding unlikely candidates to adopt online learning. Rather than early adopters, he recruited "cultural icons." He shares the story of recruiting a history teacher who had been at the university for years. He stated that she looked like a stereotypical librarian. In the process of teaching online, she developed ideas that "made her a better teacher" in her face-to-face courses as well, because she started taking her online simulations to her other classes (March 7, 2007, interview).

The concept of online education as expressed by Ian focused heavily on creating a collaborative group of faculty to develop courses, not programs. Miranda reiterated Ian's philosophy regarding faculty involvement and collaboration:

I think having faculty in on the ground level of offering these kinds of things makes a big difference. You could have experts, you could have administration, you could have everyone say this is the way to go, but until faculty members get in there and say, "I like this, it's working for me" and sharing that with other faculty members it's never going to take off. You've got to have that faculty buy in. (March 7, 2007, interview)

This sense of faculty collaboration is critical to understanding online course development at Redbud University. Hugo also observed:

I think for a long time faculty had to rely on each other. The ones who were really good at it helped the ones who weren't necessarily real good at it. But the ones who are really good at it are still teaching four courses a semester with their grading assignments, and there is only so much time to spare. (March 7, 2007, interview)

The time constraint issue tied to collaboration is also important to consider when online education expanded beyond a few courses being developed collaboratively to dozens of courses involving as many as 80% of the students at the institution.

The faculty-driven nature of the project, without close administrative oversight, resulted in random development across campus. The word-of-mouth approach resulted in a mixed level of communication within the institution. Some faculty members were very active in the development of online education from the outset, but many faculty members on campus are still vague about what online education is all about a decade later. The process has resulted in a wild flower garden rather than a well-tended rose garden. This leads us directly to the next category identified in the research, chaos.

Chaos. We have observed evidence that Redbud University embraced the concepts of using technology to enhance their courses and pedagogy in the mid-1990s. Its strategic plans since the mid-1990s have included pursuit of technology to enhance pedagogy as one means of achieving university goals. However, beyond that the method for pursuing the combination of technology and learning has been ambiguous. Hugo stated, "It was a helter skelter sort of proposition. Things [just] happened" (March 7, 2007, interview). Elijah added to this thinking:

The problems we are now having are reflective of a lack of vision being laid out from the beginning. If there was a vision before, it was viewed as a tool that would allow us to branch out and increase enrollments. They forgot you have to build infrastructure and support first, or it will be flawed. (February 16, 2007, telephone interview)

Elijah provided a succinct evaluation, “On a chaos scale we have moved from a 10 to 6.

It has been frustrating but challenging” (February 16, 2007, telephone interview). In

order to bring consistency into the program and prepare the institution to move forward

with better administrative control, the department of instructional technology has focused

on two areas: student support and faculty support. Bill described the type of support

services they are now offering students but that were not offered earlier:

Well, support wise we are more out there. We created our own section on our website. We are addressing the needs of the students. We keep a log of every student who calls into us for support. We take the name and problem of every call. At the end of the semester we review the questions that have come in frequently [then] we update our website every semester. (March 7, 2007, interview)

Given the limited budget and the self-sustaining growth of the program based on personal interest and collaboration there is evidence that the definition of online courses

was quite broad. Hugo shares an example of how broad the definition of online courses

could range, “There was one case where we found that the faculty member thought she

was doing an online course by e-mail back and forth with her students” (March 7, 2007,

interview). Elijah elaborated on this, providing a similar example:

A horror story I’ll share with you, we received a couple of calls from students at the beginning of, actually last semester, in the fall. They couldn’t get into their course. They had no way to get in contact with their instructor. The reason for that is that the instructor decided they were going to conduct the online course entirely through e-mail, not using the blackboard system; not using her campus e-mail address. This was against existing policies and procedures, and obviously creating a nightmare for the students. The instructor had no way of sending any information to her students because her students weren’t on her e-mail distribution list. The complete lack of foresight into the ramifications of deciding you’re not going

to follow some guidelines and rules really spoke to the need to have those well established on this campus. So that is the course we are taking by developing a teaching handbook for online teachers to make sure they are clear on what you need to do to teach online. This would be akin to somebody being assigned to a classroom on campus and deciding instead to hold their class down the street at Starbucks on Wednesdays and Thursdays. You can't do that. (March 7, 2007, interview)

Ultimately the dean of the instructor's college directed her to post a notice to her students on the university's Blackboard platform that would at least let them know how the course was being delivered. This was wholly in line with original development process for online courses; if faculty members wanted to develop a new course, they "shot an e-mail off to somebody" and, with only limited review, they received a developmental stipend.

Chaos is not necessarily bad. Hugo observed, "I guess insofar as we are still enrolling students in the online programs and courses, yes it's a success. Some of it by accident" (March 7, 2007, interview). The reason students are still enrolling is not a mystery. The continuing demand for online courses is a combination of convenience, the provision of numerous quality courses, and enthusiastic support by the faculty members who use online learning as part of their pedagogy.

Four out of the five Redbud participants in this study indicated a desire to provide degree programs that are fully online, complete courses of study that can be taken by an individual student from college entry to graduation. The institution has been approached before by ArmyU and other groups that are interested in having the institution provide such services. In 2004, the *Strategic Plan for Online Learning* announced five goals. The number three goal on this list was "To offer a complete degree program online, in addition to the undergraduate degree completion programs and graduate degrees now being offered online, by Fall 2005." In 2007, Hugo indicated that such a move is not even on his

current agenda. Miranda, who is a continuing advocate of fully online degree programs, feels the institution needs to be more aggressive about getting their programs online.

In discussing the changes that Elijah has brought to online education, Ian (the innovator) speaks positively:

Now we have a Director of Instructional Technology. He's really brought a couple of things: he's brought a much more structured approach to online learning; and, he's brought a much more structured approach to instructional design and what the courses need to look like. He's been very good in bringing the latest in technology and practice to the faculty. (March 7, 2007, interview)

This role of bringing order from chaos ties into the final category that I discovered in the analysis of this research at Redbud University—the critical nature of the bridge builder.

Bridge builder. A missing link in the development of online education at Redbud University was the lack of someone to communicate and advocate the online initiative to all stakeholders, including: faculty, IT, and administration. In the *2004 Strategic Plan for Online Learning* at Redbud University, the planning committee completed a SWOT (strengths, weaknesses, opportunities, and threats) analysis of the online offerings. Among the strengths, the committee recognized an increased faculty acceptance of online delivery and the involvement of several faculty members in the researching online learning. The committee members also observed that faculty members in “almost every discipline” were successfully using online pedagogy. The committee also identified seven weaknesses in their online development:

1. Normal institutional resistance to change.
2. Lack of university-wide understanding of online learning/pedagogy.
3. Limited resources of time and money for course preparation in accordance with an online format.

4. Lack of formal sharing of online experiences between colleges and programs.
5. Lack of University-wide guidelines and standards.
6. Shortage of faculty for the implementation of comprehensive online programs.
7. Lack of strategic approach for integrating online learning. (May 13, 2004)

To address these weaknesses, and in order to help meet the committee's goals and objectives, their first recommendation was to hire a director of online learning. After two searches, the University hired a Director of Instructional Design, Elijah. The University Librarian, Hugo, discusses the impact that the new Director of Instructional Design has had at the institution:

I think some of the urgency that I heard 5-4-3 years ago has gone away. It's not quite as urgent now. I think some of that is the result of Elijah's efforts. He has brought a level of sanity, if you will, to the entire arena that wasn't there before. He has a lot of expertise he is willing to share with the faculty, and is more than willing to come to them. I can't say that is universal, but I have seen him do it. (March 7, 2007, interview)

The willingness to share with other faculty members reflects not only Elijah's expertise, but his willingness to communicate with others across the institution as well.

Among the efforts he used to reach the university community, Elijah developed workshops and presentations to involve more people. In the nursing program, where the institution already had strong support for online education, his team made a presentation to new nursing students "so they would know who we are and who they were talking to. Before Elijah that was not an option for students" (Bill, March 7, 2007, interview). This strategy of providing a face-to-face presence to students encouraged and enhanced the bridge between the students and the personnel who were supporting online education at the institution.

Building a bridge with the faculty has been another focus for Elijah. Bill extols the efforts of the Director as follows:

Elijah is the vision of the office. I believe he's taking steps forward where he wants to go and where he wants this office in the future. It's his ideas that we work on. He comes up with [the ideas] then he delegates the responsibilities to us. He is really the mastermind behind all the projects we're doing. I think the reason we're getting work from the faculty is because he communicates with them and says 'I've got a really good video editing person if you need video for your class, if you need audio and so forth'. He's out there calling the faculty and letting them know that there are advances in online learning that we can help them with. (March 7, 2007, interview)

This effort to communicate with the faculty has led to demand for in-service training that exceeds the budget and manpower of the office. Elijah also works to continue the cross-institution collaboration that Ian envisioned, but in a more systematic manner. The department has created a website to address student needs, and it evaluates the information gathered on the website to update services and the information provided to students. The Department also provides workshops on integrating technology into courses.

Elijah has been on the scene only a short time. Hired in 2005, he really sees his role as surfacing over the period of the last 18 months in a system that has been evolving for 10 years. The communications that he is providing between technical services, faculty and students is already paying off. The strands of communication that he is using to build bridges with the remaining faculty holdouts, the administration, and the IT department are still in the early stages of development.

Summary

Although Redbud University is a Catholic institution, it was actually organized in the 1960s, and in its very foundation has the Vatican II council philosophy of openness in its roots. The university is administered by laity rather than church officials, and as a

result has a more collegial culture than might be expected at more traditional Catholic colleges. It is not surprising that the administration at this institution does not seem directly involved in the development of online education. Administrators encouraged the development of online education through planning, but provided limited direct support.

The philosophy of the innovator had a heavy influence on how online education was envisioned and developed at Redbud University. His background at the previous university where he had worked made him very familiar with the possibilities of online education. However, he was strongly, if not equally influenced by his interest in the collaborative involvement of the faculty in adult learning. This interest in collaborative involvement provided the framework for how he proceeded to develop online education at the institution.

The innovator also admits that he was not that systematic in his approach. With a very limited budget, he proceeded mainly by advocating faculty involvement in a collaborative effort concerning adult learning; instructional technology was part of this collaborative effort but not its sole aim. He was able to gather a strong, interested cadre of faculty members who developed an interest in online education. The institution offered development funds for individual faculty members to develop courses, but it did not provide any significant, direct funding for administrative oversight.

The result of this approach allowed the university to develop a large number of online courses, but without oversight the quality of the courses was mixed. The institution now offers dozens of courses online, and a majority of students enrolled at Redbud University take at least part of their coursework online. However, with the word-of-mouth approach, the spread of online education at the institution has been somewhat

erratic, with many courses in some areas and no courses in other areas. This means that although the institution developed online courses early on, it has not been able to develop a fully online degree program. This has been a stated goal since 2004, but at this time it appears that a fully online degree program is at least 3 years away.

In 2004, the institution made the commitment to hire a Director for Instructional Technology. When he was hired, he was given the responsibility to see what he could do about bringing more consistency to online education at Redbud University. He has taken the role of coordinator or bridge builder seriously and developed a vision to improve the services for both students and faculty members. In hindsight, many of the participants observed that they needed the infrastructure that this individual is driving toward several years earlier.

Redbud University has successfully adopted an online education initiative as demonstrated by the number of courses they offer online and by the demand for those courses. However, the story of online education at Redbud University also demonstrates the shortcomings of limited, direct, strategic planning, and the absence of a strong bridge builder. This case has helped crystallize my thinking about common elements needed to develop a successful long-term online education initiative.

This chapter has provided a case-by-case analysis of the three institutions that participated in this study. Drawing on an interpretive cross-case analysis, Chapter V will discuss a model for the adoption of online education initiatives that emerged from this research.

CHAPTER V

INTERPRETATIVE CROSS ANALYSIS

This study sought a better understanding of how private Catholic colleges and universities were able to successfully develop online education within their institutions. Each of the three institutions in this study enrolls 5,000 or fewer students. They each have unique qualities and histories, and each institution has developed online education in its own manner, fitting unique institution circumstances. They each have taken their own journey, not without bumps along the way. Despite the unique nature of each institutional story, learning from the interviews how these institutions overcame those bumps helped identify important elements that were common to the institutions in their journeys to achieve successful initiatives in online education.

After coding the interviews from each of the institutions I looked at the three institutions as a group to bring meaning to the analysis. Analyzing the interview transcripts, the documents I was able to retrieve from the institutions, and the observations I was able to conduct while on each campus, I identified four common elements for successful online education at these three institutions. First, all three institutions had some form of infrastructure that could support online education and that included a varying mix of equipment, expertise, and experience in the use of technology and in support services needed for online education. At Bluff College and Redbud University, the infrastructure was a highly developed technology base that entailed wireless technology on campus and

extensive use of computers. At Lake College the infrastructure was the support system that had been developed for remote students taking correspondence courses. Second, each of the institutions had a latent force available, that I will refer to as an engine, which could provide the long-term support needed for online education to grow. At Bluff College the engine was central planning. At Lake College it was the division of continuing education. At Redbud University it was a combination of a new continuing education division and the innovator's recognition of faculty interest in collaborative learning. In all three cases the latent force, or engine, was idle until the third component of the model emerged. The third component of the model was an innovator who had a strong interest in online education, desired to implement online education, and recognized the engine as a means of driving the institution toward online education. Finally, in all three institutions the relevance of a bridge builder was identified as critical to the success of the online education initiative. In this model I am defining a bridge builder as an individual or individuals who provide credibility for the online education effort, communication, and coordination between the stakeholders in each institution. Each component of this model, illustrated in Figure 5, plays out differently at each institution, but is clearly identifiable. In the following sections of this chapter I will discuss the elements of this model in greater detail.

Figure 5. Model for successful online education initiative

Infrastructure to Support Online Education

Delivering online education without some infrastructure for technology is problematic. Bennett, Bunker and Rowley (2002) identified technology capabilities as one of the key factors for success at any institution offering online education. Their research identified technology and support issues repeatedly in both their literature review and interviews. Several other studies (Betts, 1998; Berg, 1998; Gellman-Danley & Fetzner, 1998; King et al., 2000; Bates, 2000) support the importance of a technology and support foundation. Berg's research determined that "technical lack of system reliability, lack of connectivity/access; inadequate hardware/software; setup problems; inadequate infrastructure; [and] technical support" were reported as major barriers to online education. Betts' research at George Washington University identified IT, administrative and financial support for faculty members as a major point of concern among 532 faculty

members who participated in the study. Without technology and related support, online delivery of more than a few independently developed and delivered courses is impractical.

In all three of the institutions examined in this study, some combination of support and technology was present prior to their online education initiative. Bluff College and Redbud University had strong information technology systems in place. When asked about technology at Bluff College, Samuel responded:

Well, it's an issue that kind of startled me when I first came here, that they were spending so much money on technology, and all kinds of technology, not just online education... there was a big commitment and we had some successes being one of the first wireless campuses, we got all kinds of publicity. (March 5, 2007, interview)

This emphasis on technology at Bluff College was illustrated and supported by documents made available by the institution. Bluff College had a Distance Education Task Force in place in 1994. In its final report the Task Force recommended that the institution hire an outside consultant to evaluate the college's "current technological development in implementing distance education and to recommend cost-effective measures to gain and retain competitive advantages" (June 15, 1995). The "Consultant Report" completed on February 28, 1997, recommended a course of action and investment in technology to "assist and guide the college staff in the development of an information system technology strategy." The institution actively pursued this strategy, which provided the technology presence it desired and the technology-based infrastructure the institution needed to pursue online education initiatives.

Ian at Redbud University discussed operating on a shoestring budget, but regarding the technology infrastructure he noted,

... we have incredible technology support on campus. We are a completely wireless campus. Every full-time undergraduate student has a laptop. Every faculty member has a laptop replaced every two years. We're ranked number 11 on the unwired campuses list in the country. We have incredible infrastructure. So as we made that transition [toward online education] we could exploit that infrastructure. They've been honestly instrumental. (March 7, 2007, interview)

As noted earlier, Redbud University is a relatively young institution, founded in the 1960s. Again, quoting from Chapter IV, the institution laid out a plan in their 2003-2008 strategy noting, "At Redbud University, education will take place within an environment in which the use of technology is an integral part in the living and learning of students." The institution has invested in this strategy and is ranked among the top 20 wireless campuses in the United States.

The third case in this study, Lake College, had a different focus and strength related to an infrastructure to build on. The infrastructure advantage for Lake College was 20 years of development and experience in delivering courses remotely through correspondence programs. Rupert observed, "I think one of the strongest things for us is we already had the infrastructure" (March 8, 2007, interview). The institution had already developed an extensive student support system that was administered manually, years before they started their online education initiative. With a modest information technology budget, combined with outside grants, the institution was able to transfer this strength in student support to their online initiative.

The Engine

A second common element that I identified in analyzing these three cases was the need for, and central role of, an engine to carry out and support the intended change. The engine, or latent force within the organization, could be organizational, as was

demonstrated by Bluff College's central planning system; it could be divisional, as was demonstrated at Lake College and, to an extent, at Redbud University with its new continuing education division; or sociological, as was demonstrated at Redbud University by the focus on a common faculty interest in collaboration on adult learning. An engine, by itself is inert. It does not, in and of itself, innovate or create change.

With this theme identified, I returned to the studies of Austin (2000) and Feller (2002) to determine if these researchers had identified engines that facilitated successful online education at the institutions they examined. Each of the three institutions Austin studied had existing distance education programs in place as potential engines for an online education initiation. In two of the three instances, Austin discovered strong, ongoing support from the president, and in the third she indicated that the distance education division was independent and used strategic planning as a tool for developing the online education initiative. Feller (2002) used the term "touchstone" to refer to an online graduate degree program initiative that was introduced by the president to the campus community for discussion.

The importance of an engine element became apparent in the coding of the three institutions in this study. At Bluff College new ideas were encouraged and sought by the central planning arm of the institution. In this case the engine is organizational, with the focus being within the strategic apex. Bolman and Deal (1997) describe Mintzberg's strategic apex as the top of the organizational structure "where senior managers focus on the outside environment, determine the mission, and provide the grand design" (p. 62). The central planning arm of the institution evaluated ideas that were brought to them and supported the ideas that appeared to be in the best interest of the institution. The central

planning committee did not generate the new ideas; it evaluated and supported or denied them. Sister Mary clarified this when asked about funding for the online education initiative.

[The funding] came out of operational money. And as I said, it came under the leadership of the planning team. Our model in our planning team is that we invite proposals for funding under the title of strategic funding. So we saw this as a strategic initiative. (March 5, 2007, interview)

Sister Mary further stated that the institution has always been focused and driven by planning.

The college has been doing long range planning since its beginning. When the sisters saw the need for a 4-year institution and opening it to lay students, they selected certain members of the order to go on to get doctorates in specific disciplines. (March, 5, 2007, interview)

At Lake College continuing education was already established as a division of the institution. Using a divisional structure as the engine is substantially different than using the organization or strategic apex to drive the initiative. In a divisional structure the majority of work is conducted through semi-autonomous units (Bolman & Deal, 1997). General funding is still controlled to a greater or lesser extent through the strategic apex, but in many organizations divisions have a great deal of autonomy. At Lake College the division provided an infrastructure for a potential initiative into online education. Daniel pointed out several factors that affected their success.

The key reasons that I think we have been successful in online education include: (a) We already had a national program in place. We did not have to build from scratch. (b) We already had a strong student support piece in place. (c) We already had an academic support team to help students succeed... (February 1, 2007, telephone interview)

Bonnie noted that the division “is very separate from the on-campus traditional program....The online and on-campus programs are like two parallels going along doing

their own thing” (February 22, 2007, telephone interview). This parallel system led to a fully developed student support system within the continuing education division. The division itself, combined with this support system, provided an excellent engine for developing online education. Participants in the study at Lake College acknowledged that they had known that the institution needed to evolve into online education for at least 3 years before they made any such change. Again, we see evidence of an inert engine poised to support a positive initiative.

At Redbud University, the institution had just organized a continuing education division that provided a potential structure to support online education, as in the case of Lake College. However, unlike Lake College, which had considerable experience in distance education through its correspondence program, Redbud University had no earlier foundation on which to build. Ian pointed out, “I was told that a piece of that [new division] was going to be experiments in education; that was the connection with online learning” (March 7, 2007, interview). Ian actively sought an engine to develop online education. He stated, “When I came here I started looking into what it would take for us to do online learning here.” What he found was a strong cadre of faculty members at Redbud University who had a latent interest and willingness to support collaborative learning and adult education. This was a sociologically-based engine that ultimately helped drive this online education initiative. As noted in Chapter IV, Ian described his recruiting process as follows:

It was really like recruiting for church. Congregations grow because a minister finds a right family, then the minister find the next right family, and then the family finds the next right family, and you’re not disappointed when you only have three of them and you have this vision that it’s going to get bigger and you let it snowball. (March 7, 2007, interview)

This proved to be an important engine for the development of online education. However, this interest and support remained inert until an innovator tied the two ideas of collaboration and adult education to online education.

By way of contrast, without an engine, online education is relegated to lone ranger development, which was discussed in Chapter II. This has occurred at institutions that allow experimentation. The result is that online education remains the interest of an individual or individuals, and course development is limited to the interests of those few faculty members.

Innovator

Rogers (1995) observed that “The salient value of the innovator is venturesomeness, due to a desire for the rash, the daring, and the risky” (p. 264). In each of the three cases studied here, one or more innovators were identified. In each case the innovators were venturesome. They were also Machiavellian. I use the term Machiavellian narrowly to indicate that, along with being venturesome, they also identified the potential engine for a successful online education initiative and were willing to exploit that engine.

At Bluff College, leaders identified innovation as a key component of the institutional culture, but controlled this innovation through its central planning function. Sister Mary, the Vice President of Academic Affairs, was the primary innovator of online education at this institution. She understood the central planning process and was willing to take risks to see that online education was developed at the institution. She used power of her position and respect she had gained from her longevity at the institution (having been there since the 1960s) to manipulate the system toward her desired outcome—an online education initiative. Sister Mary discussed the strong heritage of innovation at

Bluff College, sharing several examples of innovation at the institution. She added, “This idea of technology simply builds on that willingness to risk, commitment to study, to see” (March 5, 2007, interview).

At Lake College, the distance education infrastructure was in place. Administrators and faculty in the continuing education division acknowledged that they had known they needed to move toward online education at least 3 years prior to their doing so. The impetus for change was a dynamic new dean for continuing education. By all accounts she was creative and aggressive. Emma described her as “a super creative person” (February 26, 2007, telephone interview). Daniel described her as “very dynamic. She was a powerhouse” (March 8, 2007, interview). She promoted numerous initiatives through her source of power and was willing to take risks with the administrative authority. She remained at the institution a relatively short time before moving to a larger institution. She identified the existing infrastructure of the continuing education division as being suitable to support an online education initiative and manipulated the system to achieve that goal.

At Redbud University the innovator was Ian, the inaugural Dean of the University College, which was the continuing education division of the institution. He moved from his previous assignment because he wanted a new adventure. He had planned on moving to a larger, better known school, but family matters resulted in his choosing a smaller institution closer to home. In Chapter IV Ian noted his interest in experimenting with online education. The administration was willing to support experimentation. He indicated that he had an interest in collaborative and adult education, and that he found a strong group of faculty members at the institution with a similar interest. He used this

interest in collaborative learning to encourage faculty members to experiment with online education. Some of his comments from his March 7, 2007, interview verify his role as innovator:

When I came here, I started looking into what it would take for us to do online learning here.

I began with just a few interested pioneer faculty, working with them myself. I then began having these sessions, that were basically these sessions for people who were teaching online, interested in teaching online, or just learning what the heck it was about.

I worked very hard with them to create a community

I recruited some poster children.

Using the engines of a continuing education division and faculty interest in collaborative and adult education, Ian was able to function successfully in the role of innovator at Redbud University.

In each of the three cases, the innovator wielded power. According to Northouse (2001), "power is the capacity or potential to influence" (p. 6). More specifically, the innovators in each case held position power. Again from Northouse, "Position power refers to the power a person derives from a particular office or rank in a formal organizational system" (p. 6). In one case, the innovator was the vice president of academic affairs, in the other cases the innovators were individuals over the continuing education division. Each of the innovators in this study acknowledged their innovator roles in the interviews I conducted. They were aware of the engines that could provide the support for online education at their respective institutions and did not hesitate to manipulate those engines to generate the support they needed.

The Bridge Builder

The final critical element identified in this research was the bridge builder. In many ways, a bridge builder parallels Rogers' (1995) change agents. References to building bridges were identified by both Sister Mary and Samuel at Bluff College. Sister Mary referred to their first unsuccessful attempt at starting up online education. "We weren't successful in building a bridge. They [the faculty members interested in distance learning] were all wrapped up in the technology, and we were looking at the application to programs" (March 5, 2007). Samuel also commented on this at Bluff College, "A challenge has been to bridge the gap between IT and faculty" (February 6, 2007, telephone interview). The bridge builders had to not only bridge the gaps between IT and faculty, but also between other stakeholders. At Bluff College, Samuel, the Director of Distance Education, was identified as the primary bridge builder. At Lake College, the Director of Course Development and Learning Technologies was the bridge builder. The bridge builder at Redbud University was Elijah, the Director of Instructional Technology.

At Bluff College the bridge builder was identified by the vice president of academic affairs as the perfect choice. She stated that she knew he was the right choice before they conducted the formal search for the position. The position was to coordinate the online education effort at the institution. The individual in this case had credibility with both faculty and the IT department. He had been an adjunct faculty member at the institution, overseeing teacher training after a long career in public education. He had extensive experience in delivering education using technology. These factors enhanced his credibility and ability to communicate effectively with all parties. Along with developing the reports and consistently expanding the online offerings, he promoted the

training and development needed by faculty members to use online education pedagogy. He had a vision of what the program could become, and even as he approached retirement, he had a vision of where he wanted the program to go in the future. Comparing the *Annual Report: Office of Distance Education* of 1999-2000 to 2005-2006, we see the type of impact this individual had on the development of online education at this institution.

The 1999-2000 report noted that:

The story of the mustard seed is the story of distance education at the Bluff College campus. Distance education is a very small, one person department, that has been developing very slowly but with a vision that distance education will become a large important and permanent part of the college. (Annual Report, Office of Distance Education, 1999-2000)

By the time the 2005-2006 report was issued, things had changed dramatically:

During 2005-2006, there has been a major attitude shift among faculty in support of the use of distance education. Division chairs, who in years previous, had expressed reservations about the use of distance education by teaching faculty are now encouraging faculty to use distance learning as a vital part of their pedagogy. (Annual Report, Office of Distance Education, 2005-2006)

When Samuel discussed how online education started out at Bluff College he observed, “The college set me up with a small office and I went to work. I went about advertising internally to faculty” (February 6, 2007, telephone interview). By 2007, his continuing efforts to promote online education and coordinate the work of faculty members, IT personnel, and administrators had made online education a significant part of the institution that had gained general acceptance from the faculty.

At Lake College, Hermione, who became the Dean of Graduate and Professional Studies, chose not to move the project manager for the online education initiative from his academic position to a position with the IT department. Daniel was the primary bridge builder at Lake College. He was eventually given additional responsibilities and the title

of Director of Course Development and Learning Technologies. Daniel described his mandate as being responsible to “work with faculty to take print-based materials to convert to an online environment... I was responsible to do all faculty training and student support” (February 1, 2007, telephone interview). Emma observed that, “Daniel was probably the person who took it [the online program] the furthest. He is the one whose vision has taken it a long way” (February 26, 2007, telephone interview). As noted in Chapter IV, Daniel attributes much of his success to his ability to develop credibility with different stakeholders. Of particular note is Daniel’s story of talking with faculty members who were resistant because they thought of him as an IT person. He communicated to the faculty that he was hired because of his teaching experience and stated that his role as a faculty colleague rather than as an IT support staff person was critical to the transition toward online education at Lake College “And that really helped me get a core group of initial faculty who were interested in seeing what they could do with technology” (March 8, 2007, interview). He actively built on the concept of academics rather than technology, and he worked more as a peer than as someone who was aloof or apart.

Redbud University illustrated some of the problems associated with not having a strong bridge builder, early in the process, to coordinate the efforts of the innovator. Elijah, the Director of Instructional Technology at Redbud University, was brought into the university 2 years previous to this study and 5 years after the institution had begun its online initiative. He is the bridge builder at Redbud University. Hugo, the University Librarian, discussed Elijah’s ability to build connections in the institution, “He has a lot of expertise. He is willing to share with the faculty and is more than willing to come to them” (March 7, 2007, interview). Bill confirmed Hugo’s observations, “I think the

reason we're getting work from the faculty is because he [Elijah] communicates with them... He's out there calling the faculty and letting them know that there are advances in online learning that we can help them with (March 7, 2007, interview).

Elijah also discussed administrative support when he was hired,

When I came on board the provost basically asked me to take a look at what we are doing with online education and try to improve it. He's been very supportive with some of the vision I laid out for him. (March 7, 2007, interview)

Since Elijah arrived at the institution in 2005, he has worked well as a bridge builder, building relationships and communication channels between technology, faculty and administration.

In each of these cases, the successful bridge builder was hired or promoted to build the bridges that would lead to a sustainable online education initiative. It is also relevant to note that the first person hired to fill this role at Bluff College was not successful and that this delayed successful implementation of the initiative for online education. At Redbud University we observe delays and chaos in the first 5 years of development when a credible bridge builder was not present.

At Lake College Daniel was promoted to a support position for instructional design. He was given additional responsibilities to provide him with the power to meet with the department chairs as a peer rather than as a support staff person. He is acknowledged as a driving force, having a vision of the future of online education and the pedagogical skills the institution needs to develop online education in the future.

At Redbud University, Ian was successful as an innovator but less so as a bridge builder. Ian was promoted to Dean of the Business College. Miranda was promoted to lead the University College. Miranda, although an able administrator, was neither an

innovator nor a strong bridge builder. Continuing development of online education was encouraged, but without a strong bridge builder. Faculty members continued to develop online courses but with very limited oversight. The development of online education eddied into small pools of interested faculty. So, although the institution offered dozens of online courses, it did not offer any online degree programs. Authority for online education was moved to the library under the direction of Hugo. After the arrival of Elijah, the online education initiative started to move forward more successfully. In the process of bringing order to chaos, Elijah is developing trust through communication, training, organizational skills, and having competency in both academic and technology areas. The long absence of a strong bridge builder prior to the arrival of Elijah has, according to the University's strategic plan, cost the institution 4 to 5 years of progress toward its long-term goals related to online education.

Summary

In addition to an infrastructure to develop online education, the three elements of engine, innovator and bridge builder have been critical to the success of online education initiatives at each of the institutions in this study. The relationship between these elements is not linear; rather, it is dynamic, as the exchange between these elements continues to grow and change. Innovators can be bridge builders. Bridge builders can become visionaries and, in that respect, innovators of new ideas for growth. Even the engine for support can change over time.

An online education initiative is a process, not an event, and has the dynamic elements of any process of action. The pieces are not static but constantly interacting with each other. The engine is like an automobile. Without a spark and a driver it is simply a

mass of metal and rubber. However, it retains a great deal of power if combined with a spark and a driver. The spark is the innovator—the individual who decides to turn the ignition and start the motor or engine. The innovator often sits in the driver's seat for a while and provides navigation and direction. However, innovators may get distracted, get promoted, or take a new position. At Bluff College the innovator had other responsibilities and wanted someone else to 'drive the car'. Her interest was in the innovation itself, not in driving the vehicle. At Lake College, the innovator was starting the engines of multiple cars and quickly left the institution. At Redbud University, the innovator was promoted to the deanship of the expanding business college, in effect getting a new car. At both Bluff College and Lake College, bridge builders or drivers were selected early in the process to make sure the automobile arrived at its targeted destination. In both cases, the driver or bridge builder refined the course but continued to move toward a destination that fit the online education initiative and the interests of the college. In both cases there is evidence that rather than just functioning as the hired driver, the bridge builder actually took full ownership of the car and provided the vision of where that car should go. At Redbud University, once the innovator moved on to a new position, the car continued on, but without a driver, creating a great deal of chaos. Once the institution selected an individual to serve as the driver, the car again started driving effectively toward a destination of a well-organized online education initiative. Again, at Redbud University, the bridge builder is showing signs of taking ownership of the vehicle, adjusting the vision of what online education should be and where it should go to fit his own vision.

My conclusion is that any institution can begin an online education initiative if it has an adequate infrastructure (technology and/or support) to begin the process. In

addition, the college needs an engine that will provide the long-term ongoing support to drive the effort, and it needs an innovator who is willing to turn the key. However, my observations suggest that this is not enough. The ongoing process of the online education initiative may be doomed to failure, inefficiency, or chaos if the institution does not plan for the right bridge builder or driver to develop the coordination and communication needed to build an effective program and reach the desired destination.

CHAPTER VI

SUMMARY

Online education has grown rapidly in the United States in the past 15 years. A Department of Education study (Waits & Lewis, 2003) reported that approximately 90% of public colleges and universities offered distance education in some format. The fastest growing methods for delivering distance education were asynchronous and synchronous online education. This study examined the process of adopting online education at three private colleges. This chapter will provide a brief overview of the study, then proceed to summarize major findings from the research, address implications of the study, and provide recommendations for further research.

Overview of the Study

The research problem emerged from a personal interest in online education and a pilot study I conducted in 2004. Reviewing literature on questions related to online education had been conducted mainly at larger public institutions of higher education. Findings from this research indicated that for an institution to successfully implement online education, as an institutional effort, that the institution needed significant amounts of personnel, funding and technology. The literature also revealed a wide gap between the development of online education between public and private institutions. While nearly 90% of public colleges and universities had adopted distance education, only 40% of private 4-year colleges were offering any sort of distance education coursework.

According to a 2005 Sloan Consortium national survey, 74% of public institutions believe that online education is critical to their long-term strategy, while only 41% of private, not-for-profit institutions were making online education a part of their long-term strategy in 2005 (Allen & Seaman, 2005). Yet, many private colleges and universities had successfully adopted online education. Although some of these private colleges and universities were large and had access to the personnel, funding, and technology that the existing research indicated was necessary to support a successful online education initiative, other smaller, private colleges and universities, that did not have access to significant resources, had also been successful in developing online education within their institutions. This suggested a gap in knowledge that led to the research question for this study: Within the participating institutions, how did online education get started and what was the process for its development?

Understanding the process of adopting an online education initiative could be of critical value to many private colleges and universities. With the continuing growth of online education (Allen & Seaman, 2005) and its emerging importance to long-term planning for success in higher education, there is some danger that institutions that ignore online education may find it more and more challenging in the future to maintain enrollments. Some private institutions of higher education are struggling to survive. If enrollments at these institutions shrink, the institutions may ultimately go out of existence. Adoption of online education may or may not be critical to the success of private colleges and universities in the future, but it is certainly a factor they must scrutinize carefully.

This multi-case study used qualitative methods to examine the process for the adoption of online education at three private, Catholic colleges. Specifically, the study

answered the question of how online education got started and what the process of adoption was at each of the participating institutions. Although not generalizable, the study did provide some insights for private colleges and universities that are considering the addition of online education to their long-term plans.

The scope of this research was limited by both time and financial constraints. In order to look for common elements in the process of developing an online education initiative, I wanted to examine more than one institution. A pilot study examining the role of an innovator in developing online education at a private Catholic college was the foundation for this study and helped to develop a framework for study. It also provided experience for this researcher in interviews and background of the research topic.

The three institutions that participated in this study were identified by pseudonyms. Two of the three institutions are located in the New England States, while one of the three is located in the Atlantic States. Enrollments ranged from 2,500 to 5,000 students. All three institutions offered their first online courses in the late 1990s. The institutions were identified as: Bluff College, Lake College, and Redbud University.

Bluff College was located in the Atlantic States and enrolled approximately 2,500 students. Participants in the study took pride in their heritage of innovation, which the former Vice President of Academic Affairs traced back to the early 1920s. Central planning was an important part of innovation at the institution. The institution is prospering with new construction evident around the campus.

Lake College was located in the New England States. The campus moved from a major city to a resort community in the 1950s because of space limitations. The campus now sits on 300 acres that is bordered by a recreational lake. The college enrolled over

5,000 students, but only 1,000 of those students were traditional students on campus. The other 4,000 students took online courses remotely from locations inside and outside the United States. In the 1970s, the institution made a strategic move to offer distance education programs through correspondence, in part, to help sustain its traditional campus activities, according to some participants in the study. In the mid-1990s the institution already had a 20-year track record of providing education and service to students located outside their geographic location.

Redbud University was also located in the New England States. The institution was founded in the 1960s by a forward-looking Catholic bishop. The institution grew rapidly and enrolled over 5,000 students. It was well respected nationally for its technology and its master's degree programs. Redbud University was located in a prosperous suburban area. The area also served as headquarters to a major global corporation. The institution had a strategy of no deferred maintenance. The buildings and grounds were well maintained. The institution had limited property and space for growth, but its strategic plan called for continued expansion.

Summary of Major Findings

I identified four common elements for successful online education implementation at the three institutions that participated in this study. First, all three institutions had some form of infrastructure that could support online education in place prior to their online education initiative. In two cases, a strong technology foundation was the predominate infrastructure in place. In one case, a strong, independent student support system was the key element of infrastructure in place. Second, each of the institutions had a latent force available, that I refer to as an engine, which could provide the ongoing

support needed for online education to grow successfully at each institution. In all three cases the latent force, or engine, was idle until the third component of the model emerged. Third, in each institution an innovator was identified, who had a strong interest in online education. In each case, the innovator both desired to implement online education and recognized the engine as a means of driving the institution toward online education. Finally, in all three institutions the relevance of a bridge builder was identified as critical to the sustainability of the online initiative. In this model a bridge builder is defined as an individual or individuals who provided credibility, communication, and coordination between the stakeholders in each institution. Each element of this model plays out differently at each institution, but is clearly identifiable. Table 4 illustrated these elements of successful online education at these institutions.

Table 4

Elements of Model for Successful Online Education

Institution	Bluff College	Lake College	Redbud University
Pre-existing infrastructure	Strong technology base	Strong student support system	Strong technology base
Engine	Central planning	Continuing education division	Continuing education division & collaborative learning initiative
Innovator	Vice President of Academic Affairs	Dean of continuing education	Dean of continuing education
Bridge Builder	Director of Distance Education	Director of Course Development and Learning Technologies	Director of Instructional Technology

In all three of these institutions some form of infrastructure to support online education was in place prior to their online education initiative. At Bluff College and Redbud University the institutions took early initiatives in technology development. Both institutions were well respected for their early development of wireless technology on their campuses. Both institutions had invested heavily for on-campus technology development. Lake College had developed a strong student support system for learning at a distance through their continuing education division. They were able to acquire adequate hardware and software through outside grant funding. However, they felt that their independent student support system that was developed in the 1970s was their competitive advantage in this area.

In these three case studies, three types of latent force, or engines, were identified: organizational, divisional, and sociological. Mintzberg's research on organizational structure helped clarify organizational and divisional engines. In these cases I referred to an organizational engine as one that was tied to the strategic apex, where senior management drives initiatives and mission (Bolman & Deal, 1997). This was illustrated at Bluff College, where administration solicited innovative ideas from faculty and staff that were evaluated by central planning. Central planning evaluated these ideas, molded ideas they accepted to fit the mission and goals of the institution, and then released the modified innovation for development in a systematic manner. The divisional engine was also related to Mintzberg's research where he discussed these as 'quasi-autonomous units' (Bolman & Deal). The breadth of autonomy of the division of continuing education at Lake College certainly strengthened the opportunity for success of the online initiative at that institution. The sociological force was best demonstrated at Redbud University,

where the innovator actively proselyted for participants using collaborative and adult learning as his means of attracting recruits.

Innovators at the three institutions participating in this study fit Rogers' (1995) observations about innovators as risk takers. They demonstrated venturesomeness and a sense of entrepreneurialism. In addition, in this study I also observed that the innovators both recognized the engines that could drive their initiatives toward success, and exhibited a willingness to exploit those engines. At Bluff College, the Vice President of Academic Affairs understood the role of central planning at the institution and clearly saw it as the engine to move an online education initiative forward. The innovator of online education at Lake College was a new dean of continuing education at the institution. Her successor in that position stated, "[She] is a super creative person... she was the one who could see all the pieces you could pull together here" (February 26, 2007 telephone interview). Other participants in this study referred to this innovator as "dynamic", "a powerhouse", and someone who "goes about 100 miles an hour all the time". The innovator for online education at Redbud University was the Dean of University College (continuing education) and was "looking for a new adventure". He wanted to find a place where he could make a difference. He sparked the interest of the faculty members who were interested in adult learning and pedagogy. He sparked the interest of administration by demonstrating that it could be done, and showing the increasing demand for what was being offered.

Bridge builders were the final element identified in this study that was critical to the success of the online education initiative at each of the participating institutions. Bridge builders are similar to Rogers' (1995) definition of change agents as "an

individual who influences clients' innovation-decisions in a direction deemed desirable by a change agency (p. 27). Bridge builders certainly had the responsibility to influence stakeholders to adopt online education. The bridge builders always served as communicators between technology and practitioners. In all three cases, the bridge builders expanded on the online initiative providing their own vision of where the initiative could and should go. In all three cases they were recognized by other stakeholders as both credible experts and visionaries for the future of online education at each institution. The bridge builder at Bluff College was the Director of Distance Education. He was accepted by faculty, as he had both taught at the college, and was supervising student teaching when he was recruited. Finally, he had credibility with the IT department. At Lake College, the Director of Course Development and Learning Technologies was identified as the primary bridge builder. He explained that being able to work with faculty as a faculty 'colleague', rather than as a part of the technology staff, was important to developing interest in the online education initiative at Lake College (March 8, 2007 interview). His willingness to bridge the communication gaps between IT and faculty members proved to be critical in the adoption process at this institution. Redbud University was able to successfully develop numerous courses from the initiative of the innovator. However, ongoing development of the online education initiative was somewhat chaotic until 2005, when the institution hired a new Director of Instructional Technology. He built on the ideas of the innovator in using workshops and training focusing on collaborative learning, but started to spread the message across all faculty constituencies on campus rather than just those interested in collaborative learning. His ability to build bridges between various constituencies on campus broadened the online education initiative across the campus.

In the model developed in this study, an infrastructure must be in place to begin the process. Infrastructure was not limited to a strong technology base, but could include a strong student support system, as was the case at Lake College. A latent force, or engine, is essential as the means of providing ongoing support through the development process. As was observed, specifically at Lake College, the engine could exist and remain idle for lengthy periods of time, awaiting someone to spark the engine. The third element of the model is the innovator. In these three cases the innovator was able to organize a successful online education initiative by being venturesome and also by being able to identify the engine, and spark or ignite that engine to support the initiative. Referring to the bridge builder as the final element of the model suggests a linear model. However, as demonstrated by the bridge builders in this study, their role was dynamic. They envisioned, they altered, and they redirected the online education initiative in each of these institutions. More than simple change agents, they were also visionaries and innovators in their own right. Beyond implementation of an online education initiative, they also play a critical role in facilitating a system wide organizational change that accepts online education as part of the institution's culture. As important as the bridge builder was to maintaining and expanding the online education initiative at each institution, without the innovator and engine, the online education initiative would have never gotten started.

Study Implications

This study focused on one research question: Within the participating institutions how did online education get started and what was the process for its development? The preceding chapters have described the adoptive process of the online education initiative

at three private colleges. This section considers implications for college educators who may be thinking of initiating online education programs in the areas of cultural change and leadership influence.

Cultural Change

Edgar Schein (1992) referred to culture as “those elements of a group or organization that are most stable and least malleable” (p.5). In discussing the dynamics of change, Schein referred to the studies of Kurt Lewin and observed that “human systems attempt to maintain equilibrium and to maximize their autonomy vis-à-vis their environment” (p. 298). Schein identified 11 mechanisms for facilitating cultural change. One was a “parallel learning system” (p. 316), which is developed by creating a temporary sub-culture within an organization where the shared assumptions of the existing culture are in conflict with changes desired in the organization. A sub-culture can be defined as a new department or division that is separated from the mainstream culture while it develops, providing insulation from other members or groups within the system that might otherwise oppose the changes while the change is developed or tested.

It is noteworthy that all three institutions examined in this study used a parallel learning system as part of their processes for implementing online education. Members of the Central Planning committee at Bluff College identified potential opposition of faculty members to their online education initiative as one of the critical issues they needed to address in order to successfully implement online education at their institution. In order to facilitate the adoption of online education within the institution, the institution created a separate department to develop and promote online education. The central planning committee selected a person with credentials that would be acceptable to faculty,

administration, and the IT department to lead the newly created department. He became an advocate of the online initiative, 'selling' the concept of online education to various constituencies on campus, providing training, and countering various negative rumors or stories about online education. Volunteer faculty members were invited, encouraged, and supported as they developed online coursework, and taught courses using online technology. The program grew steadily, as the faculty members who volunteered to participate in the development of online education became advocates to their peers outside the department sub-culture. Over the course of several years the online education initiative grew to over 160 courses in 2005-2006 (Annual Report, Office of Distance Education) and was accepted as part of the culture of the institution.

At Redbud University, the online education initiative was developed within a newly created continuing education division. The leader of the division was encouraged to experiment in new learning ideas (Michael, March 5, 2007 interview). As the division was insulated from the mainstream campus, it was able to experiment with online education without arousing conflict with the existing culture within the institution. The leader of the division recruited volunteers to participate in the efforts to develop online education courses. He described several of the volunteers as 'poster children' (March 5, 2007 interview) for advocating online education course development. The online education initiative continued to grow throughout the institution. The institution was offering 60 to 80 online education courses each semester at the time of this research.

On the surface, the development of online education at Lake College followed a different path. In interviews with participants of the study at Lake College, there was evidence that the institution used coercive persuasion, or mandates, to implement online

education. For example, Daniel noted that the division had tremendous clout in facilitating the changes toward online education because most of the faculty members in the division were adjunct (2007). Ron mentioned that some adjunct faculty members who did not want to use online technology to teach classes either quite or were terminated (2007). However, when looking at the change process more closely, the use of a parallel learning system is clearly evident. The institution created a division of continuing education in the 1970s. The evolution from a paper-based correspondence system, to an electronic-based online system changed rapidly within the division. The leadership team within the division started the process of change by inviting volunteers to develop online courses, but after demonstrating the viability of the process, mandated the change to the rest of the adjunct faculty members who teach in the division. Because of the nature of the institution, the online education initiative remains within the division of continuing education, which enrolls nearly 80% of all students enrolled at the institution. In this case, the insulated division was established for the broader purposes of distance education through a parallel learning system. The online education initiative was developed within this existing structure.

The examples in these three institutions illustrate that a parallel learning system strategy for changing organizational culture was effective. The problem with using the parallel learning system strategy is that it requires “anywhere from 5 to 15 or more years” (Schein, 1992, p. 317) to succeed. This means that the institution must have a strong and consistent ‘engine’ to sustain the online education initiative. For example, at Bluff College the planning process began in 1994. Eleven years later, the annual report from the Office of Distance Education indicated that “distance learning has become an integral

part of academic life at [the institution]” (2005). It also means that academic leaders who use this strategy must have the patience to let the culture evolve. It is not the only mechanism by which change can be implemented for an online education initiative, but in these cases it has been a successful mechanism.

Leadership Influence

The second implication of this study related to leadership. This study demonstrated that a successful leadership process does not need to be top-down or paternalistic in nature. Bates (2000) provided a number of strategies for leaders in higher education who desired to successfully “adopt the use of technologies for teaching and learning” (p. xiii). His recommendations focused on a process of controlled strategic planning, or top-down management, in organizing and directing the change within the institution. There is a level of efficiency gained by using paternalistic strategies such as situational leadership, wherein leaders “need to find out about their subordinates’ needs and then adapt their style accordingly” (Northouse, 2001, p. 61). This type of paternalistic leadership can often effect change more rapidly, but a paternalistic strategy implies that an organization is led by a heroic leader. There is no evidence in this study that a top-down strategic planning process will not work. However, evidence in this study identified a different leadership process that is more attuned to transformational leadership. Northouse (2001) observes that “transformational leaders set out to empower followers and nurture them in change” (p. 144). This type of leadership more closely matched the leadership influence in the online education initiative at the three institutions in this study.

At Bluff College, the Vice President of Academic Affairs had a clear vision that online education needed to become part of the Bluff College culture. She identified an

individual to lead the process of change. She credited this individual with developing the online education initiative. She also withdrew from direct participation in the change process. She empowered this person to develop his own vision of how online education should develop. He nurtured faculty members who volunteered to develop online courses. He also took a constant role of advocating for the online education initiative with other faculty and academic leaders in the institution.

At Redbud University, the dean of the continuing education division created a vision that focused on collaboration for adult learning facilitated by online education technology. He sought faculty members who were interested in the vision to develop online education. He nurtured and trained these faculty members who, in turn, became advocates of online education. The Director of Instructional Technology at Redbud University, who took on the key operational leadership role for online education 2 years prior to this study, followed a similar pattern of advocating the online education initiative to various stakeholders, communicating with academic leaders, and nurturing faculty members interested in online education.

At Lake College, the dean of continuing education developed a vision for the online initiative at the institution. Her direct involvement was limited to establishing a vision and helping identify grant monies to support the initiative. She left the institution early in the process. Her successor was a strong team builder. She empowered the full-time faculty members and the course development team to expand the online education initiative. Much like the Vice President of Academic Affairs at Bluff College, she helped nurture a future leader of the initiative, the Director of Course Development. She helped establish his credibility with academic leaders by creating a position of authority for him.

He focused on his academic experience and led the changes in the organization, even after the second dean left the institution. Peers and subordinates referred to him as the visionary for the future of online education at the institution. He works in a collaborative manner with faculty members and department chairs to expand the quality of online education at the institution.

Each of the leaders for online education in this study had a certain level of position power in academics—however, in all three cases, these leaders avoided a top-down leadership model. In all three cases they empowered other individuals in the system to create their own visions and methods for executing those visions. By empowering others to lead the process, the leadership was able to reduce misperceptions about the intended reasons for developing online education. French (2001) and Lindquist (2004) studied online education in New York and in North Dakota, respectively. They found that many participants in their studies perceived that the purpose for online education initiatives was to increase revenue and enrollments without concern for pedagogy or students. In the three cases in this study, the process of empowering others to act and lead drove communication deeper into the organizational hierarchy. This allowed for a more immediate response to concerns, misunderstandings, and opposition to the online education initiative at each of these institutions.

In summary, the combination of a parallel learning system with a transformational leadership style may offer synergies for academic leaders considering a long-term strategy for developing online education at their institution. In a long-term strategy, the top-down leadership style has a major limitation related to the tenure of the leader. If we anticipate a 5-15 year evolution to adopt the online education process into the mainstream

culture, then the turnover of the leader may alter or eliminate the initiative altogether. Diffusing leadership for the process of adoption also brings the communication channels closer to faculty members and others who may develop misconceptions about the purposes of an online education initiative.

Recommendations for Further Study

This study had several limitations. As there was little research investigating the adoption process of online education at private colleges and universities I chose to use a qualitative study methodology. Therefore, the first limitation of this process is that although the findings may be valuable, they cannot be generalized. A second limitation of this study was that the research only investigated private Catholic colleges. By design, the research looked at smaller institutions. This leaves open the question of whether or not the adoption processes identified in this study would be as successful in other types and sizes of institutions. More research is needed to better understand the adoption process of online education in other types of higher education institutions. Finally, this study has identified an adoption process that included: (a) infrastructure, (b) engine, (c) innovator, and (d) bridge builder. There is some research supporting the hypothesis that a foundation or infrastructure of some combination of technology and student support needs to exist in order to successfully develop an online education initiative (Kovel-Jarboe, 1997; Betts, 1998; Bates, 2000; King et al, 2000; Bennett, Bunker & Rowley, 2002). There is also extensive research on the role of innovators in a change process (Rogers, 1995). However, there is less research to support the findings regarding the significance of an engine and bridge builder in the process of adopting online education.

Based on the findings of this research, the following recommendations for additional research may be valuable for academic leaders and scholars who wish to better understand the process for successfully developing online education at private colleges and universities.

1. I was able to identify a latent force that I described as an engine. This latent force provided the ongoing support for the development of online education at each of the three institutions. In each institution, the latent force took a different form; at Bluff College it was the strategic apex, at Lake College the latent force was the division of continuing education, at Redbud University it was a combination of a new division of continuing education and an interest in collaborative learning. Understanding the role engines play in facilitating organizational initiatives may help academic leaders better plan for change within their organizations. Further research in this area is merited.

2. Innovators played a critical role in the online education initiative at each institution. Rogers (1995) has defined innovators as risk takers that often initiate change within organizations. Innovators in this study had some form of position power. In each case their position power was academic position power, that is, vice president of academic administration, and two dean level positions. I did not pursue the issues of power as it related to innovation of online education initiatives. There may be no link between the issue of position power and innovation for online education, but the recurrence in this study of innovators wielding position power merits further study.

3. This study identified the bridge builder as critical to the successful, long-term implementation on online education. In these cases the bridge builder carried out a coordination role in each institution. Two elements that were key to the success of the

bridge builders were strong communication skills and strong credibility with multiple and diverse constituencies. In two of the three cases, the participants mentioned a debate about whether the bridge builder should be assigned to academics or information technology, and in both cases elected to position the bridge builder in academics. On reflection, interviewees felt that placing the bridge builder in academics was an important decision. It merits further study to compare the success of bridge builders who are assigned to information technology against those who are assigned academic positions. I suspect that bridge builders will consistently perform more successfully if they are coordinating from an academic position rather than a staff or information technology position.

4. Additional qualitative studies investigating the applicability of this adoption process at other types and sizes of academic institutions should be considered.

In summary, this study has identified an adoption process by which an academic institution may be able to develop a successful online education initiative. This study provided insights into the process of change within academic institutions. Finally, it demonstrated that the development of an online education initiative does not require large endowments and large pools of talented faculty as some earlier studies suggest.

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APPENDIX A
INTERVIEW QUESTIONS

As this is an exploratory study of why and how colleges involved themselves in online programs I am limiting the initial set of questions to three sets of open-ended questions that will allow the interviewee to set the direction. These questions include:

INTERVIEW QUESTIONS (INITIAL)

1. Tell me about yourself. How long have you been at this institution? What is the nature of your work here?
2. Tell me the story of how the college got started with online courses? Who was involved and what did they do?
3. How has the online program changed or evolved since its inception? What has been behind these changes?

APPENDIX B
IRB PROPOSAL

Illinois State University Institutional Review Board

Research with Human Subjects

IRB Number

Protocol Submission Form

Federal regulations and Illinois State University policy require that all research involving humans as subjects be reviewed and approved by the University Institutional Review Board (IRB). Any person (ISU faculty member, staff member, student, or other person) wanting to engage in human subject research at or through Illinois State University must receive written approval from the IRB before conducting research. For more information, templates, and forms please go to www.rsp.ilstu.edu

Please complete and forward this form and all supporting documents to your Department/Unit IRB representative. If you have any questions, please contact your Departmental/Unit IRB representative or the Research Ethics & Compliance Office, (REC) 438-8451, Campus Box 3330

I. General Information

A. Protocol Information	
Protocol Title:	
A multiple case study exploring how a sample of small, Catholic colleges decided to initiate online programs	
Is this research part of a thesis or dissertation proposal? ☐ No ☐ Yes	
If yes, has the thesis or dissertation proposal been approved? ☐ No ☐ Yes	

B. Principal Investigator Information (PI must be an ISU faculty or staff member)	
Principal Investigator Jim Palmer	Department EAF
Telephone Number 438-2041	Email jcpalmer@ilstu.edu
Fax Number 438-8683	Address Campus Box 5900
Co-Principal Investigator Information	
Co-Principal Investigator Alan D. Hansen	Department EAF
Telephone Number ()	Email
☐ Faculty ☐ Staff ☐ Grad. Student ☐ Undergrad. S	Address
Co-Principal Investigator Information	
Co-Principal Investigator	Department
Telephone Number	Email
☐ Faculty ☐ Staff ☐ Grad. Student ☐ Undergrad. S	Address

II. Principal Investigator Assurance

As Principal Investigator, I certify that to the best of my knowledge:

1. The information provided for this project is correct
2. No other procedures will be used in this protocol
3. I agree to conduct this research as described in the attached supporting documents
4. I will request and receive approval from the IRB for changes prior to implementing changes (including but not limited to changes in cooperating investigators or any changes in procedures).
5. I will comply with IRB and ISU policies for conducting ethical research.

6. I will be responsible for ensuring that the work of my co-investigator(s)/student researcher(s) complies with this protocol.
7. Any unexpected or otherwise significant events in the course of this study will be promptly reported to the REC.
8. In the case of student research, I assume responsibility for ensuring that any student will comply with University and Federal regulations regarding the use of human subjects in research.
9. In the case of externally funded research, I will request a modification to my approved protocol if any relative changes to the project's scope of work are requested by the agency.

Principal Investigator Signature

Date

III. Protocol Description

- A. Provide a **BRIEF** description, in **LAYMAN'S TERMS**, of the proposed research.

Private colleges are much less likely to adopt online courses than public colleges, and extant studies of why and how colleges adopt online courses focus on the public sector. However, a minority of private colleges have invested in online curricula. An investigation of what led these colleges to develop online programs may shed light on why these institutions buck the trend and how these institutions successfully adopted online programs. Therefore, the purpose of this study is to examine, from the perspective of those who were involved, why and how online courses were initiated at three Catholic colleges.

The research design uses a multi-case study approach based on the pilot study format. It will review documentation and archival records, interview participants, conduct direct and participant observation, and review physical artifacts to investigate each of the three institutions. The study will use document analysis to confirm information from interviews and seek evidence of other key factors that may be overlooked by the biases and memory lapses of the participants who are interviewed. Preliminary interviews will be conducted with the contacts at the institutions. These contacts will provide the key personnel for further interviews using a snowball technique. The researcher will visit each of the institutions in order to observe how they have developed, and continue to evolve their online education program. Observation will also allow the researcher to see the interactive relationships between the people involved in online education at the institution and other departments and elements of the institution that I would not necessarily be able to perceive strictly from interviews. The physical artifacts that the researcher will focus on will be the computer platforms and physical support mechanisms in place to support online education at each of the participating institutions.

B. Methodology

1. Participants (**ALL** protocols must have a completed **Appendix A**)

- a. How many participants will be included in the study?

Number: 6-30 Male (N/A) Female (N/A)

Total: approximately 15

Age range: 18 or older

- b. Where will participants be recruited?

The study will seek out interviewees from 3-4 private Catholic colleges. Potential interviewees are those who have been involved in the development of online education in teaching, development, or administration. (See appendix A.)

- c. How will they be recruited? (Attach all recruitment documentation, i.e. letters, flyers, etc.)

E-mail contacts will be established with potential participating institutions seeking the primary faculty or staff member responsible for online education. Those individuals will be contacted by e-mail, telephone, and/or letter. Principal participants will provide direction to additional participants who will be contacted in the same manner. (See appendix A.)

- d. What procedures will be used (and in what order) to secure informed consent/assent?

Before the interview takes place the letter of informed consent will explain the purpose of the study, note steps that will be taken to protect confidentiality, indicate how the prospective study subject can secure further information, and ask the prospective study participant to indicate that he or she is willing to participate by signing the agreement. The participant will be given a copy of the informed consent letter as well.

- e. Where will the research take place?

Some of the research will take place remotely, via telephone and Internet. In addition, onsite research will take place at the respective participating institutions. Interviews will be conducted at the office of the participant or a neutral site if the participant so requests.

2. Procedure

- a. What are you asking the participants to do? In what order?

Each case study will consist of taped interviews of all participants where possible. If a participant declines to be taped the researcher will take careful notes. In addition to one interview of 60-90 minutes, several follow-up interviews or short correspondences will be necessary to fill in the gaps of the primary interview. The interviews will create a picture of the process for the development of online education at the institution, and the motivational factors that influenced these participants.

I will begin each interview by going over the informed consent form that will describe the study and the rights of the participant. The interviews will last 60 to 90 minutes. Participants for this study will typically fall into one of two categories: informant or respondent (Yin, 1994). According to Lindlof and Taylor (2002) "the best informants are savvy social actors. Gatekeepers or sponsors sometimes fill the informant role and act as guides to the world the research is about to enter" (p. 177). These participants have long experience in an organization, have served in different roles, and are usually well respected by peers, superiors and others. Respondents are more limited in that they have a narrower focus and can usually only speak about issues from their personal perspective. In the case of participants who can be classified as informants, I will likely interview these individuals on multiple occasions as noted in the previous paragraph.

Interviews will consist of three open-ended questions.

- 1. Tell me about yourself. How long have you been at this institution? What is the nature of your work here?**
- 2. Tell me the story of how the college got started with online courses? Who was involved and what did they do?**
- 3. How has the online program changed or evolved since its inception? What has been behind those changes?**

These questions will examine why and how the institution and individuals at the institution got involved in development of online courses; the support and opposition they experienced; the transitional roles they played; and their perspective on the transformation of the institution and stakeholders in the institution.

- b. Will you involve them in a psychological intervention, deception, or biomedical procedure?

No.

- c. Will you audio_____√_____, or videotape _____, or record in any other manner_____, participant responses? Please check.

3. Instruments/Apparatus

What forms, surveys, equipment, etc. will you use? (**Attach copies** of all forms, surveys and instruments to be used.)

The interview will be recorded on an audio recorder

4. Data

- a. How/where will the data be stored and kept secure?

The audiotapes will be given to a transcriber, who will secure them in his or her locked office and follow confidentiality protocols described in Appendix K. (We will go over confidentiality rules with the transcriber and require him or her to sign an affidavit of confidentiality as a condition of employment.) The transcriber will return the transcripts and the tapes to us (and erase any computer copies he or she has). Once we eliminate personally identifying information from the transcripts (substituting pseudonyms for college names and cod number for the names of interviewees), we will destroy the tapes. The transcripts will be secured in locked cabinets in our offices or on password-protected computers in our offices.

- b. Who will have access?

The transcriber and the researchers, under the conditions described in 4a, above. In addition, each interviewee will be given a copy of his or her transcript so that he or she can amend or modify any of the contents.

- c. How will the data be used (during and after the research)?

The transcripts will be coded by the researcher for underlying themes.

- d. How will the data be disposed of?

Tapes will be destroyed as soon as transcripts have been made. Transcripts will be shredded (and deleted from our computers) two years after completion of both parts of the study (December 2009). It is necessary to keep the transcripts in case questions arise after study results have been published.

C. RISKS

1. What are the physical, psychological, or social (loss of reputation, privacy, or employability) risks?

The interviews do not pose questions that threaten the legal standing, employability, or reputation of interviewees. Nonetheless, the interviewees have the right to expect that their comments will remain strictly confidential. They will be assured of this confidentiality, and steps will be taken to eliminate personally identifying information from the transcripts and to physically secure the tapes and transcripts. (See B4, above, and appendix K.) Presentations and publications summarizing the results will examine general themes that emerge in the interviews. Individuals and the institutions they are associated with will not be named.

2. Will the data be anonymous _____ or confidential ✓?
(Please check one)

D. BENEFITS

1. What do you hope to learn?

By studying the implementation of online courses at small private colleges this research may provide substantial insights into both the opportunities and barriers faced by private colleges that are considering the potential role on online education at their institutions.

2. Who might find these results useful?

- **Private colleges that are considering implementing an online education strategy.**
- **Other colleges that have adopted online education strategies that are struggling with their programs.**

3. How will the participants directly benefit?

Participating in the study may be a useful opportunity for interviewees to reflect on their careers and professional experience.

IV. Checklist

This checklist must be completed and attached to all protocols or Department Representatives will return them to the PI. Please note that for any items checked “yes” you must attach the designated, completed appendices.

☒ Yes ☐ No	Informed consent procedures/ documentation have been clearly explained. (All protocols must have a completed Appendix A)
☐ Yes ☒ No	Is your research being funded? (if yes, complete Appendix B)
☐ Yes ☒ No	Are you recruiting and enrolling subjects 0-7 years old? (if yes, complete and attach Appendix C)
☐ Yes ☒ No	Are you recruiting and enrolling subjects 8-17 years old? (if yes, complete and attach Appendix C)
☐ Yes ☒ No	Are you recruiting and enrolling prisoners as subjects? (if yes, complete and attach Appendix D)
☐ Yes ☒ No	Are you recruiting and enrolling pregnant women as subjects? (if yes, complete and attach Appendix E)
☐ Yes ☒ No	Are you recruiting and enrolling mentally incapacitated individuals as subjects? (if yes, complete and attach Appendix F)
☐ Yes ☒ No	Will the subjects of this study be exposed to the possibility of harm, including physiological, psychological, or social (e.g., loss of reputation, privacy, or employability), (if yes, complete and attach Appendix G)
☐ Yes ☒ No	Will the subjects of this study be exposed to any psychological interventions such as contrived social situations, manipulation of the subject's attitudes, opinions or self-esteem, psychotherapeutic procedures, or other psychological influences. (if yes, complete and attach Appendix H)
☐ Yes ☒ No	Will this study involve any elements of deception? (if yes, complete and attach Appendix I)
☐ Yes ☒ No	Will the proposed research involve any biomedical procedures (e.g., the taking or withholding of medication, ingestion of any food or other substances, injections, blood drawing, or any other procedure which would normally be done under medical supervision). (if yes, complete and attach Appendix J)
☒ Yes ☐ No	Will all or some of the subject(s) of the proposed research will be audio or videotaped? (if yes, complete and attach Appendix K)
☐ Yes ☒ No	Will this proposed research involve any elements of technology? (i.e. web-based)

Informed Consent

Dear _____

This research is investigating the implementation of online courses at small private colleges. Participants will include faculty, staff and members of administration from your institution as well as other institutions involved in this multi-case study. The following will be the general areas of inquiry:

1. To discover how your institution became involved in online education, including the people and processes.
2. How have the online programs at your institution changed since their inception?
3. How has the program been received, and evolved?
4. Are the programs successful? Why or why not?

Procedures for the interviews will include a few introductory comments and a series of open-ended questions for your comment. Specifically I will be looking for your personal perspective on the story of online education development at your institution. The activity will be audio taped. The purpose of the audio tape is to get a complete transcript of the interview (and interviews) for analysis. The tape and transcript will be secured by the researcher, and destroyed after research is completed. Research may be published, but identify of participants in the study will be confidential. They will not be identified in any reports or publications

Participation in this study is voluntary. Refusal to participate involves no penalties. You may discontinue participation at any time without penalty.

There are no foreseeable risks anticipated in this study for the participants. The benefits of this study may include a clearer understanding of how online education works in private colleges and universities. The research will be used to provide analysis and possible recommendations for small colleges and universities who are considering the development of online education at their institutions.

If you have questions about this research or participants rights please feel free to contact Alan Hansen, James Palmer, or the Research and Sponsored Programs Office. Contact information is also on the attached Contacts sheet.

Contact	Telephone	E-mail
Alan Hansen	()	
James Palmer	(309) 438-2041	jcpalmer@ilstu.edu
Research & Sponsored Programs Office	(309) 438-8451	

I have read and understand this Informed Consent form, and agree to participate in this focus group.

 Signature

 Date

Appendix K: VIDEO/AUDIO TAPING

- 1) If all or some of the subject(s) of the proposed research will be audio or videotaped, **justify** why the use of audio or videotaping is necessary to the study.

Interviews will be audio recorded to ensure accuracy in collecting and transcribing their responses. It will be necessary to audio record the interviews, because the researchers will need to listen intently to the meaning of responses, pose questions needed to clarify any unclear responses, and pursue any emerging line of questioning to complete the interview. It is impossible to do this while taking notes at the same time.

In addition, the ability to read and code transcripts will help us understand the underlying themes that emerge in the interviews.

- 2) Who will have access to the tapes and for what purposes?

The researchers will store the tapes in locked cabinets in their offices. However, the researchers may decide not to transcribe the tapes themselves. In that case, the tapes will be given to a transcriber who will transcribe them in his or her office. If a transcriber is hired, the researchers will personally go over ground rules for confidentiality with him or her. In addition, he or she will be required to read the ground rules and sign a pledge of confidentiality. This pledge, among other things, requires the transcriber to return the tapes with the transcriptions and delete the transcriptions from his or her computer files once the transcriptions have been sent to the researchers. (Please see "Transcriber's Assurance of Research Confidentiality," below.)

Once the transcriptions have been submitted by the transcriber, the researchers will go over them to eliminate any personally identifying information. Institutions will be given pseudonyms, and individual subjects will be given a code number. (The codes will be stored separately from the transcriptions.) The tapes themselves will then be destroyed, and the transcriptions will be secured in the researchers' offices; paper copies and copies on disk will be in locked cabinets, copies for analysis will be secured on the researchers' password protected computers in their locked offices. The researchers will have access to the transcriptions so that they can be coded and analyzed.

It should also be noted that each interviewee will be provided a transcription of her interview. This will give the interviewees the opportunity to amend, edit, or clarify what they have shared.

- 3) Where will the tapes be stored and what security measures will be taken to prevent unauthorized persons from accessing the tapes?

The transcriber, if hired, will keep tapes locked in his or her office. He or she will be required to delete the transcriptions from his or her computer after returning the tapes and transcriptions to the researchers (as per the "Transcriber's Assurance of Research Confidentiality," below.)

Once personally identifying information has been removed from the transcriptions by the researchers, the researchers will destroy the tapes. Transcripts will be secured as described above.

- 4) What are your plans for the ultimate use and disposal of the tapes?

The audio-recorded interview tapes will be transcribed for analysis. The tapes will be destroyed as soon as transcriptions have been made and personally identifying information has been deleted from the transcriptions. The transcriptions, secured in the researchers' offices as described above) will be shredded two years after completion of both parts of the study. That is, it is anticipated that the transcriptions will be shredded in December 2009.

Transcriber's Assurance of Research Confidentiality¹

The researchers heading this project, Jim Palmer and Alan Hansen, are firmly committed to the principle that research confidentiality must be protected. This principal holds whether or not any specific guarantee of confidentiality was given by respondents at the time of the interview. When guarantees have been given, they may impose additional requirements which are to be adhered to strictly.

It is incumbent on transcribers to treat information from and about research as privileged information, to be aware of what is confidential in regard to specific studies on which they work or about which they have knowledge, and to preserve the confidentiality of this information. Types of situations where confidentiality can often be compromised include conversations with friends and relatives, conversations with professional colleagues, conversations with reporters and the media, and in the use of consultants for computer programs and data analysis.

Unless specifically instructed otherwise, a transcriber upon encountering a respondent or information pertaining to a respondent that s/he knows personally, shall not disclose any knowledge of the respondent or any information pertaining to the respondent's testimony or his participation in this research project. In other words, transcribers should not reveal any information or knowledge about or pertaining to a respondent's participation in this project.

Data containing personal identifiers shall be kept in a locked container or a locked room when not being used each working day in routine activities. Reasonable caution shall be exercised in limiting access to data to only those persons who are working on this thesis project and who have been instructed in the applicable confidentiality requirements for the project.

The researchers for this project, Jim Palmer and Alan Hansen, shall be responsible for ensuring that all transcribers involved in handling data are instructed in these procedures, have signed this pledge, and comply with these procedures throughout the duration of the project. At the end of the project, Jim Palmer and Alan Hansen shall arrange for proper storage or disposition of data, in accordance with federal guidelines and Institutional Review Board policies at Illinois State University.

Jim Palmer and Alan Hansen must ensure that procedures are established in this study to inform each interviewee of the authority for the study, the purpose and use of the study, and the voluntary nature of the study (where applicable).

¹ Excerpted from pages 15-16 of the *User's Guide for the Protection of Human Research Participants at Smith College School for Social Work*, Retrieved October 10, 2005, from <http://www.smith.edu/deanoffaculty/documents/SSW%20IRB%20Guide.pdf>

PLEDGE

I hereby certify that I have carefully read and will cooperate fully with the above procedures. I will maintain the confidentiality of confidential information from all studies with which I have involvement. I will not discuss, disclose, disseminate, or provide access to such information, except directly to the researchers, Jim Palmer and Alan Hansen, for this project. I will keep the tapes locked in my office, and the transcriptions will be saved on a password-protected computer. After submitting the transcripts and returning the tapes to Palmer and Hansen, I will erase or delete the transcription from my computer files. I understand that violation of this pledge is sufficient grounds for disciplinary action, including termination of professional or volunteer services with the project, and may make me subject to civil penalties. I give my personal pledge that I shall abide by this assurance of confidentiality.

Signature _____ Date _____

APPENDIX C
IRB APPROVAL

November 16, 2006

Jim Palmer
EAF 5900

Thank you for submitting the research protocol titled A multiple case study exploring how a sample of small, Catholic colleges decided to initiate online programs for review by the Illinois State University Institutional Review Board (IRB). The IRB has approved this research protocol following an Expedited Review procedure. You may begin this research.

This protocol has been given the IRB number 2006-0469. This number should be used in all correspondence with the IRB. You may proceed with this study from 11/16/2006 to 11/16/2007. You must notify the IRB before 11/1/2007 if you will need a continuation beyond that ending date.

This approval is valid only for the research activities, timeline, and subjects described in the above named protocol. IRB policy requires that any changes to this protocol be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact Chris Embree at 438-8451 or myself in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
Campus Box 3330
Professional Development Building
Telephone: 438-8451

It is your responsibility to notify all co-investigators (Alan Hansen), including students, of the classification of this protocol as soon as possible.

Thank you for your assistance, and the best of success with your research.

Beverly Smith, Chairperson
Institutional Review Board
Telephone: 438-7645

cc: Wendy Troxel, IRB Department Rep., EAF