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Current Issue

Visions Shaping the Future of Online Education: Understanding its Historical Evolution, Implications, and Assumptions

by Jorge Gaytan

The purpose of this paper was to present a historical background of online education, review its current status, and provide visions shaping its future in an attempt to understand its potential and limitations that will lead to the advancement of the scholarship of teaching and learning. Online instructors must understand the way online education has evolved over the years from previous conceptions of education and the wide array of implications and assumptions involved in the delivery of online education. Recommendations for the advancement of online education, including future research, are given.

Factors Motivating and Inhibiting Faculty in Offering Their Courses via Distance Education

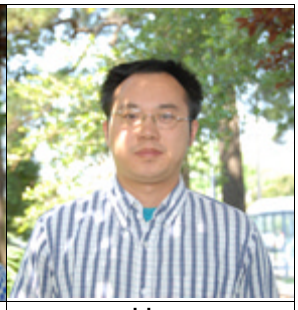
by John Bruner

While many colleges and universities have moved forward with implementing distance education (D.E.) programs, administrators still find difficulty in getting faculty to participate willingly. An understanding of faculty motivators and inhibitors, especially faculty perception of the “hassle factor” involved with D.E., will give administrators an edge in D.E. implementation. This study also provides important information that will help administrators understand why some faculty members are more open to involvement with D.E.

Streamlining Forms Management Process in a Distance Learning Unit

by M’hammed Abdous and Wu He

Abdous



He

Managing the required forms for a variety of distance courses is challenging and sometimes overwhelming. Inefficient management can lead to a variety of problems in course delivery, such as delays in obtaining textbooks, problems in obtaining copyright permission, and even course delays. In an effort to facilitate, streamline and improve forms management, a system was designed to streamline the management of required forms for face-to-face, hybrid, online and televised courses. The system provides faculty, and distance learning administrators with an easy method to manage all forms effectively and

efficiently.

Conditions for the Success of Online Mentoring a Case Study
by Bernard Nchindila

This paper reports on the findings about a mentoring project that failed. It is based on a case study in which the writer participated as a mentor of the staff members of the South African Department of Labour.

Developing Knowledge Through Practical Experience: The Principles of Financial Sustainability for Online Programs

by Katrina A. Meyer, Janis Bruwelheide, and Russell Poulin

Following the theory of situated cognition as proposed by Brown, Collins, and Duguid (1998), this research project tapped into the contextual knowledge of experienced administrators of online programs. Draft principles of financial sustainability for online programs were developed by an initial team of experienced online educators and then critiqued by seven directors of FIPSE-funded online programs. The directors added conditions, situations, and caveats to the principles making the final product a rich and comparatively complete list of issues that are important for administrators to understand.

What Do Online MBA Professors Have to Say About Online Teaching?

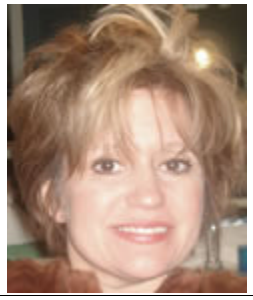

Kim


Liu

by Shijuan Liu, Kyong-Jee Kim, Curtis J. Bonk, and Richard Magjuka

Online MBA programs have grown exponentially in recent years. Yet, the prevailing literature indicates that research on online MBA education remains extremely limited. This article summarizes 28 instructor interviews from those teaching online courses in an online MBA program at a Midwestern public university. Instructors were interviewed regarding their perceptions of the benefits and barriers of teaching online, as well as their suggestions for improvement of the online courses and the overall MBA program. The results are expected to help better understand issues related to online teaching and learning, and provide implications for designing and delivering online MBA courses.

From the Editor



In this edition, author John Bruner addresses a topic of research that is one of the most intriguing to me… what factors contribute to or inhibit faculty involvement in distance education? While research shows that monetary incentives can influence some faculty, in my experience the best distance ed teachers are those who participate for intrinsic reasons. It seems that it's these same individuals who make the best mentors for their peers, get the highest student evaluations, and maintain high retention rates. I hope to see future research that supports this contention.

We are busy preparing for our annual distance learning administration conference, to be held this year on St. Simons Island. In our September edition, you will find our three best papers from the conference. I hope you all have a safe and memorable summer!

Melanie N. Clay, Ph.D.
June 15, 2007

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Visions Shaping the Future of Online Education: Understanding its Historical Evolution, Implications, and Assumptions

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Abstract

The purpose of this paper was to present a historical background of online education, review its current status, and provide visions shaping its future in an attempt to understand its potential and limitations that will lead to the advancement of the scholarship of teaching and learning. Online instructors must understand the way online education has evolved over the years from previous conceptions of education and the wide array of implications and assumptions involved in the delivery of online education. Recommendations for the advancement of online education, including future research, are given.

Introduction

Distance learning has existed for many decades. Correspondence courses delivered in Europe are the earliest form of distance learning (Flores, 2004). The increased demand for online courses has resulted in a significant growth in the number of institutions offering such courses (Labonty, 2005). In the 2000-2001 academic year, 90% of 2-year and 89% of 4-year public institutions offered distance education courses (National Center for Education Statistics, 2006).

Much research has been conducted related to teaching and learning online. The Illinois Online Network (ION) is a faculty development initiative "that provides comprehensive professional development opportunities in the area of online teaching and learning to faculty and staff from higher education institutions in Illinois and beyond" (ION, 2006a, para. 1).

The ION staff argues that "effective online instruction depends on learning experiences appropriately designed and facilitated by knowledgeable educators" (ION, 2006b, para. 1). They recommend the use of a variety of instructional strategies including learning contracts, discussions, lectures, self-directed learning, mentorships, small group work, projects, collaborative learning, case studies, and forums. The ION staff claims that:

Because learners have different learning styles or a combination of styles, online educators should design activities that address their modes of learning in order to provide significant experiences for each class participant. In designing online courses, this can best be accomplished by utilizing multiple instructional strategies. Teaching models exist which apply to traditional higher education learning environments, and when designing courses for the online environment, these strategies should be adapted to the new environment. (ION, 2006b, para. 1)

According to the Online Learning Center at the University of Houston—Victoria (2003), effective online instruction involves translating the unique benefits of face-to-face interaction to online activities. The Center encourages professors teaching online to get students to be actively involved in their learning by designing activities that promote student interactions and build a sense of community among students and faculty.

Perhaps the most comprehensive review of literature related to online learning was conducted by Tallent-Runnels et al. (2006). These authors found little consistency of terminology used in the online learning environment. In addition, they found that:

Most of the studies reviewed were descriptive and exploratory, that most online students are nontraditional and Anglo American, and that few universities have written policies, guidelines, or technical support for faculty members or students. Asynchronous communication seemed to facilitate in depth communication (but not more than in traditional classes), students liked to move at their own pace, learning outcomes appeared to be the same as in traditional courses, and students with prior training in computers were more satisfied with online courses. (Tallent-Runnels et al., 2006, p. 93)

The purpose of this paper is to present a historical background of online education, review its current status, and provide visions shaping its future in an attempt to understand its potential and limitations that will lead to the advancement of the scholarship of teaching and learning. That is, online instructors must understand the way online education has evolved over the years from previous conceptions of education and the wide array of implications and assumptions involved in the delivery of online education.

Historical Background

This section presents a historical background of online education divided into various themes that emerged from the literature review.

Increased Access

William Harper, first President of The University of Chicago, is considered one of the founders of "learning by correspondence" programs. Harper later developed a more advanced correspondence program that became an integral part of the university, allowing students to complete a maximum of 30% of coursework through mail (Holmberg, 1986; Storr, 1966; Watkins, 1991). Teaching by mail became central to The University of Chicago, allowing the

institution to reach a large number of individuals regardless of age, gender, geographic location, and other demographic and socioeconomic characteristics. It was a way to reach international students and to respond to institutional inequalities by reaching out to a more diverse group of students (Larreamendy-Joerns & Leinhardt, 2006).

Other colleges and universities followed the example of The University of Chicago and became involved in "learning by correspondence" programs. For instance, The University of Wisconsin and The University of Kansas developed leading "learning by correspondence" programs (Watkins, 1991). These programs, however, were challenged by the academic community (Pittman, 1991), as the absence of an appropriate distance learning organizational structure was notorious, including the lack of incentives (e.g., financial support, course releases) for distance education faculty (Burrell, 1954; Watkins, 1991). In addition, the academic community questioned the lack of interaction among students. In summary, distance learning initiatives were under tight scrutiny and remained marginal to most colleges and universities (Stein, 1971).

Today, while the skepticism still exists, the academic community holds several visions for online education. The vision that constantly emerged from the literature review is that it provides a learning opportunity to a diverse group of citizens (e.g., working professionals) otherwise unable to obtain needed training (Gordon, 2006; Larreamendy-Joerns & Leinhardt, 2006). This vision is consistent with the concepts of corporate universities and just-in-time learning (Oblinger, 2001).

Changed Focus

Several changes have taken place in online education over the years. Online education has moved from a minor alternative role of "learning by correspondence" to the center of life at most universities (Feenberg, 1999; Larreamendy-Joerns & Leinhardt, 2006). The Internet has played a significant role in these changes (Wallace, 2004) because it has assisted instructors to more effectively respond to the limitations often cited regarding online education (Murray, 2003) and it has been used to deliver instruction to students and employees at remote sites (Oblinger, 2001). Colleges and universities have tapped into the online market in an attempt to increase revenues, expand educational reach, and recover a portion of the investments made in technology (Holzen & Rickman, 2003; Oblender & Glass, 2004). These large investments in technology are justified by the increased revenue and by their impact on the educational institutions' rapport with the outside world regarding the use of cutting-edge technology to deliver online education (Larreamendy-Joerns & Leinhardt, 2006).

Several signs of these changes are evidenced by the following events. First, an increasingly higher number of universities are requiring their students to enroll in at least a few online courses (Golden, 2006). Second, the U.S. Senate is tinkering with the idea to relax the rule by which a college or university must enroll no more than 50% of its students through online programs if their students are to be eligible for Federal financial aid (Carnevale, 2003). Third, Harvard University's faculty commission is considering reducing the time residence required of their students to earn a degree (Young, 2002).

Fourth, other Tier I institutions of higher education have embraced the initiative to deliver high-quality online courses and, consequently, have launched online program initiatives that vary in scope but integrate top-notch instructional and cognitive principles (Larreamendy-Joerns & Leinhardt, 2006). Fifth, a significant increase in the amount of scholarly publications regarding the role of online education in the transformation of teaching and learning is evident (Larreamendy-Joerns & Leinhardt, 2006; Wallace, 2004).

While many educational stakeholders have claimed that online education threatens the quality of instruction delivered, others have viewed it as a great opportunity to overcome the limitations of face-to-face classroom instruction. These conflicting views, however, are not necessarily unique to online teaching and learning, as anything that has challenged the effectiveness of face-to-face classroom instruction has caused major controversies (Larreamendy-Joerns & Leinhardt, 2006).

Instructional Quality and Learning Outcomes

Much debate exists regarding the characteristics of instructional quality of online education. Most individuals tend to measure the quality of online instruction against standards established for face-to-face classroom instruction (Tucker, 2001). The expectation has been to demonstrate that online education is at least as effective as face-to-face classroom instruction. This expectation is exemplified by the fact that researchers have usually attempted to compare online and face-to-face courses in terms of learning effectiveness by using experimental, quasi-experimental, or causal comparative methodologies and have found online instruction to be at least as effective as face-to-face teaching (Bata-Jones & Avery, 2004; Tallent-Runnels et al., 2006).

However, skeptics of online education continue to provide the same arguments since the inception of online education. That is, critics of online education have expressed concerns regarding the validity of research studies that have compared online and face-to-face instruction in terms of learning outcomes because different instructional modes and media were used. On the other hand, research studies that have compared online courses possessing different structures have yielded valid results because researchers are able to investigate the interaction between learner differences and the features of online instruction, using the same instructional mode (Tallent-Runnels et al., 2006). Most concerns are based upon the natural limitations of instructional technology such as the perceived lack of social interaction and immediate feedback, inability to address the learning needs of a diverse group of students, lack of transparent academic activities by for-profit online schools (e.g., diploma mills). Lastly, there is a perceived lack of strong credentials of faculty involved in the delivery of online instruction (Larreamendy-Joerns & Leinhardt, 2006).

Supporters of online education have responded to these criticisms in a variety of forms. While some have accepted the limitations of online education and have proposed instructional strategies to more effectively deliver online instruction, others have conducted empirical research studies to demonstrate the effectiveness of online instruction. Some other individuals have challenged the quality of instruction delivered in a face-to-face classroom (Larreamendy-Joerns &

Leinhardt, 2006). Still other researchers have used descriptive research methodologies to investigate student perceptions of online courses and found that, generally speaking, students reported a relatively high degree of satisfaction with the online experience and expressed an interest in taking more online courses in the future (Gaytan, 2004).

Other research methodologies have been employed such as experimental comparisons of online and face-to-face classroom learning and correlational research to look into the relationships among various aspects of online learning such as the learners' satisfaction levels and overall characteristics, and the features of the online learning environment. Generally speaking, students possessing computer training and experience were more satisfied with online courses (Kim & Moore, 2005; Tallent-Runnels et al., 2006).

In summary, critics of online education have reached hasty conclusions regarding the quality of online instruction because they have not carefully considered the ultimate goals, processes, and products of online education (Larreamendy-Joerns & Leinhardt, 2006). Quite often, online education has been required to demonstrate levels of quality that have been seldom found in face-to-face classroom instruction (Jaffee, 1998). Most empirical research has focused on the technology being used rather than the quality of instruction itself (Cuban, 1986; Russell, 1999).

Learning Environment

The literature review clearly revealed that most research studies related to online learning environments have used descriptive research methodologies and small populations, making it difficult to make generalizations to the larger population (Tallent-Runnels et al., 2006). In addition, most of these studies have failed to provide evidence to support the contention that certain assessment tools are more effective than others. That is, the authors of these studies do not fully understand the dynamics of effective online pedagogy, as they struggle with questions related to whether or not effective online assessment techniques should be based upon the characteristics of outstanding face-to-face teaching and learning such as: challenging students to think, providing a reason to want to step into the classroom, displaying a willingness to give extra help and encouragement, and giving varied and meaningful assignments (Marshall, 2003; Tallent-Runnels et al., 2006).

Several researchers have found significant challenges when assessing student learning in online courses (Liang & Creasy, 2004). However, other researchers have demonstrated a clear understanding of online assessment as they argued that online assessment requires a more ongoing, systematic approach than used with face-to-face instruction (Robles & Braathen, 2002). In addition, as the assessment methods must match the level of desired competencies, online assessment requires educators to modify their methods of instruction to make them more innovative than traditional instruction because it changes human interaction, communication, learning, and assessment methods (Robles & Braathen, 2002).

Several research studies demonstrated the importance of developing online learning communities by exposing students to effective, constant, and consistent online communication, modeled by

the instructors, and practiced by the students as they formed small groups. Another theme that emerged from the review of these studies is that increased interaction among the online course participants had a positive effect on learning. The interaction, however, must be based upon a thorough understanding of course content by participants (Gaytan, 2006; Tallent-Runnels et al., 2006).

Characteristics of Learners

Regarding the characteristics of learners, the literature review showed that most students taking online courses were older than the typical undergraduate student. In fact, most students were older adults highly motivated to achieve the course learning outcomes. In addition, the literature review demonstrated a shift in the focus of the research from determining the impact of online instruction on student learning to identifying the factors that motivate students to take online courses, methods that would best match the course design with the students' learning styles, and aspects involved in the effective delivery of online instruction (Tallent-Runnels et al., 2006).

While convenience has been cited by students as an important advantage of online courses, quality of instructional design has emerged as an important aspect of an effective online course. In addition, students claimed that being able to control the pace of the lesson is crucial, despite the fact that more self-management is required (USA Study Guide, 2006). Designers of online courses must take into account the various learning styles of online course participants (Gaytan & McEwen, in press; ION, 2006c). The relationship between learner characteristics and online delivery tools available has also received increased attention. In fact, online course designers are taking into account the learner and faculty characteristics, online delivery tools available within the context of institutional mission and vision statements (Tallent-Runnels et al., 2006). Finally, several studies revealed an important need to continuously train the faculty and students in the effective use of online technologies (McEwen & Gaytan, 2006; Wells, 2000).

Institutional Policy

National organizations have recommended several benchmarks for online courses. For instance, one of the benchmarks has to do with establishing institutional policies for online courses. While most institutions of higher education have developed written policy related to online courses (e.g., course delivery mechanisms, faculty and student requirements), such policy does not include course development, training, support, and evaluation (Tallent-Runnels et al., 2006).

In addition, faculty members expressed a need to obtain assistance related to online course development and delivery as well as finding effective assessment techniques (Southern Region Education Board, 2006). They also thought that they should be compensated for developing courses online (Carnevale, 2004). In addition, faculty and students expressed an interest in receiving training that would allow them to maximize the various features available in the online teaching and learning environment (Feist, 2003). Furthermore, on-going technical support is highly desirable by faculty and students engaged in the online experience. For faculty, this continuous technical support is crucial because research has shown that the more the technical

difficulties experienced by the students the lower they rated their instructors (Lan, Tallent-Runnels, Thomas, Fryer, & Cooper, 2003).

Current Status of Online Education

The historical background of online education presented above revealed that, in order for online education to work effectively, it requires (a) a constant and consistent adaptation by all parties involved, (b) addressing the financial challenges, (c) progressive leadership, (d) dealing effectively with the politics that get in the way, and (e) much commitment from educational stakeholders (Watkins, 1991). However, the current status of online education reveals "a story of grandiose promises, marginal commitment, and abandonment" (Larreamendy-Joerns & Leinhardt, 2006, p. 582). In other words, online education has failed to follow the ascending trend of technological innovation and questions regarding the quality of online instruction continue to emerge, as critics continue to question the way online instruction addresses the various learning needs of a diverse group of students (Larreamendy-Joerns & Leinhardt, 2006).

The current status of online education also reveals that there is an important role that online instruction plays in society because it reaches a significant amount of individuals historically underserved. Supporters of online education continue to argue that instructional quality can override the technological limitations. That is, instructional quality can be achieved despite the technological shortcomings. While instructional quality involves the effective integration of technology into the learning environment of the classroom, it also requires a vision of what students must learn and be able to do, student engagement, and a thorough understanding of content knowledge and effective online delivery strategies by the instructors (Larreamendy-Joerns & Leinhardt, 2006).

However, issues related to online instructors continue to represent an ongoing challenge. Problems will continue to emerge anytime that there is a difference in the way online and face-to-face faculty are treated regarding academic qualifications, research opportunities, salary, and evaluation criteria. Another problem has to do with the following:

Quality is undermined when business becomes the prevailing model of distance programs. While a market approach to distance education may allow institutions to secure funding and increase revenues, it may bypass academic controls and practices in favor of supply-and-demand opportunities if unchecked. Business models may dissociate, in the name of efficiency, course conception and development from their pedagogical enactment, and in doing so compromise the desirable integrality of the scholarship of teaching. (Larreamendy-Joerns & Leinhardt, 2006, p. 583) These issues are very critical and must be addressed effectively to enhance the sustainability of online education.

Visions Shaping the Future of Online Education

Among the various formats of online education, it appears that stand-alone instruction may have the greatest potential to becoming "massive, effective, and comparatively inexpensive

instruction" (Larreamendy-Joerns & Leinhardt, 2006, p. 584). By "stand-alone" online instruction, it is meant Internet-based instruction without the human interaction (e.g., simulations, virtual laboratories, and Internet-based multimedia modules). This high-tech, Internet-based instruction has given online education more credibility to the point that online instructors and educational researchers have begun to engage in productive dialogue that may lead to learning improvements in both types of instructional delivery.

Progressive online multimedia environments will continue to facilitate the effective delivery of online instruction because they mimic the dynamics involved in high-quality, face-to-face classroom instruction. For instance, well-designed Internet-based instructional models will continue to flourish because they support problem solving and allow detail-oriented instructional guidance using highly structured tasks (Larreamendy-Joerns & Leinhardt, 2006).

Recommendations

Online education will contribute to the advancement of the scholarship of teaching and learning only if several critical issues are properly addressed.

1. Top-notch faculty must become heavily involved in the planning, design, and implementation of online instruction and must continue to engage in formal, scientific research that will lead to the advancement of the scholarship of online teaching and learning. While online education was originally established as an extension of mainstream instruction, it must not play a marginal role or be separated from mainstream academics. It must not become a second-class form of instruction (Caplan, 2004; Larreamendy-Joerns & Leinhardt, 2006).

2. Pedagogical decisions must not be transferred from outstanding scholars and instructors to the individuals involved in the technical aspects of online education. That is, school administrations must provide incentives to faculty, teaching online courses, to assume ownership of their own courses. For instance, financial incentives, recognition, and great importance in tenure decisions should be given to faculty involved in the development of own online courseware (Caplan, 2004; Larreamendy-Joerns & Leinhardt, 2006).

3. Educational stakeholders must cease to measure the quality of online instruction against standards established for the face-to-face instruction. The expectation has been to demonstrate that online education is at least as effective as face-to-face instruction. This expectation is exemplified by the fact that researchers have usually attempted to compare online and face-to-face courses in terms of learning effectiveness by using experimental, quasi-experimental, or causal comparative methodologies and have found online instruction to be at least as effective as face-to-face teaching (Bata-Jones & Avery, 2004; Tallent-Runnels et al., 2006). The "at least as effective" phrase can be interpreted in various ways, including the following: face-to-face instruction and online education have the

same quality, online education is not better than face-to-face instruction, or online education mirrors the deficiencies of face-to-face instruction. In other words, countless individuals have challenged the quality of instruction delivered in a face-to-face learning environment (Larreamendy-Joerns & Leinhardt, 2006). Quite often, online education has been required to demonstrate levels of quality that have been seldom found in traditional, face-to-face learning environments (Jaffee, 1998). Online education must not be required to be "at least as effective" than face-to-face instruction. It should be required to advance the scholarship of teaching and learning (Twigg, 2002).

4. Successful practices must not be overused in an attempt to design new online instructional strategies. Educational tools must be used to support instruction and not as fixed templates in which the subject matter must fit. If used as templates, the risk is that they will not allow for diversity of academic subjects, student learning styles, and formats of online instructional delivery mechanisms. Instructional diversity is necessary to meet the demand of a diverse society (Larreamendy-Joerns & Leinhardt, 2006; Rotter, 2006; Sobel & Taylor, 2005).

5. Educational stakeholders must understand that self-teaching is not the essence of online education. Online instruction has given a diverse group of citizens increased access to educational opportunities, reducing educational inequality. At the very least, online education must continue to support students by providing additional learning opportunities that do have an impact on students' academic performance (e.g., Web-based instructional modules). While efforts must be made to continue to improve online technology that fosters dynamic interaction among all participants in the educational process, technology by itself will not improve the scholarship of teaching and learning. Instructional practices have the most impact on teaching and learning. That is, online learning environments must foster the development of state-of-the-art instructional strategies, allowing faculty to increase the quality of their instruction (Larreamendy-Joerns & Leinhardt, 2006; Moskal, Dziuban, Upchurch, Hartman, & Truman, 2006).

Future Research

While several studies have provided recommendations for practice and future research, most of them did not provide scientific, research-based models and teaching practices that ensure the effective delivery of online instruction. Future research must focus on developing new scientific models for online teaching and learning, based upon sound research methodologies, not just on faculty and student perceptions or the standard model for face-to-face instruction (Tallent-Runnels et al., 2006).

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Factors Motivating and Inhibiting Faculty in Offering Their Courses via Distance Education

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Introduction

Problem to be Investigated

While many colleges and universities have moved forward with implementing distance education (D.E.) programs, administrators still find difficulty in getting faculty to participate willingly. An understanding of faculty motivators and inhibitors, especially faculty perception of the "hassle factor" involved with D.E., will give administrators an edge in D.E. implementation. This study also provides important information that will help administrators understand why some faculty members are more open to involvement with D.E.

The purpose of this study was to discover what factors may motivate faculty members at small, private colleges to adopt distance education, as well as what factors may inhibit that adoption. The college studied is located in the southeast and is a relative latecomer to the distance education arena. In 2003, the college Board of Trustees asked the administration to provide information regarding degree completion and distance learning educational programs for the next meeting. This is a tuition-driven institution, and when enrollment dips substantially, the college budget suffers. Distance education typically has offered new revenue streams for colleges that have adopted it (Diversifying Campus Revenue Streams: Opportunities and Risks, James C. Hearn, 2003).

The research question was: What are the factors that will motivate or inhibit the participation of small, private college faculty in offering their courses via distance education? For the purpose of this study, the term distance education refers to instruction in which both distance and time separate the teacher from the students, as in an asynchronous distance education model.

The phrase "factors that motivate" describes any phenomenon that would cause a faculty member to have a positive attitude toward delivering his/her course content via distance education technology. The phrase "factors that inhibit" describes any phenomenon that would cause a faculty member to have a negative attitude toward delivering his/her course content via distance education technology. These factors might be based on facts or merely on impressions

of what each faculty member feels they would experience should they deliver their course to distance learners. The emotional responses of faculty are more important in this regard than are hard facts about the success or failure of distance education (Black, 1992).

Background and Review of Related Literature

While implementation of distance education programs certainly involves information technology, what is more important is the "people variables" (Levine, et al, 1996). According to Bromley (1998), administrators can be too hasty in pushing DE, treating technology as "something apart from the human world, instead of as a social phenomenon." In the case of this college, the people who will adopt or reject distance education initially are the faculty. Relevant literature discusses factors that will motivate or inhibit faculty participation in distance education.

It is critical to determine what factors will motivate faculty participation. Faculty who are early adopters of technology and already make use of substantial educational technology may be predisposed to using distance education (Jacobsen, 1998) while those who are not early adopters may require other motivating factors. Those other motivators generally parallel the same reasons why faculty teach traditional courses--for intrinsic rewards (Parker, 2003). Parker identified self-satisfaction and flexible scheduling among those intrinsic rewards. Rockwell et al (2002) discovered that the primary incentives for faculty involvement centered on personal rewards, including opportunities to provide innovative instruction and self-gratification or fulfilling a personal desire to teach.

Intrinsic rewards were also the focus of Wolcott's (1999) study in which most faculty members were not motivated to teach distance education courses by promise of stipend, merit pay, promotion or award, but instead to fulfill several personal or socially derived benefits, the top five of which are: a) the ability to reach new audiences that cannot attend class on campus; b) the opportunity to develop new ideas; c) a personal motivation to use technology; d) an intellectual challenge; and e) overall job satisfaction. She also noted that faculty saw distance education as an opportunity to carve out a professional niche for themselves, increase their visibility and reputation on both the state and national levels, establish and maintain "critical links" off-campus, and make industry contacts that led to consulting. A "side benefit" of distance education is its value in assisting faculty members build careers on the added promotion and image they get from teaching a course. Rockwell et al (2002) noted that there are multiple extrinsic motivations for faculty including achieving recognition for their work (including peer recognition), extending educational opportunities beyond the traditional institution, decreased workload and receiving release time for preparation.

Although Rockwell et al (1999) asserted that monetary awards were not significant incentives at a mid-west land grant university, research by Parker (2003) said otherwise, indicating that compensation is indeed an incentive. More broadly speaking, faculty are concerned that good teaching be rewarded whether in traditional or distance education environments.

While intrinsic and extrinsic motivators are more powerful forces in predicting whether a faculty member will participate in Distance education than are the inhibitors that might keep them from participating (Cook, 2003), several inhibitors or disincentives in the literature are still worth noting. Wilson (2001) found faculty unsure of the efficacy of distance education, ranking it last behind the various forms of one-on-one instruction and face-to-face classroom instruction. Wilson also found another common inhibitor was the lack of technical experience, and that technology issue was a common theme in the literature. Faculty frequently expressed inhibitions about not possessing the necessary and progressive technological savvy or having the requisite technical support for themselves (Bower, 2001; Pachnowski & Jurcyzk, 2003, Rockwell et al, 1999).

Several inhibitors stem from faculty concerns about time requirements (Rockwell et al, 1999). They may have valid reason for concern; Pachnowski & Jurcyzk (2003) showed that while course preparation time does drop for repeat distance education courses, up to thirty percent of faculty reported needing significant additional hours of preparation time even in their third semester of teaching the course (2003). Developing a distance education course takes 2-3 times as long as a traditional course and teaching the course takes substantially greater time than a traditional one (AAUP, 2002). Wolcott & Betts (1999) noted the increased amount of time and effort faculty members were required to commit to preparation.

Another disincentive relates to faculty-perceived lack of recognition for the time and effort distance education demands (Wolcott & Betts, 1999). Furthermore, faculty who do participate in distance education or who are considering participating perceive that such activity will be unrewarded and unsupported by the university infrastructure (Wilson, 2001; Dillon & Walsh, 1992). The lack of reward is sometimes, but not always, related to remuneration. Wolcott (1999) found that compensation for outreach teaching including distance education was not adequate. However, in relation to motivation, faculty members were less interested in payment than in an acknowledgment of their work. Finally, faculty may be worried about developing distance education courses on their own time with few institutional resources. Without assistance from instructional designers or graphic designers, faculty may feel that the task is too daunting (O'Quinn & Corry, 2002).

Some faculty inhibition comes due to the perceived lack of face-to-face interaction with students and the preference for traditional student-teacher interaction (Wolcott, 1999; Wilson, 2001). However, there is substantial evidence that the amount of interaction, at least with computer-based distance education, actually *increases*. Because of the individualized nature of e-mail communication, interactions were more numerous and personalized than in many traditional courses (AAUP, 2002.) Bradburn (2002) echoes this in her finding that faculty teaching distance education classes held more office hours per week than those who did not teach distance education. Ironically, the increase in student-teacher interaction may be viewed as a disincentive.

Ownership of intellectual property is a major concern and inhibiting factor among faculty (Bower, 2001). According to Maitland (1998), the NEA has lobbied consistently for legislation protecting the rights of educators to their own work. Ownership of faculty created websites and

videotapes of lectures, as well as course notes suddenly have an increased value now that they can be distributed electronically. Furthermore, distance education courses are often treated by universities like inventions, with the result that the university treats them more like items for which they own the patent and for which they will return a portion of the royalties to the faculty member. This is in contrast to the traditional classroom where the faculty members have the full rights to publish their materials and all royalties return to the faculty member (Estabrook, 1999).

Wolcott (1999) noted inhibitions related to distance education vary according to the stage of the faculty member's career. Senior faculty have less to lose; involvement doesn't cost them as much as it might cost a junior faculty member. They are freer to make the choice to participate in innovative practices and are more immune to the risks that such investments might pose in terms of career advancement. Rockwell et al echo the career concerns, identifying faculty wondering about the effect of distance education on promotion and tenure (1999).

Fortunately, faculty and administrators appear to be equally aware of all the factors that inhibit participation in distance education. The need to develop incentives, support, training, quality control, and to address career advancement issues are concerns shared by both faculty and administrators (Dooley & Murphrey, 2000).

This study applied what is known generally about faculty participation in distance education to a small, private college in the southeast. Therefore the purpose of this study was to determine: What are the factors that will motivate or inhibit the participation of faculty in offering their courses via distance education?

Procedures

A survey was used to measure the factors that will motivate or inhibit the participation of small, private college faculty in offering their courses via distance education. The instrument was administered at the beginning of a normally-scheduled faculty meeting. It was made clear to the faculty members that they were in no way required to fill out the surveys, that their identities would remain hidden, and that although the survey was not commissioned by school administrators the results would be shared with them. Faculty members are quite accustomed to filling out surveys of varying types at these meetings, so this did not pose a threat.

Not all faculty members were present when the survey was implemented. This mortality threat was controlled because the presiding administrator took attendance at the meeting and determined from that list the names of those not present at the meeting. Surveys were sent to those not in attendance through the college post office. These delivered surveys were accompanied by a written explanation identical to the one given to the faculty members present at the meeting.

Questions regarding age, gender, years teaching, and technological competency and open-ended questions aside, the survey consisted of statements for which subjects were asked to select a response based on a five-point Likert scale. This Likert scale was assigned a numerical value between one and five, with assigned as follows: Strongly Disagree: 1, Disagree: 2, Neutral: 3, Agree: 4, Strongly Agree: 5.

To determine the reliability of the instrument, a pilot administration was given to a group of three faculty members, then administered again to that same group after several days. The percentage of same answers from the first to second administration was calculated to determine test-retest reliability and was above 90%.

Construct-related evidence of validity was used to determine the validity of this instrument. The content was shown to be consistent with theory as shown by expert opinion. To achieve this, the instrument was sent to two professionals in the field of distance education who have experience starting distance education programs and working with faculty adopters. The instrument was also reviewed by the college's Institutional Review Board.

Some faculty members may have a pronounced dislike for the changes involved in implementing distance education. These dislikes may be based on the real or perceived amount of work involved, the feeling that distance education lacks validity, or a dislike of change of any kind at a traditional, residential-only school like this one. These attitudes might have caused some to want to purposely sabotage the results.

To control for this threat of subject attitude, I made it clear that this survey was not coming from the administration, but was merely part of my master's degree graduation requirements. It was made clear that the results would be shared with the administration. The subjects were also made aware that the results of this survey would be helpful to the institution as it makes decisions related to distance education.

The accessible population to which my research may be generalized is the faculty members who were present at the faculty meeting at which the survey was implemented as well as those faculty members who were not present but who completed the survey at another time. The target population to which my research may be generalized is the faculty at this small, private college in the southeast. The results of this research will have ecological validity for schools similar in nature, which is to say small, private liberal arts colleges.

Findings

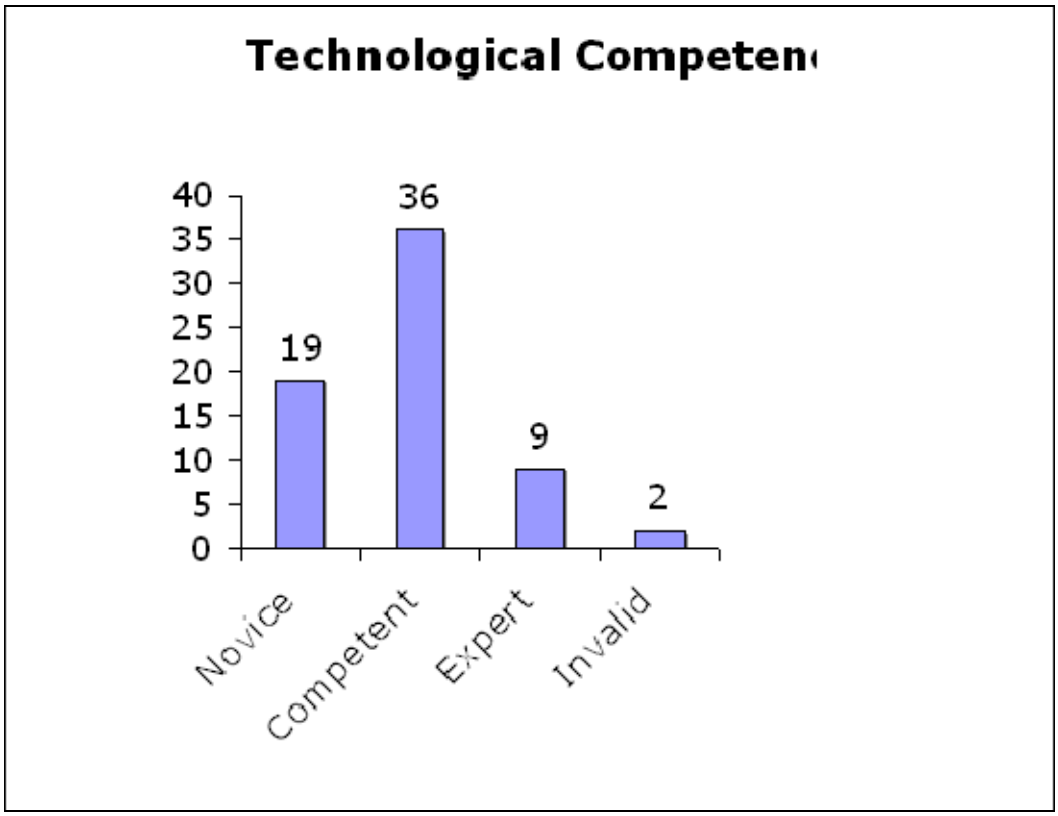
Faculty Characteristics

The faculty at the sample college ranges from thirty-two to seventy-two years of age, and includes sixty-seven males and twenty-four females. Ninety of the faculty members are Caucasian, with the sole minority member being Asian (a native of Korea.) Sixty-three faculty and three administrators responded to the survey, yielding a 70.2% response rate. The survey respondents included 41 men (62%) and 20 women (30%). There were five invalid answers, representing 8% of the sample. One noteworthy element was the large percentage of older faculty. Sixty-four percent (64%) were 50 or older. The highest percentage of respondents (45%) had 20+ years of teaching and 63% were tenured. Only five respondents, representing 8% of the faculty, had previously taught a distance education course. The percent who had personally taken a distance education course was also 8%.

Results Related to Technological Competency

The first thirteen questions of the survey employed true or false questions exploring both the subject's familiarity with technology and his or her current use of technology. Based on answers to these questions, a "technological competency" score was created. This score was used to determine whether expertise with technology was a motivating or inhibiting factor for distance education. Three categories were created: "novice," "competent" and "expert." Faculty who scored 0-4 were classified "novice." Those who scored 5-8 were classified "competent." Those who scored 9-13 were classified "expert." As shown in Figure 1, nineteen (19) faculty representing 29% of the subjects scored in the novice category, 36 faculty (54%) were in the competent category, and 9 faculty (14%) were in the expert category. Two subjects did not answer this set of thirteen questions.

Figure 1



Question 18 stated "If teaching a distance education course paid more than a traditional course, I'd be more inclined to develop one." The mean for novices was 2.84 whereas the mean for the experts was 3.67 (See Table 1).

Table 1

Attitudes Towards Pay Based on Technological Competency

Category	Mean	Median	Mode	SD
Expert	3.67	4	4	.87
Novice	2.84	3	3	1.26

Table 2
Attitudes Toward Losing Personal Contact Based on Technological Competency

Question 20 stated "Losing on-site, live face-to-face contact with students is reason enough to not get involved in distance education." The mean for experts was 2.89 while the mean for novices was 3.47 (See Table 2).

Category	Mean	Median	Mode	SD
Expert	1.89	1	1	1.54
Novice	2.22	2	2	0.88

Question 22 stated "A professor's workload is typically less demanding in distance education courses than in traditional courses." Experts strongly disagreed with this statement. Novices also disagreed but not quite as strongly (see Table 3).

Table 3
Attitudes Toward Faculty Workload Based on Technological Competency

Category	Mean	Median	Mode	SD
Expert	1.89	1	1	1.53
Novice	2.22	2	2	.88

Questions 14-32 of the survey were designed to assess the factors that might motivate or inhibit faculty in offering their courses via distance education. The most significant of these results are outlined below. This data is available in full in Appendix B.

Results Related to Motivating Factors

Question fifteen stated "If the college provided instructor training for distance education, I would be more inclined to offer courses using it." Forty percent (40%) of faculty "agreed" with this statement, and 12.31% "strongly agreed." In this case, the mean (3.18) is skewed by a few very negative responses, since the mode and the median are both 4.0.

Question sixteen stated "A summer stipend equivalent to one course would be a sufficient incentive for me to develop a course via distance education." Over forty percent (43.75%) "agreed" and 7.81% "strongly agreed." In this case, the mean (3.2) is skewed by several very negative responses.

Question seventeen stated “Release time in the form of a one course load reduction during the development stage would be a sufficient incentive for me to develop a distance education course.” Slightly more than forty percent (40.63%) “agreed” and 7.81% “strongly agreed.”

Question twenty-seven stated “Implementing a few distance education courses will fundamentally change the nature of this college for the worse.” More than twelve percent (12.5%) “strongly disagreed” and 43.75% “disagreed.”

Question twenty-eight stated “This college should add distance education course options for our undergraduate, residential population.” More than eighteen percent (18.46%) “strongly disagreed” and 33.85% “disagreed.”

Question twenty-nine stated “This college should add distance education courses for new, nonresidential student populations whom we do not currently serve.” More than thirty-three percent (33.85) “agreed” and 20% strongly agreed.

Question thirty stated “A well-managed distance education program would bring positive attention to our college.” More than thirteen percent (13.85%) “strongly agreed” and 56.92% “agreed.”

Question thirty-one stated “A well-managed distance education program would bring increased revenue to our college.” More than half of the faculty (50.78%) “agreed” and 18.46% “strongly agreed.”

Question thirty-two stated “A well-managed distance education program would bring additional ministry opportunities.” More than thirty-seven percent (37.5%) of the faculty “strongly agreed” and 14.06% “agreed.”

Results Related to Inhibiting Factors

Several individual questions in the survey addressed factors that might inhibit faculty from offering their courses via distance education (See Appendix B).

Question 21 stated “If I were to teach a distance education class, I feel that my role in the student’s education would decrease whereas the role of technology would increase.” More than half of the faculty (53.13%) “agreed” and an additional 21.88% “strongly agreed.”

Question 22 stated “A professor’s workload is typically less demanding in distance education courses than in traditional courses.” More than a fourth of the faculty (26.98%) “strongly disagreed” and an additional 34.92% “disagreed.”

Question 25 stated “It would take a lot of time and effort to repurpose a course I currently teach into a format appropriate for delivery via distance education.” Exactly fifty percent (50%) of the faculty “agreed” and 31.25% “strongly agreed.”

Question 26 stated “In distance education, technical problems during course delivery would be frequent and frustrating.” Again, exactly fifty percent of the faculty 50% “agreed” and 10.94% “strongly agreed.”

Results by Age

Another way of considering the data was to compare the faculty members by age range. When comparing the responses of the youngest age-range with the oldest, some noteworthy results became apparent for several of the survey questions. Question 18 stated “If teaching a distance education course paid more than a traditional course, I’d be more inclined to develop one.” The mean for the youngest faculty group was 4.13 while the mean for the oldest faculty group was 3.13 (See Table 4).

Table 4
Attitudes Toward Pay as Motivator Based on Age Ranges.

Category	Mean	Median	Mode	SD
30-39	4.13	4	4	.64
60+	3.13	3	3	1.19

Question 21 stated “If I were to teach a distance education class, I feel that my role in the student’s education would decrease whereas the role of technology would increase.” Both younger and older faculty groups responded similarly (See Table 5).

Table 5
Attitudes Toward Workload Based on Age.

Category	Mean	Median	Mode	SD
30-39	4.5	4.5	5	.53
60+	4.27	4	4	.59

Question 23 stated “A student’s workload is typically **more** demanding in distance education than traditional courses.” Younger faculty reported a mean of 2.88 while the mean for older faculty was 3.36 (See Table 6).

Table 6
Attitudes Toward Student Workload Based on Age.

Category	Mean	Median	Mode	SD
30-39	2.88	2.5	2	1.36
60+	3.36	3	3	0.74

Question 32 stated "A well-managed distance education program would bring additional ministry opportunities." In response to this question, younger faculty reported a mean of 4. Older faculty reported a mean of 3.27 (Table 7).

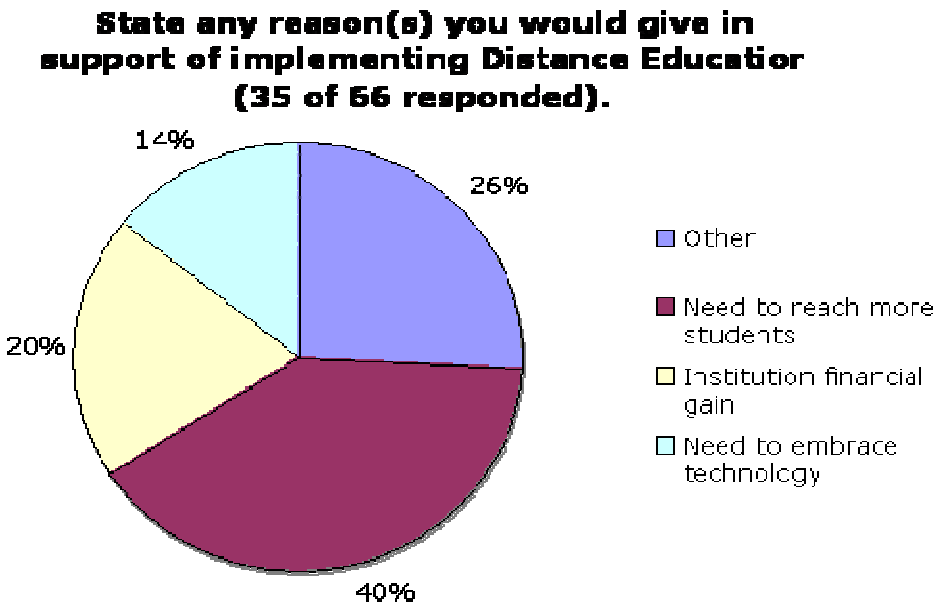
Table 7
*Attitudes Toward Ministry Opportunities Based on Ag*e

Category	Mean	Median	Mode	SD
30-39	4	4	4	.76
60+	3.27	3	3	.80

Results of Open-ended Responses

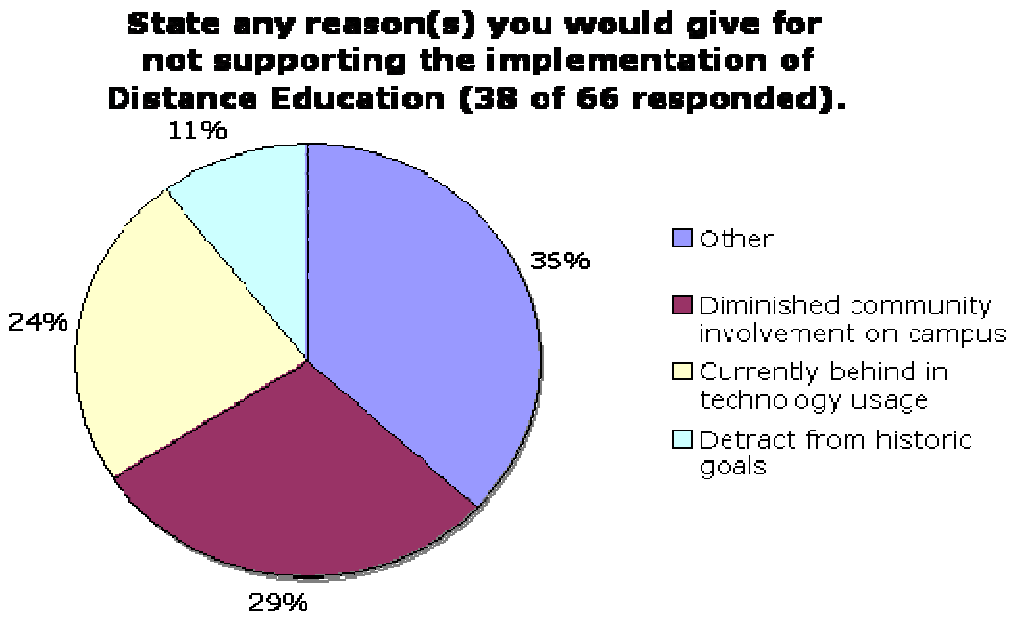
The survey included two open-ended questions whose responses are included in Appendix C. Of the 66 returned surveys, 35 respondents (53%) answered question 32, which reads: "State any reason(s) you would give in support of this college implementing distance education." Of the 35 respondents, 14, or 40% cited concerns centering on a need to reach more/new students. Seven (7), or 20%, cited financial gain for the institution, and 5, or 14%, cited a need to embrace technology (Figure 2).

Figure 2
Reasons to support D.E.



Of the 66 returned surveys, 38 respondents answered question 33, which reads "State any reason(s) you would give for not supporting the implementation of distance education." Of the 38 respondents, 11, or 29%, cited a fear that distance education would diminish community involvement on campus, personal contact, spiritual development and one-to-one contact. Nine, or 24%, cited their feelings that the institution is currently behind with technology and does not excel with technology. Four, or 11%, stated that distance education would detract from the college's historic goals as a residential liberal arts college.

Figure 3
Reasons Not to Support D.E.



Results Related to Tenure Status

The data showed no appreciable difference between tenured and non-tenured faculty except on question 14. That question "My teaching portfolio and vita would be enhanced if I were to teach a distance education course." Non-tenured faculty members were more inclined to agree with this statement than were tenured faculty (See Table 8).

Table 8
Attitudes Toward DE Enhancing Portfolio and Vita Based on Tenure Status.

Category	Mean	Median	Mode	SD
Tenured	2.8	3	3	3.29
Non-tenured	3.6	4	4	0.7

Results Related to Academic Department

When scores were aggregated by academic department, question 27 yielded a noteworthy result. This question stated "Implementing a few distance education courses will fundamentally change the nature of this college for the worse." Five departments disagreed with this statement and therefore seemed more optimistic about distance education's potential. They included Education, Philosophy, Communication Arts, Health/Physical Education/Recreation and Christian Ministries. It should be noted that I looked at only those departments that had two or more representatives who responded to the survey (See Table 9).

Table 9
Departments That are Optimistic About D.E.

Department	Education	Philosophy	Communication Arts	Health, Physical Ed., Recreation	Christian Ministries
Mean	1.67	1.5	2	1.75	2

Results Aggregated by Question Type

When all questions were aggregated by type, four broad categories of questions could be assessed. Questions 14-19 relating to personal implications (my teaching portfolio/vita, instructor training, assistance for course preparation, summer stipend, higher course pay, release time) were called the "self and support" category. Questions 20-21, 23-24 related to changing roles for both students and faculty (losing face-to-face contact with students, technology becoming more important than human instructor, student's workload expectations, faculty control of curriculum) were called the "faculty/student roles" category. Questions 22, 25 and 26 dealing with the perceived downsides of distance education (including increased faculty workload, time and effort required to implement D.E., and potential technology problems) were called the "hassle factor" category. Questions 27-32 related to the value of distance education for the college (whether it will change the nature of the college, adding D.E. offerings for current undergraduates, adding D.E. offerings for new populations, P.R. value for college, increased revenue, additional ministry opportunities) were named the "institutional impact" category. Given these four aggregated categories, the most significant inhibiting factor for faculty participating in distance education was the "hassle factor" category. The mean of the means for the hassle factor questions was 2.4. The mean of the medians for the hassle factor was 2 and the mean of the modes was also 2 (See Table 10).

Table 10
Aggregated Questions by Category

Category names and associated questions	Self and Support Questions 14-19	Faculty/Student Roles Questions 20, 21, 23, 24	Hassle Factor Questions 22, 25, 26	Institutional Impact Questions 27-32
Mean of means	3.16	2.65	2.14	3.33
Mean of medians	3.33	2.5	2	3.33
Mean of modes	3.83	2.5	2	3.67

Summary and Conclusions

The majority of the faculty at this small, private liberal arts college had had limited experience with teaching or learning using distance education. In spite of that inexperience, faculty across all categories consistently viewed distance education as a lot of work. In fact, the "hassle factor" (related to increased faculty workload, time and effort required to implement D.E., and the potential for frequent frustrations with technology) was the single biggest inhibitor for faculty. Either faculty have read some of the literature or heard horror stories from colleagues at other schools. The literature on D.E. would support the truth of the "hassle factor."

Faculty members who are novices with technology are unlikely and/or unwilling candidates for teaching distance education. It may be that novices believe that their lack of experience with technology makes them poor choices for pioneering distance education efforts, and that is most likely correct. Being a novice is itself a significant inhibiting factor. Experts are more likely to possess the skills necessary to pioneer distance education, but their expert status makes them more aware of technological challenges and time requirements, and therefore may make them reticent to step forward unless there are financial incentives.

Younger faculty, in general, are more motivated by financial incentives and may be willing to pioneer distance education courses if offered additional pay, summer stipends or release time.

Both younger and older faculty members think their role as teachers will be diminished as the role of technology increases. The literature suggests that the role of the teacher will change but not necessarily diminish. While it is true that the nature of the interaction with students becomes computer-mediated, the quantity of interaction with individual students often increases. On a related note, while some faculty are concerned about the loss of face-to-face contact with students, those with expert status seem to understand that other forms of technology-based "contact" with students (i.e. e-mail, chat rooms, etc.) might be not ideal but workable alternatives to face-to-face contact. At the very least, the experts do not seem to believe that the loss of face-to-face contact is a good enough reason to avoid online delivery of courses.

Younger faculty are more optimistic than their senior faculty colleagues about ministry opportunities that D.E. might bring to the college. The 30-39 year old group, although numerically small, have no doubt been required to use the computer and Internet for most, if not all, of their adult lives and have learned that interpersonal communication can occur using computer-mediated communication.

Forty percent of those who responded to the open-ended question about why to implement distance education cited the need to reach more/new students. Some faculty may wish to extend the college's mission or educational offerings to other groups while other faculty may see increased enrollment as a means to the end of increasing financial stability for the college. An additional 20 percent cited the potential for institutional financial gain, perhaps due to recent budget cuts and salary freezes. This group may see D.E. as an alternative source of income that can be used to support the current traditional approach.

Twenty-nine percent of those who offered reasons not to support D.E. cited a fear that D.E. would diminish community involvement on campus, personal contact, spiritual development and one-on-one contact. This inhibiting factor was also covered by question 20 of the survey, which stated "Losing on-site, live face-to-face contact with students is reason enough to not get involved in distance education." More than fifty-four percent of faculty either agreed or strongly agreed with this statement. The literature has demonstrated this concern on other college campuses as well. In addition, 24% of faculty responding to this question believe that their college is currently behind in technology and does not excel with it. This could be due to recent budget cuts, internet and e-mail connection problems and perceived understaffing in the institution's Information Technology. Addressing some of these current technology issues might help overcome this inhibiting factor. Of course, addressing that factor might require the very dollars that D.E. is hoped to provide.

This study has one significant limitation. Although the survey asked if faculty had personal experiences with teaching or taking a distance education class, it did not ask whether faculty had had personal experience using Blackboard's online software for teaching support. If a faculty member's experiences with Blackboard were negative, this might be an inhibiting factor for D.E. If a faculty member's experiences with Blackboard were positive, this might serve as a motivating factor for them to develop complete courses online. Further exploration of faculty attitudes toward Blackboard might serve as a preliminary test case for both faculty attitudes toward online teaching and their actual experience with the "hassle factor."

If college and university administrators wished to pursue D.E., one approach they might take would be to begin with market research, determining what courses students are willing to pay for, then determine the delivery system and provide resources to support it technologically and in course design. Administrators should seek to reduce the hassle factor by ensuring that the delivery technology is sound. Ideally they would also provide financial incentives and release time to motivate faculty.

Unfortunately, that approach is based on an economic model, and turning education into a commodity (which higher education tends to do in this consumer-oriented culture) can come into conflict with classic notions of what it means to offer a liberal arts education. Furthermore, some faculty are genuinely concerned that their college's historic mission as an undergraduate, residential liberal arts institution is incompatible with distance education (see Appendix C).

The Midwest Higher Education Commission found (Gifford, 1999) that most innovative efforts in higher education today are the product of individual faculty members working alone, with the use of innovative approaches and materials restricted to individual courses. This implies that administrators would be wise to begin by identifying individuals likely to innovate in distance education. Those individuals will tend to be younger, in departments where faculty are less likely to see D.E. as threatening to the overall institution, and who are at least competent or ideally expert in their use of technology. On the downside, the same Commission found that faculty's innovative concepts were largely disconnected from a coherent theory of instruction. This

Commission finding suggests that if administrators seek innovators to develop online instruction, they would be wise to do so within a clearly articulated educational philosophy.

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Appendix A

Data Collection Survey

Gender: M F

Age: 20-30 30-40 40-50 50-60 60+

Years of teaching experience: 0-2 3-5 6-9 10-14 15-19 20+

Tenured: yes no

Department: _____

True or False

1. I have taken a distance education course at the undergraduate or graduate level.

2. I have had at least one positive experience with teaching a distance education course in the past.

3. I use several forms of technology in my classroom for teaching.

4. I can create my own presentation graphics (for instance, using PowerPoint)

5. I use email for most of my correspondence with my students.

6. I am able to scan photographs into digital files.

7. I am able to manipulate digital images using software.

8. I am able to record and use digital sound in my presentations.

9. I am comfortable connecting a computer to various output devices.

10. I can create my own web pages.

11. I am familiar with teaching methods appropriate for distance education.

12. I could confidently deliver a course over the web.

13. I have taught a distance education course in the past.

Likert scale questions: strongly disagree, disagree, neutral, agree, strongly agree

14. My teaching portfolio and vita would be enhanced if I were to teach a distance education course.

15. If the college provided instructor training for distance education, I would be more inclined to offer courses using it.

16. A summer stipend equivalent to one course would be a sufficient incentive for me to develop a course via distance education.

17. Release time in the form of a one course load reduction during the development stage would be a sufficient incentive for me to develop a distance education course.

18. If teaching a distance education course paid more than a traditional course, I'd be more inclined to develop one.

19. If I had assistance from distance education specialists, graphic designers, and/or instructional designers, I would be more inclined to develop a distance education course.

20. Losing on-site, live face-to-face contact with students is reason enough to not get involved in distance education.

21. If I were to teach a distance education class, I feel that my role in the student's education would decrease whereas the role of technology would increase.

22. A professor's workload is typically less demanding in distance education courses than in traditional courses.

23. A student's workload is typically more demanding in distance education than traditional courses.

24. If I were to teach a distance education class, my control of my curriculum might diminish.

25. It would take a lot of time and effort to repurpose a course I currently teach into a format appropriate for delivery via distance education.

26. In distance education, technical problems during course delivery would be frequent and frustrating.

27. Implementing a few distance education courses will fundamentally change the nature of (name of college removed) for the worse.

28. (Name of college removed) should add distance education course options for our undergraduate, residential population.

29. (Name of college removed) should add distance education courses for new, nonresidential student populations whom we do not currently serve.

30. A well-managed distance education program would bring positive attention to (name of college removed)

31. A well-managed distance education program would bring increased revenue to (name of college removed).

32. A well-managed distance education program would bring additional ministry opportunities to (name of college removed).

Open-ended questions

33. State any reason(s) you would give in support of (name of college removed) implementing distance education.

34. State any reason(s) you would give for not supporting the implementation of distance education.

Appendix B

Question		Mean	Median	Mode	Standard Deviation
14	My teaching portfolio and vita would be enhanced if I were to teach a distance education course.	3.05	3	3	1.16
15	If the college provided instructor training for Distance education, I would be more inclined to offer courses using it.	3.18	4	4	1.27
16	A summer stipend equivalent to one course would be a sufficient incentive for me to develop a course via Distance education.	3.20	4	4	1.18
17	Release time in the form of a one course load reduction during the development stage would be a sufficient incentive for me to develop a Distance education course.	3.22	3	4	1.12
18	If teaching a Distance education course paid more than a traditional course, I'd be more inclined to develop one.	3.25	3	4	1.17
19	If I had assistance from Distance education specialists, graphic designers, and/or instructional designers, I would be more inclined to develop a Distance education course.	3.59	4	4	1.20
20	Losing on-site, live face-to-face contact with students is reason enough to **not** get involved in	3.41	4	4	1.18

	Distance education.				
21	If I were to teach a Distance education class, I feel that my role in the student's education would decrease whereas the role of technology would increase.	3.80	4	4	0.98
22	A professor's workload is typically **less** demanding in distance education courses than in traditional courses.	2.22	2	2	1.01
23	A student's workload is typically **more** demanding in distance education than traditional courses.	3.02	3	3	0.89
24	If I were to teach a Distance education class, my control of my curriculum might diminish.	2.83	3	3	0.98
25	It would take a lot of time and effort to repurpose a course I currently teach into a format appropriate for delivery via Distance education.	4.02	4	4	0.93
26	In Distance education, technical problems during course delivery would be frequent and frustrating.	3.64	4	4	0.78
27	Implementing a few Distance education courses will fundamentally change the nature of (name of college removed) for the worse.	2.64	2	2	1.16
28	(Name of college removed) should add Distance education course options for our undergraduate, residential	2.62	2	2	1.16

	population.				
29	(Name of college removed) should add Distance education courses for new, nonresidential student populations whom we do not currently serve.	3.46	4	4	1.17
30	A well-managed Distance education program would bring positive attention to (name of college removed).	3.72	4	4	0.91
31	A well-managed Distance education program would bring increased revenue to (name of college removed).	3.74	4	4	0.96
32	A well-managed Distance education program would bring additional ministry opportunities.	3.47	4	4	1.02

Question	Strongly Disagree percentile	Disagree percentile	Neutral percentile	Agree percentile	Strongly Agree percentile	Invalid Response percentile
14	14.06	14.06	32.81	31.25	7.81	3.13
15	13.85	18.46	15.38	40.00	12.31	1.54
16	14.06	10.94	23.44	43.75	7.81	3.13
17	10.94	12.50	28.13	40.63	7.81	3.13
18	10.94	12.50	29.69	34.38	12.50	3.13
19	7.81	12.50	15.63	40.63	23.44	3.13

20	4.69	23.44	17.19	35.94	18.75	3.13
21	0.00	17.19	7.81	53.13	21.88	3.13
22	26.98	34.92	30.16	4.76	3.17	4.76
23	1.59	28.57	41.27	23.81	4.76	4.76
24	6.25	34.38	34.38	20.31	4.69	3.13
25	1.56	7.81	9.38	50.00	31.25	3.13
26	0.00	7.81	31.25	50.00	10.94	3.13
27	12.50	43.75	20.31	14.06	9.38	3.13
28	18.46	33.85	18.46	26.15	3.08	1.54
29	7.69	12.31	26.15	33.85	20.00	1.54
30	4.62	3.08	21.54	56.92	13.85	1.54
31	3.08	7.69	20.00	50.77	18.46	1.54
32	6.25	6.25	35.94	37.50	14.06	3.13

Appendix C

Note: Questions 33 and 34 were open-ended questions. Some respondents chose not to answer these questions, others answered only one or the other, and still others responded with one or multiple answers to each. Multiple answers from any one subject are grouped together.

Question 33: State any reason(s) you would give in support of (name of college removed) implementing distance education.

- Technology is an integral part of our lives and it is imperative that we embrace it for educational purposes if (name of college removed) is going to impact the 21st Century.

- Education delivery across the nation has and is changing. We are dated in response to "life-long learning," a quote we espouse openly.

- It would broaden our exposure and outreach.

- Will it detract from our traditional program? Could we give a diploma which indicates it was earned in the distance/non-traditional program?
- Drawing attention to the college.
- New opportunity for (name of college removed) to reach out to a new constituency.

- Do it in a way as to net significant profit for (name of college removed) and make our Xtn (sic) lib arts perspective more available to non res. students.

- Competitive advantage. Failing to do so could make us increasingly irrelevant in higher education. Extending the mission and ministry of (name of college removed).

- Could offer opportunity to reach professional students and those working in missions. We would need some on-site elements to the program for instance…summer intensives.

- Keeps (name of college removed) competitive w/other schools.

- Provides service to others. Help the institution financially.

- Carefully controlled - keeps us current with technological delivery and would seem to reach a niché in today's market.

- It would allow (name of college removed) to be on the cutting edge in this area of education.

- We wish to be more comprehensive in our outreach and more financially prudent.

- Increased revenue and exposure for the College.

- Students expect it – and have it at many other (growing) institutions comparable to (name of college removed).

- More and more students expect the convenience – especially graduate students. It is an educational trend that is here to stay. We should explore what courses can BEST delivered this way and try a few courses.

- Benefit to non-traditional student populations.

- Economic benefits.

- The main arguments I would offer are included in the survey. Overall, I support the idea of limited distance education offerings…but only if our regular full-time faculty are heavily involved in the course development, deliver and quality control.

- For students that need to repeat a course or students that could work to relieve some of the requirement courses.

- Potential for reaching students not currently enrolled.

- Assist students in completing required, core curriculum.

- I think distance education courses could be a good opportunity to reach a new population, thereby increasing our visibility and generating revenue. I am very interested in technology in education and am generally quite supportive of distance education initiatives. My response on Questions 14-21 are neutral or negative because of what I teach. While I strongly support distance ed in general, I don't think it is feasible in my own area-undergraduate foreign language courses.

- I do not support it.

- More options for students.

- Contacts with people who can't come to campus.

- It's a fad.

- More ministry opportunities. More service to community.

- I need more info to answer this question.

- I support the implementation of distance learning to reach a currently unserved population, outside our residential population. D.L. offers outreach opportunities as well as reaches an untapped resource.

- We could provide continuing education at a reasonable cost to our graduates and others.
- Additional revenue.
- Provided opportunities for individuals all over the world to experience (name of college removed) from afar.

Question 34: State any reason(s) you would give for not supporting the implementation of Distance education.

- It would be essential that (name of college removed) provide enough curriculum development resources and technical support services to make this a quality learning experience.
- None.
- We do a mediocre job of supporting technology already (hand-drawn frown face). I have a computer with Windows 98. My classroom has a DVD player that will not play more modern DVD's. It is often difficult to even check-out a faculty lap-top.
- Diminish community involvement on campus.
- I have a fear that this kind of program could water-down (name of college removed) high standards of academy.
- We should not do something poorly – that's all.
- Infrastructure requirements. Personnel requirements.
- Technical challenges – we are understaffed in I.S. already – (they wouldn't be in a position to support us.)
- Lack of tech support and hardware/software.
- None.
- Not to lose personal contact with students and reduce residential student count.
- Do we have the financial means to pursue this area of ed.?
- I much prefer the environment of the traditional classroom. I am also frustrated w/ the general expectation of distance learners that online courses are easier.
- Services (currently) and equipment is meager!

- Potential for undermining residential academic program with its commitment to develop the whole person. Increased risk of jeopardizing (name of college removed) academic reputation, by engaging in programs that could water-down the curriculum. Could have unintended negative effect on residential enrollment.

- We need to move very slowly in this. Our college fulfills a niche in its person-to-person, community centered education.

- I am not sure that sufficient funding could be appropriated to make it top-notch. Current support for existing on campus resources is low-end.

- Face-to-face education provides more opportunity for building strong community and spiritual development. God with us.

- Distraction from historic goals, purpose. Diversion of resources and administrative energies.

- Lack of personal attention to student's needs. Lack of involvement of students with chapel, campus community, etc.

- It might change our core values – I'm very concerned about that.

- I think the stated concern that heavy reliance on distance education (for financial reasons utilizing adjunct faculty) might lead to mission drift and loss of "fit" between institutional and student values. Must be taken seriously. Other colleges (e.g. name of college removed) that have done this have benefited financially but have lost many of their spiritual distinctives.

- Our media resources are so far behind – I would hate to see our monies creating new things when we can't support our existing technology.

- I am concerned about technical demands for this type of program in view of current lack of ability to maintain current equipment. I am also concerned about loss of spiritual emphasis in this type of course.

- Current technology for what we need on campus, as well as support service is already inadequate. Distance education would only exacerbate this problem. Distance education is inconsistent with our mission.

- To replace classes where interaction between faculty and students is essential.

- I would support limited availability for residential undergraduate students, most of the focus should be on residential students. Some studies seem to show that Distance Ed is

not cost effective. If it appears that it would cost rather than generate revenue, I would not support Distance Ed.

- See 30, 31, 32 above. (Subject answered "strongly disagree" to all)
- I think my particular courses are too "hands-on" to be good candidates for distance learning.
- I am too busy!
- I have reservations about evaluating learning from online science courses.
- Lack of one-on-one relationships. Barrier to Chn. faith community.
- It's a fad.
- Major concern is effect on residential life; chapel, community.
- I do not support DL for the residential committee (sic) because there can be no substitute for daily interaction between students and professor in meeting the college's mission.
- Information Services is woefully inadequate when it comes to meeting our current needs. I don't see how they could take on a major new task.
- The sole justification is additional revenue.

Streamlining Forms Management Process in a Distance Learning Unit

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Abstract

Managing the required forms for a variety of distance courses is challenging and sometimes overwhelming. Inefficient management can lead to a variety of problems in course delivery, such as delays in obtaining textbooks, problems in obtaining copyright permission, and even course delays. In an effort to facilitate, streamline and improve forms management, a system was designed to streamline the management of required forms for face-to-face, hybrid, online and televised courses. The system provides faculty, and distance learning administrators with an easy method to manage all forms effectively and efficiently.

Introduction

Preparation and management of distance learning courses often require greater front-end preparation time and resources than traditional courses (Hartman, Dziuban & Moskal, 2000; Smallwood & Zargar, 2000; Smith & Caris, 2001). This additional workload is partially due to the variety of paper-based forms required for the management of distance learning programs. Following the paper-based culture of on-campus units, distance learning units require faculty to complete a myriad of forms such as forms for developing syllabi, ordering textbooks, obtaining copyright clearance, requesting software, requesting course packs, and proctoring exams. Because of the complexity of workflow processes associated with manually processing and routing paper-based forms, the management of such forms has become tedious and time-consuming. This complexity increases when distance learning units use multiple delivery modes (e.g., broadcasting, web-based, CD-ROMs, video streaming) as every mode often has its own specific forms and procedures that must be used. In addition, with more faculty teaching from

remote sites, the submission of paper forms has become cumbersome, and increased the difficulty of tracking and managing course delivery information.

To effectively manage a large number of forms and to streamline distance course delivery, many distance learning (DL) units have converted conventional paper forms to electronic forms. However, this electronic conversion has not always improved the situation:

It is surprising how few organizations have implemented online forms on their intranets. Most have instead created PDF versions of their existing forms, and have placed them on the site. Staff have to print these off, fill them in by hand, and submit them via internal mail. This is only a very small benefit beyond the original paper forms. (Robertson, 2004, p. 1)

In recent years, distance learning staff have also utilized specialized software, such as Adobe Acrobat. Using such software, Portable Document Format (PDF) forms can be completed and e-mailed to appropriate parties. However, unless complete forms management solutions are implemented (Adobe 2003), such specialized software often requires several manual operations such as printing and scanning or faxing before the task is completed.

Despite the problems noted above, little online and distance learning literature has focused on workload issues associated with course delivery logistics. To compensate for this gap in the literature, this article will discuss the development of an online form management system designed to (1) reduce faculty workload and increase their satisfaction by simplifying forms management processes, and (2) minimize the DL units' administrative burden and costs associated with paper-based forms.

Project Background

The site at which the online form management system was developed is a moderate sized, urban, public, doctorate-awarding, research university that is a national leader in technology-mediated distance learning and has been involved in technology delivered distance learning since the mid-1980s. Historically, course delivery has been conducted using interactive television via satellite broadcast from campus to sites around the country. In recent years, delivery modes have been expanded to include two-way video, Internet, CD-ROM, and video streaming.

To ensure the success of various course delivery modes, faculty are required to complete a variety of course-related forms such as syllabi, textbook ordering, copyright clearance, software requests, course pack requests, and exam proctor forms. As shown in Figure 1, faculty complete the forms manually and submit them to the office of Distance Learning for processing and routing to different departments. In addition to burdening faculty with numerous forms, this paper-based manual approach created tracking, processing, and retrieving problems to the DL staff. Paper-based forms were traditionally contained in binders and stored in filing cabinets and boxes. Over time, the storage of these forms has become cumbersome and problematic. Inefficient management of forms often leads to a variety of problems, such as textbook delays, course meeting delays, problems with obtaining copyright permissions, and so forth.

In an effort to facilitate, streamline, and improve the forms management, a system was designed to streamline the management of required forms for face-to-face, hybrid, online, and televised courses. A pioneering web-based system was developed and has been used by faculty since the summer semester of 2006. Business process reengineering was used as a methodological framework for examining and improving the university's internal procedures (Aversano, Canfora, De Lucia, & Gallucci, 2002). The new web-based environment provides faculty with an intuitive web interface to manage all forms effectively and efficiently. This system also provides DL staff with the capability to efficiently track forms submission online.

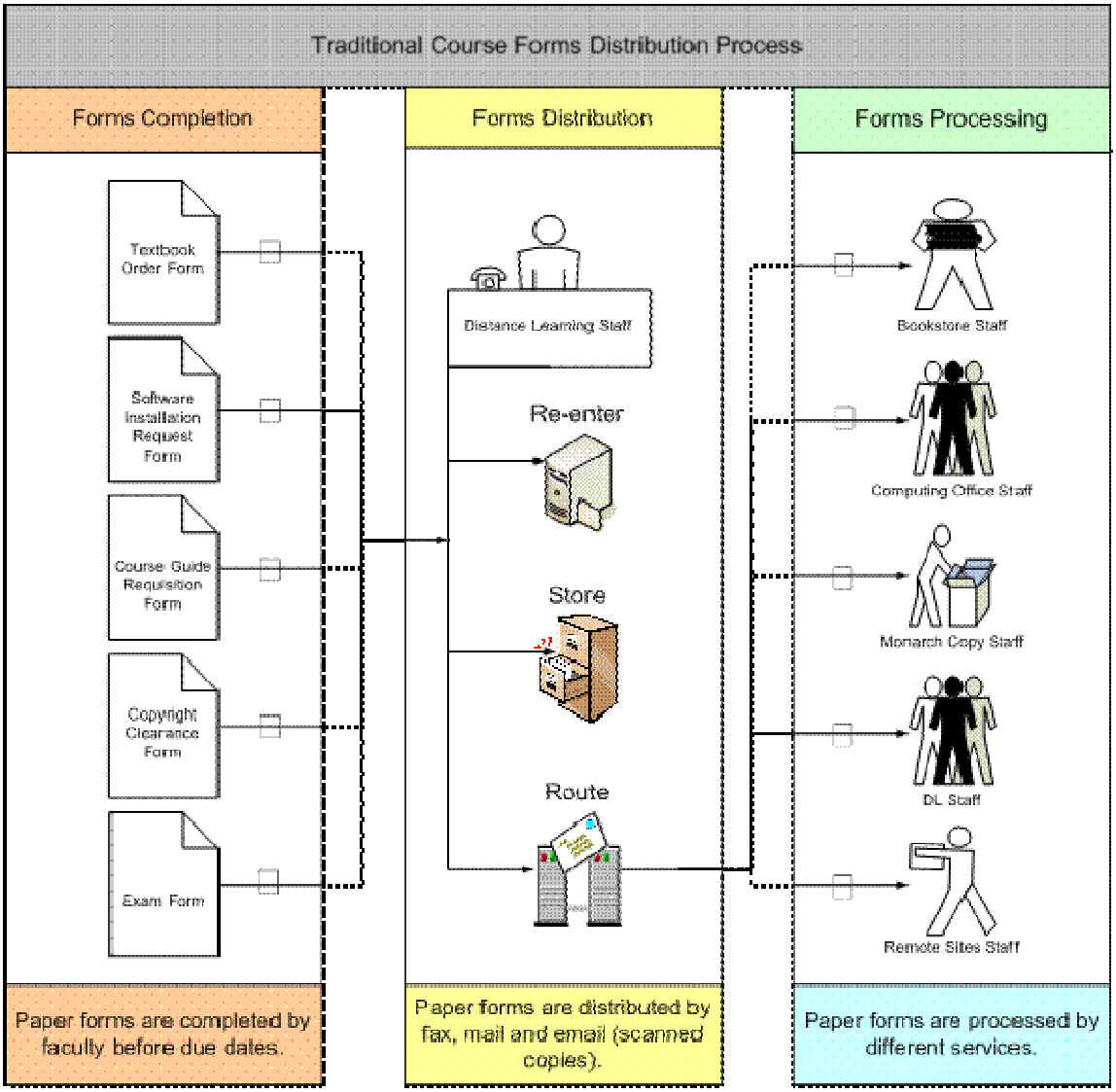

Figure 1. Paper-Based Forms Processing Approach

Online Forms Service

The new approach adopted a rapid application development approach (Robinson, 1995) to the design and development of the online form services system. Our design approach embraced several core design principles: layout design, web development, system integration and application programming. As part of the faculty support portal, the system [http://www.clt.odu.edu/onlineform/] has been through two iterations of "molding" and "tweaking," based on feedback collected from usability tests and faculty reviews. So far, over 90 faculty teaching distance learning courses have used this system for their course forms submission and management. The following is a brief overview of the key features currently available in the system:

Completing forms online. Faculty can fill in and submit various course forms online at anytime and anywhere (except for copyright clearance form which requires hard copy signature). Faculty can also check due dates for various course forms (See Figure 2).

Figure 2. Online Form System Interface

Adapting forms from previous semesters for current use. Faculty can reuse/update previous semesters' forms to create new ones. User profile information is used to pre-populate generic forms fields. This reduces the data entry time for faculty (See Figure 3).

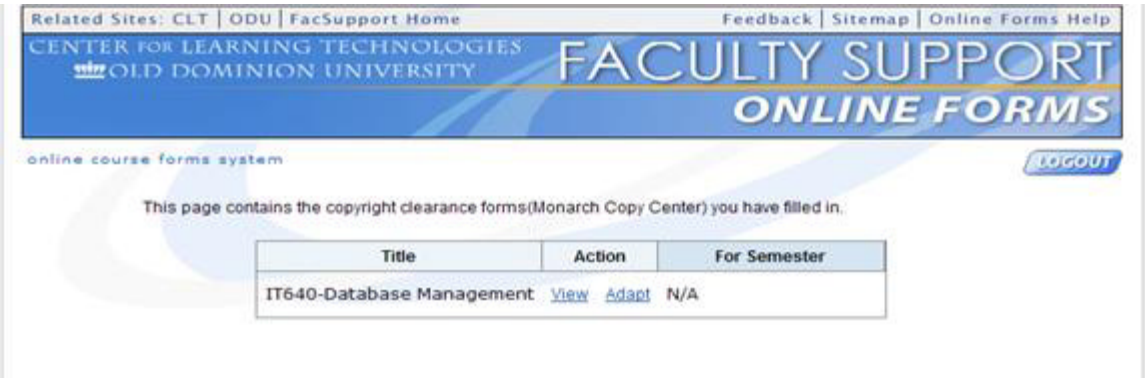

Figure 3. Online Form System Retrieval Interface

Provide DL staff with immediate knowledge of form usage. All course-related forms are saved in a centralized database, easily maintained and tracked by DL staff. The interface provides an easy interface to view and generate reports, import and export data, and to send automatic reminders to faculty. (See Figure 3).

Figure 4. Online Form System Workflow

In summary, as shown in the Figure 4, the online forms system plays an essential role in facilitating coordination and communication among the stakeholders involved in the course delivery logistics.

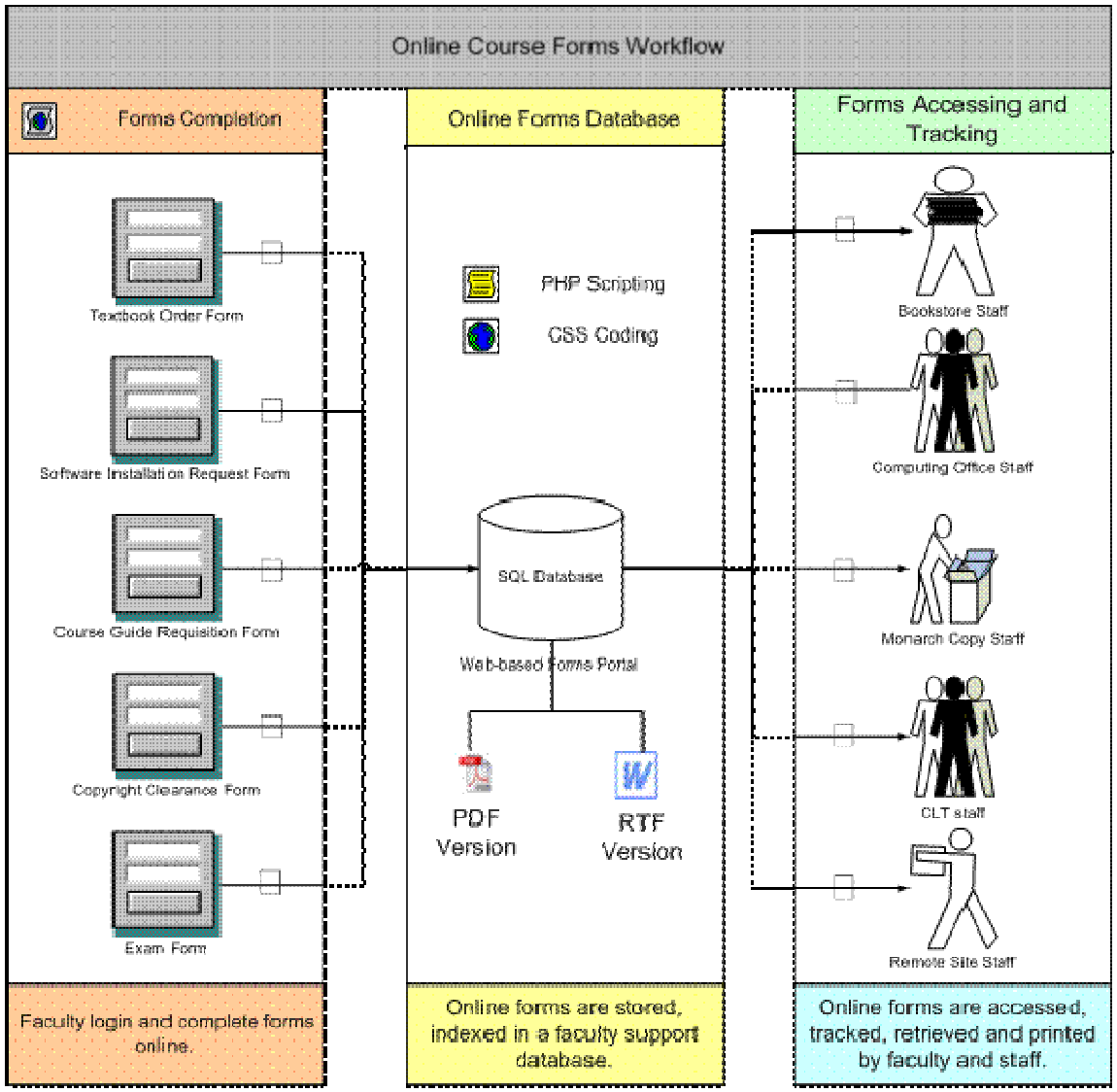

Figure 5. Online forms management system

Technical Architecture

The system is a database-driven tool that helps streamline forms management process. To deploy the system on the web, a Microsoft MSSQL server is used as the backend database environment, because of its capacity to support the required functionalities. PHP is used as a scripting language to create dynamic web content by querying the database. CSS was used to ensure the overall consistency of the system's look and feel. A user account authentication system maintained by the Center for Learning Technologies is used to prevent unauthorized access to the online form services, thereby protecting the security of the application. An instructional designer, two instructional technologists and an interface designer were involved in programming and developing the actual system.

Evaluation

To capture first-hand feedback about faculty experience using the online forms service, faculty were asked to provide feedback and suggestions using an online form. After going through several modifications of the interface, including suggestions from faculty and CLT staff, the system has received good ratings and positive comments from faculty who are pleased with the new online form services. A review of initial feedback indicates that the system is a time-saving and convenient tool for the forms management process and improves the performance of the DL operations. The system also enables all staff involved in the process to work together asynchronously and remotely. Through the development and subsequently offering of this online form service a number of lessons have been learned, including the following:

1. Online forms are not simply the electronic replication of their print paper format. Although considerable attempts have been made to make the online forms appear the same as paper forms, efforts also have been made to ensure the usability of all forms. The online forms have been implemented with design consideration to reduce data entry time (data pre-filling), validation, and improve data accuracy. In addition, form fields have been labeled with instructions to tell the user what type of information is required for the field, the format the information should follow, and any other necessary information. An online tutorial for using this service also have been provided.
2. It is critical to keep online forms up-to-date. To help online forms service run smoothly, our DL staff maintains and updates the forms on a regular basis. From semester to semester changes are made to keep the forms updated.
3. Providing faculty support is crucial. Faculty have different needs for technical assistance and different levels of proficiency with technology. To be responsive to faculty needs and to ensure they use the system correctly, technical help is provided to faculty in a timely manner.
4. Making an easy transition to electronic forms. To avoid a disruption of the normal course delivery operations, **both paper and electronic forms have been made available to faculty. We adopted a phased approach to facilitate faculty buy-in and use of the new system. Encouraging and helping the faculty to use the online system eventually will lead to the discontinuation of paper-based forms.**
5. Tracking forms submission is essential. Some faculty tend to be tardy in their completion of required forms. This system provides DL staff with the capability to efficiently track and remind faculty of upcoming due dates.

Conclusion and Future Work

There is no question that moving from a paper-based to a web-based system is a growing trend in business and industry, such as banking and airlines companies. With university faculty and staff experiencing problems related to the effective management of course-related forms, it has become clear that a more efficient system needs to be implemented. New web-based technology

has the potential to create new systems that will streamline the forms management process, save time, lower costs, and reduce problems associated with the manual processing of forms (Nimmons, 2003). The centralized web-based database system described in this paper provides a more efficient method of reducing the problem of managing and tracking numerous course-related forms. This system can continue to expand in scope to include other management tasks and can be integrated with other university systems (e.g., university course registration system) in the near future. Adoption of a similar system by other colleges and universities can benefit other distance learning programs and encourage their efforts in going paperless.

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Conditions for the Success of Online Mentoring a Case Study

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Abstract

This paper reports on the findings about a mentoring project that failed. It is based on a case study in which the writer participated as a mentor of the staff members of the South African Department of Labour.

In 2002, the South African Department of Labour (DoL) published a tender ref: Services/ta/cst/p1/wp3 for Communications Skills Training for Staff of DoL. The project was known as the Business Communication Programme (BCP) and the European Union Commission for South Africa funded it. The crucial objective of the BCP was to develop work-based communication skills. This programme was designed to drive a redress and equity process of empowering learners of English as a second language and in particular black women and people with disabilities to advance in the system and to encourage learners to be more effective in the workplace.

The Subjects

Forty-nine learners and 14 mentors were observed in the Business Communication Programme (BCP) for two years from 2003 to 2005. The learners all came from the South African Department of Labour in Pretoria and the mentors came from SACHED, Wits University and the University of South Africa. The mentoring group consisted of two Indians who withdrew in the early stages of the programme, two black Africans and 10 whites. I was one of the two black mentors and my research supervisor was one of the white mentor experts from the University of South Africa. The learners' group comprised black and white adult females and black males. They were all South African speakers of English as a second language of post secondary school level.

Theoretical Framework

Online Mentoring

In order to put the issue of mentoring in its historical perspective, we begin by tracing the origins of mentoring going as far back as 18 B.C. literature (Homer, 1955), where we learn that Mentor, in Greek mythology, was the faithful companion of Odysseus, King of Ithaca. When Odysseus set off for the Trojan wars, he left Mentor in charge of the household with particular responsibility for ensuring that the king's son, Telemachus, was raised to be a fit person as heir to his father's throne.

It is however worth noting that while some studies seem to recognise these classical underpinnings of mentoring (Hamilton and Darling in Hurrelman and Engel, 1989), some other research shows that basing mentoring on its origins creates an impression of myth and the world of fairy tales and fantasy (Murray, 2001).

Away from the Homeric era, various perceptions of mentoring have been proffered in recent times. Kram (1985) calls it "a developmental relationship that involves organisational members of unequal status, or less frequently, peers". Darwin (2000) even ventures into the possibility of juniors mentoring seniors in a workplace. A broader definition of a mentor is given by Hutto *et al* (1991), who defined a mentor as "an experienced, successful and knowledgeable professional who willingly accepts the responsibility of facilitating professional growth and support of a colleague through a mutually beneficial relationship". Nonetheless, for the purposes of this research, we will consider mentoring as a developmental relationship between a less experienced person and a more experienced person from an external mentor point of view and not just involving members of the same organisation.

Education in the cyberspace has been a subject of great debate since the late 1970's when the Internet was still in its infancy stage. Literature thus shows a proliferation of arguments for and against promoting education in virtual space. While some researchers glorify the evidence of reality in virtual space and the benefits that accrue with the advancement of the Internet technology (Bassi, Benson and Cheney, 1996), others have questioned whether in fact concepts like mentoring which seem to assume a strong social dimension can be promoted in a systematised channel like the technologically influenced cyber world (Kealy and Mullen, 2003). Where some research has challenged whether cyber technology can be used as a substitute for face-to-face education (Sinclair, 2003), proponents of the benefits of online education have argued that the two approaches are not comparable as they are affected by totally different circumstances and available resources, and are therefore aimed at solving different problems.

Although the debate is still out on the superiority of online education compared to the traditional methods of face-to-face education or indeed using post office mail or courier systems, it is clear that distance education practitioners will be eager to embrace the most effective mode of education in distance learning. With the undeniable reports that cyber education cuts down on distance and time, it is self evident that this mode is attractive and therefore it becomes important to invest in exploring what conditions are necessary for the success of this type of education.

Process writing

According to Song and August (2002), portfolio assessment of writing, which makes use of multiple writing samples produced at different times, has been found to be ideally suited to programmes that use a curriculum influenced by the writing process due to the fact that portfolios can accommodate and even support extensive revision. They can also be used to examine progress over a period of time, and can empower students to take responsibility for their own writing.

Research is rich in support of the use of the portfolio assessment system (Camp in Bennett and Ward, 1993; Gill, 1993 and Herman and Winters 1994). Hamp-Lyons and Condon (2002) advocated the use of portfolios for students of English as a Second Language because they found them to be especially suitable for non-native English-speaking students. However, much as portfolio assessment promises huge benefits for curriculum and assessment, it also faces challenges. According to Brown and Hudson (1998) five disadvantages of using portfolio assessment can be identified as: the issues of validity, reliability, design decision, logistics and interpretation. These researchers found that portfolio assessments were time-consuming and that reliability and validity of the assessments remained unresolved in this type of assessment. Song and August (2002) further posed searching questions such as, how can we ensure that psychometric reliability such as scoring consistency is achieved in the portfolio assessments? How can we achieve scoring fairness? More crucially, the researchers ask how it can be established that portfolios adequately exemplify students' writing abilities so that the decisions made about students are accurate. In response to the questions raised on the issue of assessments, Yancey (1999) argues that scoring consistency can be achieved through negotiations among assessors. Huot and Williamson in Yancey and Weiver (1997) on the one hand, have supported portfolio assessments saying that the fact that the portfolio assessment system resists psychometric standardisation makes it a better assessment instrument, arguing that reliability and validity in the narrow psychometric sense are undesirable factors in evaluations. On the other hand, even researchers such as Hamp-Lyons and Condon (2002) who have supported portfolio assessments have conceded that reliability and validity are necessary if this type of assessment is to replace the other types because psychometric data tends to be more convincing to decision makers.

The Curriculum

The general assumption about the curriculum was that learners would start from Elementary tasks and proceed to the Intermediate and Advanced levels having acquired the lower level skills.

To achieve the required skills, learners were expected to work with a tutor who would have some face-to-face contact with the learners in a classroom/workshop learning situation to help learners pinpoint their particular difficulties in writing and to find solutions which would help them. Learners would further have the opportunity to use the tutor as an online colleague and editor during the programme.

The learners were also expected to submit a portfolio of work for each phase of the programme.

The submission of the portfolio file was mandatory as an important part of the assessment that would lead to formal accreditation.

Below is the Curriculum of the Mentoring Activities

At the introductory level learners were required to:

- take notes
- write a memo or submission
- write a letter of confirmation
- edit one's own and others' work
- develop a workshop programme
- communicate information by e-mail
- write their CV
- write a letter of application

The Intermediate course required learners to:

- plan a project
- conduct a survey
- produce a proposal
- conduct meetings (notices, chairing, minutes)
- produce an action plan
- write a final report
- write an information pamphlet

In the Advanced course learners had to:

- summarise
- write a speech on behalf of a senior official
- write replies to Parliamentary Questions
- write about a workplace task

Research Context

In terms of the social and political reality, it is worthwhile noting that South Africa comes from a history of the apartheid system of government in which the white citizens dominated and discriminated against the black people. After many years of struggle by the black people, the apartheid rule ended in 1994, and with the coming of the new government, many changes were made to give a chance to the black people who had been deprived of quality education and job opportunities.

One of the changes made after 1994 was the policy of language. While in the apartheid regime the official languages of government were Afrikaans and English, Afrikaans received more

prominence than English did (Silva, 1998). After 1994, the constitution of the Republic of South Africa (1996) advocated the use of eleven official languages. However, at the national and international level, communication in South Africa takes place in English (Silva, 1998) and English "has typically been seen as the language of liberation and black unity" (Gough in Silva, 1996: xviii).

At the South African Government level, different approaches have been prescribed in various South African Government papers such as the *Learnership Act of 1998* and the *National Skills Development Strategy of 2001*. The BCP programme was an example of an attempt by the Government to respond to work skills development in a workplace. Therefore, this was an important project and its success would have a bearing on the success of the South African Government policy.

Rationale for the Study

I decided to investigate the conditions that are necessary in implementing this type of learning with a view to informing those who would like to use this mode of teaching or learning so that lessons drawn from our experience could be used to prevent shortcomings. What inspired this research even more was that mentoring adult learners using computer and Internet communication was a fairly new practice in Africa. In sub-Saharan Africa in particular there was very little research showing approaches that combine mentoring and Internet learning methods at the time.

Objective

The study attempted to address the central question: What are the conditions for the success of the writing process in English using online mentoring in the workplace?

Research Methods and Design

I observed the subjects for a period of two years from 2003 to 2005. As I observed the programme, I consulted literature on the different aspects of online mentoring and the writing process in workplace settings. I was able to see a link between the literature and the problems which we were encountering on the programme. This was the basis for the formulation of the hypotheses.

The research was approached from a case study point of view. The initial plan was to collect data through quantitative questionnaires and analyse the data statistically (Nunan, 1992). Two questionnaires were designed to obtain data from the learners and mentors respectively. The response from the learners was not favourable enough. Because of the huge challenges encountered in running this programme, it was extremely difficult to get co-operation from some participants in answering the questionnaires sent to them in the aftermath. Out of the targeted 38 learners, only 6 were able to respond which represented 15% turn-over. Most of the participants referred to similar submissions they had made to the DoL/ EU (Morake 2004) report.

Nevertheless, 6 of the 9 mentors who worked on the programme for a fairly long period were able to return their answered questionnaires, recording a 66% turn-over. With a good response from the 38 learners, validity and reliability were going to be enhanced. The poor response from the learners however posed a threat to the issue of reliability of the data as statistically, the collected data could not be representative enough. The study could therefore not lend itself solely to the quantitative design.

To defuse this potential threat to reliability, it was decided that the data collected be used in triangulation with the information left behind in the process of mentoring.

To strengthen reliability, I subjected the findings of the study to a form of local peer review (Nchindila, 2005): *Writing-process mentoring as a tool in workplace English learning* - a paper I presented at the 33rd Annual Conference of the South African Association for Language Teaching (SAALT) held from 4th to 6th July 2005 where I received useful comments about the challenges of mentoring in South Africa.

I further subjected the findings to an international peer examination (Nchindila, 2006): *Portfolio Assessment of Process-writing in Workplace English for Business Communication online Mentoring* - a paper I presented at the 5th Annual International Conference on Internet Education held from 11th to 13th September 2006 in Cairo, Egypt. At this conference I was able to confirm the importance of English as a second language in business communication in an environment where Arabic is the predominant language. I was also able to compare the levels of advancement in the use of technology in language learning in Southern Africa, North Africa and the developed world.

Through this triangulation a hybrid was achieved between quantitative and qualitative methods (Leedy, 1993) with low control of the data.

The reliance on a variety of sources in this study is well supported by the findings made by Yin (1994) who argued that one of the benefits of a case study is that it depends on multiple sources of data as evidence.

The study was guided by the following hypotheses:

1. The success of online mentoring depends on the degree of familiarity with all aspects of the programme shared by material writers, tutors, mentors and assessors.

2. The success of online mentoring depends on the quality of the relationship that is established between mentor and learner.

3. The success of online mentoring depends on the degree of motivation the learner feels both before and during mentoring.

4. The success of online mentoring depends on the participants' computer efficacy, including the adequacy of the hardware, software and the Internet aspects for interaction between mentor and learner.

Methods of Data Analysis

The information collected through the questionnaires was processed statistically using percentages. The hypotheses were tested by appreciating the major problems encountered on the programme with supporting evidence from the tender document, the learner manual, assessment guides, mentor and learner guidelines, reports, minutes of meetings, learner portfolios and learners and mentors' questionnaire results. The findings were then analysed in close consultation with previous research on the topic of online mentoring in workplace using a process approach to writing.

Findings

The Tender Document

The Tender Document reflected a strong awareness of the importance of motivation in a language development programme (Hypothesis 3), but does not mention relationships between learners and mentors (Hypothesis 2) or computer efficacy (Hypothesis 4) directly.

The importance of motivation can be seen in the following extracts from the Tender Document:

- "an accredited learning programme *adapted to the communication needs of the learners* will be developed
- accreditation would also provide learners … with an incentive to engage in the learning programme
- "All training will be situational and context specific. It will be based on typical daily experience and involve role play, decision making and communicative and personal interaction within realistic circumstances.
- Our training materials will be adapted … to reflect the actual circumstances which characterise the communicative needs of the Department of Labour" (p.3).

The BCP Learner Manual

The BCP learner manual contained the curriculum of activities. Each task had assessment guides to help the mentors guide their learners towards meeting the outcomes.

The BCP Learner Manual (2003:3) shows the importance of motivation (Hypothesis 3) in the following extracts from the forewords in the three phases:

- "The BCP is based on needs expressed by people like yourself who want to improve their business writing and presentation skills and it has been divided in three phases so that people do only those parts of the programme that they need".

- "….to build …confidence and capacity to communicate effectively in the workplace, verbally and in writing and to make the programme the learners' own"

The manual also reflects the awareness of relationships (Hypothesis 2) in the forewords stating that learners would have:

- "….contact with …tutors"
- "…the opportunity to use…..tutor as on-line colleague and editor during the programme"

The Assessment Guides

The assessment guides were provided in the first BCP learner manual of 2003. They were revised in 2004 in an attempt to standardise mentoring and direct mentors to aspects of editing that certain mentors were overlooking. It is clear from the list of general editing guidelines for the assessment of Introductory Phase tasks that mentoring was meant to be comprehensive:

- The structure of text is coherent, logical and well sequenced.
- The text conforms to the major features associated with the text type.
- The text fulfils its purpose, and its register is appropriate to the audience and context.
- Major language errors are identified and the required changes are made.
- Layout, spelling, punctuation and small grammatical errors are checked and corrected where necessary.
- Information is checked for accuracy and correctness.
- The edited text makes use of plain, clear language and is clearly an improvement on the original.
- The final copy is proof-read to ensure that it is completely satisfactory.

In assessing the individual tasks, mentors were required to address content, organisation, language and presentation.

These assessment guidelines are relevant to Hypothesis 1 in that they emanated from the materials writer and provided the basis for all others – participants, trainers and mentors to share a common understanding of what was required. A report on the participant's interaction with the mentor was also required, thereby providing information relevant to the hypotheses relating to relationships and motivation as well.

Mentor and Learner Guidelines

The first set of Mentors' Guidelines was drawn up in July 2003 in order to standardise mentoring. As a result of these guidelines, some success was achieved by February 2004 when the first group completed one level. This could be seen as an indication of the success that could be achieved if the proposed conditions are put in place.

However, the mentoring continued to be unsatisfactory in several ways, and the consortium therefore revised the guidelines in February 2004.

The new guidelines focussed mainly on Hypothesis 3, although the editing guidelines remained, and the following instructions also imply an awareness of the need to standardise mentoring:

- "Make feedback explicit and not too cryptic to be of real use.
- Use the Outcomes to direct learners to aspects of the task to be achieved" (p.2).

There is also one instruction that relates to Hypothesis 2: "Be friendly and professional at all times …" (p.2).

However, most of the new instructions in the Mentors' Guidelines (2004: 3-4) suggest that the dominant concern by now relates to Hypothesis 3 –keeping participants interested and active:

- use workplace visits to gain an insight into the demands of the learner's work environment and to deal with issues related to the learner's writing and/or presentation skills
- use the opportunity to help the participant schedule her/his work in order to create a regular flow of work between the mentor and the learner
- return portfolios in a face-to-face meeting with the learner, especially if some tasks were still not regarded as competently done
- encourage learners to be equally pro-active in terms of checking whether the tutor had received work and/or returned work, which the learners may not have received
- aim at returning work within 48 hours of receiving it
- call or email the learner to explain and reschedule the return of drafts if, for any reason, you could not fulfil the promise made to return the work

In addition, these Guidelines introduced a new portfolio requirement: two real workplace tasks from each learner's particular circumstances. This was the first recognition of the need to individualise the programme; despite the apparent authenticity of the original materials, it had become obvious that writing tasks that were performed by some DoL employees were never performed by others.

Reports

Consortium Reports

The consortium was required to submit monthly reports to DoL. These included a general report from the consortium plus reports by trainers, reports by mentors, and invoices for work done. In summary, it can be observed that the reports show a one way direction of posing the challenges by the mentors and trainers to the consortium and the Department of Labour. The reports seem to

carry very little information showing how the problems posed were acted upon by the stakeholders for implementation.

The final report by Morake(2004) reported that of the initially targeted 60 learners, only 12 were able to complete a level. Of these, only 2 learners completed the Advanced level. This is proof of the general failure of the programme.

Minutes of Meetings Between DoL, the EU Representative and the Consortium

In the course of this mentoring training a number of meetings were held between the consortium and DoL with the representatives from the European Union who were attached to this programme. As a result, a rich resource of information was produced. Of relevance to the Hypotheses covered in this research the study reviewed Minutes of nine of the ten meetings held from July 2003 to May 2004. The findings from the Minutes showed concerns raised by the stakeholders about the slow rate at which reports were presented, how unsatisfactory the mentoring was, a high rate of learners who dropped out and the need for specific assessment guidelines for learners. As the meetings were supposed to be conducted monthly, the reviewed Minutes represent 90% of the deliberations that took place concerning this programme. Therefore, the findings from these Minutes do significantly represent the real picture of the activities that took place on the programme.

Mentoring Activities

The writing of the portfolio tasks was the hub of the mentoring that took place. The mentors' comments were therefore crucial in this exercise. The information from selected samples of the mentors' comments shows that there was a wide range of approaches in the way learners were guided. Besides, learners were mentored by different mentors.

Learner Lists Showing Learner Workplace Sections

Learners came from ten different sections of the Department of Labour. These were: National Skills Fund (NSF), Employment Services (ES), Planning Unit (PU), Programme Management Unit (PMU), Training and Development (TD), National Skills Authority (NSA), Management Services (MS), Skills Development Planning Unit (SDPU), Public Relations (PR), and Human Resources Management (HRM).

It can be concluded from this information that learners had specific needs according to the requirements of their sections. The data therefore reflect the need for collaboration in materials development so that training is tailored to the specific learner needs (Hypothesis 1). If learners' needs are catered for learners would feel motivated to complete the course (Hypothesis 3).

The Questionnaires

The main aim of the questionnaires was to test the validity of the hypotheses as they applied to the case study of the mentoring done.

Findings From the Learners' Questionnaire

Thirty-eight questionnaires were issued to the learners who took part in the programme only six filled them. The first part of the questionnaire was based on a five-point-scale. The final part requested the learners to choose from four options.
The results are summarised as follows:

Regarding collaboration in training and mentoring (Hypothesis 1), the information can be summarised as follows:

(i) No learner believed that training and mentoring had similar teaching aims
(ii) No learner believed that mentors had similar teaching aims

It can be concluded that the need for Hypothesis 1 was significant among the learners who responded to the questionnaire.

Concerning learner and mentor relationship (Hypothesis 2), the results were that half of the learners believed that mentors were not helpful.

Regarding the need for motivation, the results were that most respondents agreed that:

(i) Learners learnt a lot from mentoring=66% which is motivating to the learners (Hypothesis 3).
(ii) Mentors returned work in stipulated time =83% which must have motivated learners to work on their drafts in good time.
It can be concluded from these results therefore that the programme attempted to motivate learners.

However, the results also showed that the learners had mixed feelings in the way they felt motivated. For instance whereas half of the learners believed that the BCP was relevant to their daily work and that mentoring improved their writing ability, 83% of the respondents reported that pressure of DoL work interfered with their mentoring. Similarly, few learners felt that:

(i) BCP catered for the learners' needs= 33%
(ii) Contact sessions taught learners a great deal =17%
(iii) Learners returned their work in stipulated time= 17%

What is even most striking about these results is that the highest number of learners (83%) reported that *mentors returned work in stipulated time* while the same number reported that *pressure of DoL work interfered with their mentoring*. From this sharp contrast, it can be argued that learners perceived the negative effects of motivation as coming from the challenges they faced from their workplace rather than from the commitment of their mentors.

Aspects of the need for learner computer efficacy (Hypothesis 4) can be deduced from the response that 50% of the learners believed that mentoring improved their writing ability because

computer efficacy helps learners to write well just as the awareness of improved writing skills gives learners a sense of fulfilment leading to motivation. However here again, the result shows that only half of the learners believed that they benefited from the use of computers.

In summary, the results showed a mixed response of the learners in relation to the four hypotheses under consideration. However, because of the poor yield of the filled questionnaires returned by learners, these findings may not be conclusive. Nevertheless, these results are suggestive and were therefore used in support of other findings from the various sources identified for the study.

Findings From the Mentors' Questionnaire

Eleven questionnaires were sent to the mentors who took part in mentoring up to May 2004. Nine mentors responded.

In the first part of the questionnaire, mentors were asked to agree or disagree with the statements.

Concerning collaboration in materials development and training (Hypothesis 1) the information shows that few mentors were

- Involved in initial planning=17%
- Involved in writing course material=17

Similarly, all the mentors who responded reported that there was too much record-keeping and that there was not much collaboration in portfolio assessment. Most of them also reported that this was their first experience=83%. However, most mentors also reported that they were

- Involved in mentoring=100%
- Involved in some contact teaching=67%.

This is evidence that there was some collaboration in mentoring and teaching. In fact, the fact that all the mentors reported that they were involved in mentoring proves that the questionnaire was given to the right audience.

These data suggest that the responses were mixed as far as Hypothesis 1 was concerned. Nevertheless the responses lean on the negative side since four out of the six items tested concerning this hypothesis are negative. It can be concluded therefore that 66% of the respondents were negative leaving 44% who were positive.

Regarding relationships (Hypothesis 2), the summary shows that all the mentors believed that:

- Gender was not an issue=100%
- Race was not an issue=100%

Motivation can be looked at in two ways: (a) Learner motivation and (b) Mentor motivation.

Although learner motivation is more important than mentor motivation, it is necessary to look at both because mentoring is a special type of teaching that requires both learners and mentors to be totally committed to the programme if mentoring has to work. In terms of learner motivation the results were that:

- very few of the mentors believed that mentoring improved learners' spelling and punctuation=17%
- none of the mentors believed that mentoring improved learners' grammar
- none of the mentors believed that mentoring improved learners' ability to write clearly,
- none of the mentors believed that mentoring improved learners' ability to organise ideas
- none of the mentors believed that mentoring improved learners' awareness of audience and purpose
- most of the mentors believed that the learners' language skills did not improve=66%
- none of the mentors reported that learners returned their work in stipulated time
- all the mentors believed that most of the learners lacked commitment

These items relate to motivation because they are elements of achievement and any sense of achievement inspires the learner to work harder. These results show that most of the mentors' beliefs about the learners' achievement were negative.

However, there is also evidence of a positive response as 66% of the mentors believed that the mentoring improved learners' computer skills. Nevertheless, this view was just one out of the nine items tested concerning learner motivation. The results therefore incline toward the negative perception by 8/9 or 88%. This perception is therefore significant.

Although mentor motivation may not be crucial because mentors are expected to be motivated since teaching is their duty, it is important to note that most of the mentors felt that "mentoring dragged on too long=66%". Similarly, the information shows that all mentors felt that "mentoring involved too much record-keeping". Although the issues of record-keeping fall under the need for agreement on management reporting procedures (Hypothesis 1), if reporting procedures are cumbersome, they can be quite demoralising to mentors. This can lead to mentors' loss of motivation.

The study therefore supports the view that the awareness of the four hypotheses discussed could help in addressing these problems. The four hypotheses are therefore confirmed.

Discussion

All the problems noted here provide lessons to those who would like to use online mentoring. As a result of the challenges experienced on the programme which were not initially planned the programme did not operate smoothly and outcomes were not all met. Therefore training providers who would like to profit from this type of education must carefully plan and implement the requirements if they have to succeed.

This study posits that the following conditions would lead to success:

Assessments

Success concerning portfolio assessments would be measured by mentors' experience and expertise and how closely related the curriculum, the syllabus and the learning tasks are to the job tasks of an individual learner including the standardisation of training, making commentaries and applying the assessments objectively to the agreed outcomes.

Mentoring Relationships

The success indicator for this condition would be evidence of shared purpose, how well the learners and mentors are matched against the learners' needs and mutual trust and confidence shown between mentors and learners.

Motivation Online

The success indicators of motivation would be measured in terms of the specific adequate time given for fulfilling the mentoring tasks, the adequacy of the resources, learners' support from their workplace supervisors and mentors, learners and mentors' punctuality in responding to online tasks, and learners' drive and ability to complete the programme levels thereby keeping the number of dropouts to a minimum.

Computer and Internet Efficacy

In terms of computer and Internet efficacy, success for this condition would be measured by the suitability of the computers for the writing process tasks, the ability and confidence that learners and mentors would display in the use of computers and their versatility in utilising Internet resources for the purposes of online learning. Learners would show knowledge of Internet surfing techniques, grammar, spelling, editing, and file saving functions. Trainers would show knowledge of the Word comment function, useful educational Internet search engines and ability to use standard correction software.

Conclusion

Although this study reports a failed mentoring experience, the benefits of the lessons to be learnt outweigh the project's shortcomings in that this project was bold enough to test the use of Internet education and mentoring in a multiracial ESL learning African context. As reported in the literature (Magagula 2005), computer and Internet efficacy are still challenging issues in

adult education in Africa. This study therefore underscores Magagula's findings for the benefits that can be drawn when computer and Internet conditions are set in place in training adult learners in a workplace setting in Africa.

However to be forewarned is to be forearmed. The triumph of this study lies in the fact that it is able to share research on a failed project. As mentoring may take different forms, many practitioners might claim successful implementation of mentoring programmes. Nevertheless, as far as e-mentoring is concerned it is important to realise that in cross-cultural Africa, e-mentoring will only succeed if mentoring conditions are correctly configured before and during the implementation of the programme.

The findings of this study are based on a single case study. Therefore they might not be generalised. Furthermore, as the researcher was quite close to the data by taking part in the programme as a mentor, this study might be said to be subjective.

This study was part of a Masters degree research registered at the University of South Africa in 2004.

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Developing Knowledge Through Practical Experience: The Principles of Financial Sustainability for Online Programs

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Abstract

Following the theory of situated cognition as proposed by Brown, Collins, and Duguid (1998), this research project tapped into the contextual knowledge of experienced administrators of online programs. Draft principles of financial sustainability for online programs were developed by an initial team of experienced online educators and then critiqued by seven directors of FIPSE-funded online programs. The directors added conditions, situations, and caveats to the principles making the final product a rich and comparatively complete list of issues that are important for administrators to understand. The final list of ten principles include (1) know your market, (2) know your costs, (3) determine a price, (4) negotiate with the institution(s), (5) observe good financial management rules, (6) develop and implement marketing, (7) have a web identity, (8) identify and develop good faculty, including adjunct faculty, (9) improve retention, and (10) improve courses or program. These principles represent the situated knowledge of experienced administrators and may be valuable to new administrators of online learning or experienced administrators looking for additional ways to improve a program's financial status.

Introduction

How do administrators of online programs create and sharpen their knowledge of how to make their programs financially successful? Perhaps there are answers to these questions in the work of Brown, Collins, and Duguid (1989) and their theory of situated cognition, where knowledge is best understood as situated in and a product of the activity, context, and culture where it is developed and used (p. 1). By tapping into the knowledge of experienced online administrators,

the expertise of the field can be shared more widely and the skills of new administrators can be more rapidly improved.

This research relied on the situated knowledge of experienced online administrators to develop principles for financial sustainability of online programs. It was initiated when a Fund for the Improvement of Post-Secondary Education (FIPSE) officer wanted to capture the knowledge of how to offer financially sustainable online programs as evidenced by a group of successful FIPSE project directors. This project became an opportunity to explore the Brown, Collins, and Duguid (1989) theory while capturing the situated knowledge of a set of experienced online administrators. It asks the research question, "Are there agreed-upon principles of financial sustainability for online programs?"

Literature

Administrators must possess knowledge of people, the workings of small groups, an organization and its culture, and the environment it is in. And this is only a short list of what administrators must know and do. For administrators of online programs, there are no educational programs to prepare them for their role, although there are a growing number of conferences and journals that provide contact with other administrators and opportunities to learn from their successes and failures. These conferences and journals offer a version of Brown, Collins, and Duguid's (1989) "cognitive apprenticeship" (p. 2), where knowledge is passed on by the more experienced to the less. But this knowledge continues to evolve, "because new situations, negotiations, and activities inevitably recast it in a new, more densely textured form" (p. 3). In other words, apprenticeship is not purely a one-way endeavor as implied by reading or listening to an expert; the apprentice continues to make new knowledge of the old as he or she faces new contexts in which to test, expose faults and exceptions, and then modify the original knowledge.

In fact, Brown et al. (1989) would propose that learning results from acting in situations, not merely from receiving it from others. To learn to use a tool or concept or knowledge, one must understand the community or culture where it is being used. Said in a different way, learning must be used and these uses are shaped in fundamental ways by the situations in which they are used. Or put even more simply, knowledge is developed when practitioners act, reflect, and evaluate what they do in their jobs.

This emphasis on situated knowledge should not ignore the growing research literature on important topics for administrators of online programs. They need to know the practices of their higher education institution or system, the rules and exceptions to rules that guide what they can do. They need to know how to cost their programs, using the Technology Costing Methodology (or TCM at http://www.wcet.info/projects/tcm), the Flashlight Cost Analysis Handbook (http://www.tltgroup.org/programs/fcai.html), Rumble's (n.d., 1997, 2001) costs, Activity-Based Costing method (Bates, n.d.), Cost of Supporting Technology Services (COSTS) (Leach & Smallen, 2000), or Morgan's (2000) online costing tool (at http://www.marshall.edu/distance). Costing methods from the National Association of College and University Business Officers (NACUBO) (2002) and the Delaware Cost Studies (2002) also exist, although they have not

been used to cost online programs because they cost "undergraduate instruction" (NACUBO, 2002) or instructional costs by discipline or faculty type (University of Delaware, 2002), but do not provide data on online coursework specifically.

To understand costs of online coursework requires that the institution disaggregate costs in much greater detail. Activity-Based Costing (ABC) has been a popular method for costing online courses because online courses have been an infrequent activity within traditional institutions and online courses have more discrete activities and more people involved in the design and development of the course. This makes costing online coursework different than costing on-campus programs, in terms of understanding how cost structures of online coursework are different from traditional courses and understanding how faculty time is spread across online courses and other important activities. ABC is therefore different from many other costing approaches, because it attempts to cost various activities (e.g., registering a student, preparing a powerpoint presentation) rather than by budgetary line item (e.g., faculty salaries) or by allocating existing departmental or college-level budgets (Massy, 2003). Faculty salaries, in this case, are broken down into the various activities faculty do, rather than being lumped together. Whatever the costing method, the online administrator needs to know how to capture program costs and to be relatively confident that proposed budgets can be covered by the revenues coming in for the program.

Administrators can also expect to be familiar with the growing literature on cost-effectiveness or cost-efficiencies. Twigg (1999, 2002, 2003a, 2003b, 2005) has done perhaps the most comprehensive work on cost-effectiveness and researching ways to control or cut costs while maintaining or improving student learning. But there has been other research in this area (Bishop & SchWeber, 2001; Campbell, Bourne, Mosterman, Nahvi, Rassai, Brodersen & Dawant, 2004), and there will continue to be more studies that add to our knowledge of how to improve both costs and learning. Research on cost-efficiencies (Meyer, 2006) tends to focus on similar tactics to cut or control costs: redesigning courses, using technology more to replace high-cost labor or free up capital space, using high-cost faculty less, or replacing high-cost with lower-cost instructors. These tactics can be broken down into very specific approaches, such as using online automatic grading, developing modules for greater individual learning, building virtual labs, and offering online quizzes as self-assessment tools. All of these are examples of using technology to replace some of the activities of higher-cost faculty in ways that have the potential to improve student learning.

This quick review of the research literature clarifies the differences in knowledge necessary to administrators of online programs. Research literature may be viewed as a form of knowledge that has been tested by a set of standard research methods and the requirements of peer-review and standards of publishers. And yet administrators possess another kind of knowledge that is situated, practical, and tested by various experiences and revised in new situations.

For example, higher education administrators of all kinds are increasingly aware that resources are constrained and programs must help students with diverse needs to learn. Two conditions make this situation especially pressing for administrators of online education. First, many online

programs are offered on a cost-recovery basis, in other words, the revenues brought in from students, employers, etc. must cover the cost of offering the program. While other programs need not cover the entirety of their costs, they can not be a continuous economic drain on the institution. Second, competition is increasing as more higher education institutions offer online programs and students take an increasingly consumerist view of the educational marketplace. And while this situation does not describe the entire higher education marketplace, it increasingly describes online programs that must find students, market to them, and enroll enough of them to offer a program to cover costs.

These pressures argue for a method to unearth, compile, and evaluate the expertise of experienced administrators of online programs. The following section describes how the authors undertook the development of a set of principles that would improve the likelihood that online programs would be financially sustainable.

Method

During the Summer of 2006, the director of a FIPSE-funded project who developed and offered online courses to prepare library media specialists for K-12 schools was preparing the required final project and fiscal reports for FIPSE. The FIPSE Project Officer asked that she consider abstracting her knowledge of how to develop and offer online programs that were financially sustainable over a period of time. This seemed an intriguing project, and the FIPSE project director sought the involvement of the other two authors to form a project team to design a process to develop principles that, if followed, would improve a program's likelihood of being financially sustainable. The team had experience developing and offering online programs, experience in developing costing methods for online learning, or research expertise in cost-efficiencies of online learning.

Before proceeding, the project team developed several definitions to guide the project. A *principle* is "a comprehensive and fundamental law, doctrine, or assumption" or "rule or code of conduct" (Merriam-Webster, n.d.). For this project, principles would be any rules of policy or practice that have a high likelihood of contributing to the financial sustainability of an online educational program.

Sustainability is "a method of . . . using a resource so that the resource is not depleted or permanently damaged" (Merriam-Webster, n.d.). FIPSE uses this term and defines sustainability as "the likelihood that a project will be continued and institutionalized beyond federal funding" (FIPSE, 2006, p. 18). For this project, sustainability will be those policies and practices that improve the likelihood that an online educational program is financially viable.

Program will refer to any course or set of courses, or module or set of modules that comprise an educational program of study.

Two caveats are important to understand both the process of uncovering and evaluated situated knowledge, but also the goals of the process. First, the project team aimed to provide a

comprehensive list of principles that would contain questions for administrators to ask before taking a program online. While a program or institution might not have answers to all of these questions, it would be wise to know as much as possible about these issues, because this would help administrators make more informed decisions and increase the likelihood that the program would be financially sustainable.

Second, the purpose of the principles would be to focus on fiscal matters and issues that directly impact financial sustainability. Because quality is critical, these principles would need to assume that the program was already pedagogically sound and contributed to student learning.

With these definitions and caveats in hand, the project team proceeded. First, the team brainstormed an early set of principles that they felt would lead to sustainability and submitted these to an external consultant with expertise in online programs. After this round of reviews and revisions, a draft document on "principles of sustainability" was available for wider review.

After gaining IRB approval to undertake this research, the team identified nine FIPSE project directors in the FIPSE Grants Database (http://www.fipse.aed.org/subject.cfm?program=1) whose projects developed online modules, courses, and/or programs and whose grants were in the latter stages of completion. The project directors of these FIPSE projects were chosen because of their experience going online. These projects were also at different types of higher education institutions (medical schools, research universities, regional or comprehensive universities, community colleges), which might have elicited different experiences with the projects.

The nine project directors were contacted by email explaining the project, its aims, and the draft principles. A telephone interview was requested to gather their criticisms, additions, or changes to the principles. Seven project directors were finally interviewed; scheduling problems prevented additional FIPSE directors from being involved. One member of the project team conducted all of the interviews – lasting approximately one hour for each interview -- and proposed wording changes or additions to the principles based on the interviewee's suggestions. Initially, it was expected that this round of additional comments on the draft principles might produce conflicts that the project team might need to adjudicate, but this did not occur. Instead, the interviewees largely added ideas and exceptions to the principles. The final question of the interview asked the project director to assess the importance of each principle by answering the question, "How valuable is this principle to achieving sustainability of online programs?" Likert-style responses included (1) low value, (2) modest value, (3) moderate value, (4) high value, and (5) absolutely critical. Mean responses were calculated to assess the importance of each principle as well as the order of presentation in the draft list of principles.

After the interviews, another draft of the principles was prepared, including the suggestions, additions, and clarifications arising from the interviews. This draft was reviewed by the project team as well as the external consultant, which resulted in additional word modifications and clarifications. The current version of the principles for financial sustainability are presented next.

Results

The process of tapping the practical knowledge of existing project directors of online efforts resulted in principles that grew longer, more detailed, and more comprehensive. Each review tended to improve the document, adding a perspective that was missing or an exception that needed to be included. In retrospect, it was important to include the experience of project directors of very different types of projects. Two projects were at medical schools, three at research institutions, and two at regional or comprehensive institutions. Some projects were to operate or offer programming on state funding, others used grant funding to offer programs, and still others attempted to license their products to create a revenue stream. Some projects were local, others regional, and others national or conceivably international. Some projects were for undergraduate students, others for graduate students, and still others for adults seeking professional training. Some projects focused on developing online modules, others developed courses, a few even developed a full program (be it a certificate or degree program). Some projects were housed in an academic department, others in a continuing education or distance education department, still others in a central office. And projects were spread across the sciences, allied health, education, and professional programs.

Despite this diversity of projects, what is intriguing is the similarity of the responses and the consistent support for the draft principles. Therefore, their diverse needs, problems, and solutions contributed to a set of principles that others may have more confidence in. The final set of overarching principles is:

Principle #1: Know your market.

Principle #2: Know your costs.

Principle #3: Determine a price.

Principle #4: Negotiate with the institution.

Principle #5: Observe good financial management rules.

Principle #6: Develop and implement marketing.

Principle #7: Have a web identity.

Principle #8: Identify and develop good faculty, including adjunct faculty.

Principle #9: Improve retention.

Principle #10: Improve courses and program.

What follows in this section is a prose description of the kinds of questions and issues to be explored for each principle. An individual desiring to view the entire list of questions for each principle will find the principles in a checklist format in Appendix A.

Principle #1: Know Your Market

All of the individuals involved in this process agreed that this principle was first in importance and foundational to all other principles. It involves (a) knowing the job market (e.g., what jobs graduates can do; what skills are growing in importance), (b) knowing the student market (e.g., how many there are, what influences their interest in programs, where they are located, what skills they have, what computer equipment they have), (c) knowing the competition (e.g., which institutions offer similar programs, how they are delivered, what they cost, how much time they require, how many students are enrolled, (d) knowing your markets within the institution (e.g., how the program fits into programs at your institution, whether it can be adopted by others, whether it competes with internal programs), and (e) knowing your competitive advantage (e.g., how loyal students are, whether there are new competitors, whether preference for the program is based on price, focus, delivery or format). Once this information is in hand, the administrator can ask tough questions about the program: whether there is room in the market for the program, if changes to the program might make it more marketable or appealing, and the level of enrollments to be expected from the market. One way to get help identifying, compiling, and analyzing market information is to develop advisory boards with expertise in the area of the program.

Principle #2: Know Your Costs

Knowing and understanding costs must precede setting a price (principle #3) and generating monies to cover the costs of reinvesting in the program. To do this, administrators of online programs need to first create a process for identifying and estimating costs, which may be determined by the institution or may require the administrator to explore other costing methods (e.g., Technology Costing Methodology), or allocating costs to development, delivery, and administration (Rumble, 2001). Costs that need to be identified and tracked include instruction, academic support, and student services, but also fees to various bodies inside and outside the institution (more on this later). This is an enormous first step that takes a great deal of time and effort, but will pay off later when the administrator tackles the second step: improving cost-efficiencies through use of instructional design principles, increasing scalability, substituting lower-cost for higher-cost labor, substituting technology for higher-cost labor, and substituting technology to free up capital space.

Calculating costs to any program requires that you identify all costs. To do so requires knowing where the program will be housed, because different locations of a program will bring the program under different policies at your institution or system. That includes policies on what the institution expects the program to pay (known as "chargebacks") to various departments or levels of the organization. Also identify the costs borne by the institution or partners, because some of these are free and others are not. Be alert to finding hidden costs, too, which is especially important if the program is one of the first online programs at the institution. But remember that

costs change and it is best to get all agreements in writing. Also, seek help from those who have experience identifying costs. And while it is important to identify all costs, precisions may not be absolutely necessary. If you are early in the process, obtain reasonable estimates and do not try to calculate every item to the last penny.

Principle #3: Determine a Price

With this cost information in hand, you are now able to calculate the number of students needed to cover costs left over when resources from other sources are applied to the bottom line. This is critical to calculating a price for the program and generating the level of revenue so there is a surplus for reinvesting in the program. Let us define the price charged to students as the sum of tuition and all fees. The administrator must identify all policies on tuition and fees, all waivers to these policies, including distance learning or technology fees applicable to the program. Then ask will the state subsidy be available to support the program, will there be other sources of support (e.g., grants), or will the program need to cover all of its costs? Is the price of programs already set by policy, and if so, will the revenue exceed the costs? If not, will the institution help out? Can enrollments be increased to cover the shortfall? And if enrollments are increased, will there be a negative impact on learning? How many courses or years will the program have to operate to achieve a breakeven point or the point where it can begin to make money or recoup its development cost?

Setting a price also requires asking questions about students, their ability to pay, their future pay, their financial aid options, the ability or willingness of their employer to pay, and the availability of grants. Setting a price requires asking what other programs charge and if there is an ethical limit to what can be charged. Lastly, the price needs to be low enough to attract students and high enough to cover costs and generate a surplus. That surplus is essential, so it is critical to understand what the institution expects of the surplus and whether a larger share of the surplus can be negotiated to cover unexpected expenses, redesigning and upgrading the program, or trying new programs and new markets.

Principle #4: Negotiate With the Institution(s)

Because all online programs are offered in and through educational organizations that have various rules, it is important to locate as many of these policies or rules in the beginning and negotiate exceptions when necessary. The experts encourage administrators to work out agreements – in writing – before offering the program, and to make these agreements as comprehensive as knowledge of the organization and its rules allows it to be. The agreement should cover program revenue, the percent of royalty payments, and indirect cost recovery and indicate how much goes to faculty, the program, department, and others. Do not assume these are non-negotiable; there may be more room for negotiation than originally supposed. For inter-institutional partnerships, indicate how financial aid, student records, course transfers, and charges will be shared. Negotiate with everyone and at every level, although it is important to be consistent, follow institutional norms for who negotiates, and get agreements in writing. Do not forget to identify institutional and system policies on approval of programs and make sure

several institutional leaders understand the program because losing an advocate can be detrimental to completing and fulfilling negotiations.

Principle #5: Observe Good Financial Management Rules

It may not be glamorous, but the administrator must know and follow all financial rules. In fact, especially for faculty acting as program administrators, it is important to stress that they are now a money manager. This involves identifying the financial rules at your institution, knowing how to set up and monitor a budget, knowing how to keep books, hiring someone to do this or learning how to do this, regularly reviewing the budget, making sure payments are made, knowing how to work with accounting, knowing when money is available, knowing what money can roll over and other restrictions, knowing how to get reimbursed or pay people, and knowing how billing and financial aid works for students. Also, make sure the budget is not accessed by others or what charges will be made against the account. Have contracts for work performed and make friends with the people in offices who can teach these new skills or help negotiate within the institution's budgeting system.

Principle #6: Develop and Implement Marketing

Marketing is key to finding and communicating with potential students. This requires knowing what students are most likely to be successful and stay enrolled in the program and identifying ways to distribute information about the program. It also requires reviewing what is known about the market and identifying routes to distribute information about the program, including organizations, employers, professional associations, agencies, and advisory boards. Next, develop a marketing plan, using newsletters and other publications, web sites and media channels. Help students understand if online learning is for them and if the program will fit their needs.

Principle #7: Have a Web Identity

Think of the program's web site as its "face," which can help the right students find the program, understand the program, and choose it, if it is right for them. Make sure the web page Googles well and follow institutional guidelines for web design. Provide lots of information about the program (what it does, what is required, when it is offered, how it transfers or is delivered, successes of earlier graduates) and links to application forms, registration, cost and financial aid information, deadlines, library resources, policies, advising, etc. Make sure there is a way for the student to contact someone and have a process for managing inquiries so questions are answered quickly, students can be tracked, and new information about the program can be shared with them. Be clear about students' responsibilities (e.g., equipment, prerequisites) and do not forget to use the site to collect information from students to make sure the program is finding the right market. And finally, make sure the site stays up-to-date.

Principle #8: Identify and Develop Good Faculty, Including Adjunct Faculty

Good faculty are critical to ensuring a quality learning experience, and good adjuncts can be doubly critical as a way to ensure quality and handle enrollment growth. Choose faculty who are interested in online learning and want to learn how to do it well; they need to be flexible and able to handle problems; perhaps involving them in an existing course is a good way to see if they are really a good fit with online learning. Make sure various policies are understood and followed: institutional policies on workload, course or program enrollments, and hiring new faculty. These policies govern core faculty and may constrain the program's use of core faculty, the size of the program, and the number of adjuncts needed to handle enrollment increases. Adjuncts can be found several places (e.g., professional associations, employers, program graduates), but they need to like online teaching and be trained to do it well. They can help deal with enrollment growth and help control costs, as well. Training for both core and adjunct faculty needs to cover pedagogy, technology applications, instructional design, the course management system, academic policies, student and course expectations, and ways to manage interactions and assess student learning. Co-designing courses with more experienced faculty designers can help new faculty, as will having a solid assessment plan in place to make sure student learning improves despite efforts to increase efficiency.

Principle #9: Improve Retention

Improving retention is tied to financial sustainability because it costs more to recruit a new student than to retain an existing one. This requires improving screening methods or admissions criteria, providing an orientation to online learning, the CMS, and the program, building community in the program, encouraging interaction between and among students and faculty, designing high-quality courses, encouraging faculty to reveal their personalities online, contacting students regularly (especially those who have been "missing"), and providing regular feedback so that students know how they are doing and/or what they may need to improve and how to do so.

Principle #10: Improve Courses or Program

The quality of a program is critical to financial sustainability because quality impacts the recruiting and retaining of students, keeps faculty committed to the program, and raises the level of recognition of the program among employers, members of the public, or institutional leaders. Actions that are particularly helpful include continuously assessing student learning and the curriculum and making improvements, using rubrics or other assessment tools, keeping curriculum up-to-date, listen to and use student feedback during and after the course or program, evaluating faculty instruction and role in the course, having the course reviewed by an instructional design professional or online course evaluation rubric such as Quality Matters (http://www.qualitymatters.org), regularly scanning the market to monitor the program's changes in competitive advantage, monitoring accreditation standards, and seeking external evaluations (e.g., advisory board members, professional associations, recognized experts).

Table 1 captures the initial proposed order of the principles and the mean Likert score for the importance of the principle given in response to the question, "How valuable is this principle to achieving sustainability of online programs?" While all principles received either "high value" or

"absolutely critical" votes, the Likert responses implied that a different order – based on importance – might be considered. While changing the order of the principles was discussed by the project team, doing so would result in a list of principles that seemed out of order. It was felt that the proposed order made more logical sense, because it started at the beginning and proceeded through the program planning and implementation process step by step.

Table 1
Comparison of Initial Order of Importance versus Likert-Scale Responses
1=Low value, 2=Modest value, 3=Moderate value, 4=High value, 5=Absolutely critical

Principle	**Order of Principle**	**Mean Likert Response (n=6)**
Know your market.	1	4.8
Know your costs.	2	4.7
Determine a price.	3	4.2
Negotiate with the institution(s)	4	3.9
Observe good financial management rules.	5	4.0
Develop and implement marketing.	6	4.7
Have a web identity.	7	4.0
Identify and develop good faculty, including adjuct faculty.	8	4.7
Improve retention.	9	4.0
Improve courses and program.	10	4.3

Each principle captures the situated knowledge of the online administrators involved in this research project. Appendix A provides a more detailed and lengthy list of conditions, questions, and suggestions that support each principle and guide one through a variety of questions or choices. Not all choices will be available in all conditions. Not all institutions will be interested in financial sustainability or having programs cover their costs; they may be willing to absorb costs or cover them through other revenues. Not every project will be able to negotiate its own price. Not every project will be able to negotiate with the institution, although it may be able to negotiate on some items and not others. But perhaps what is valuable is the list of things that can be negotiated in some institutions (if not all) and the negotiations that should be explored so that the online program can have the best chance of being financially sustainable. But as one experienced administrator might say to a new administrator, "It doesn't hurt to ask." Perhaps the more important caution is, "Don't assume." Do not assume you know the rules at your institution, or what the institution will or will not do. Ask. And do not forget to get agreements in writing.

Discussion

The principles of sustainability in Appendix A represent the collected, evaluated, and vetted knowledge of experienced online project directors. As with all knowledge that is situated in individuals with a certain level of experience, it captures a level of "expertness" that may not be perfect because it is constrained by the conditions, situations and programs in different institutions. The principles may need to continue to evolve as professionals' experience with developing sustainable online programs grows, markets continue to change, institutions adjust to new conditions, and costs change due to new technologies or other forces.

Nevertheless, this knowledge is certainly valuable to others who are new to the development and administration of online programs. The principles of knowing your market and costs are fundamental to achieving financial success. And it is important to know that in many cases prices and other policies can be negotiated with institutions. The administrator, whether he or she is a faculty person or administrator, needs some solid preparation and skills in financial management, marketing, and developing a web presence for the program. They also need to be able to find and develop faculty – full-time or adjunct – who have the potential and willingness to become good online teachers. And finally, they need to focus attention on finding ways to improve retention in the online program, especially through improving the quality of the courses offered. These are foundational skills in the view of experienced online administrators.

The process of abstracting knowledge from experienced administrators as outlined by Brown et al. (1998) may well be a useful approach to uncovering the situated knowledge of professionals in a manner so that it may be examined, learned, and tested by others. It may be an approach that can be used to abstract the knowledge of experienced distance and online learning administrators on other topics, such as what makes a good online instructor or student or the factors that affect a program's success in a rapidly changing marketplace. Certainly, this process of interviewing and repetitively evaluating the knowledge of these project directors has produced a viable, working document that may help others develop and offer financially sustainable programs.

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APPENDIX A

Principles of Sustainability

1. <u>Know your market</u>.

A. Why? It is essential to know your market in order for a program to be sustained financially.

B. How to do this:

1. Know the job market:

a. Know what jobs your graduates can fill.

b. Know if these jobs are growing.

c. Know what these jobs require in terms of skills.

d. Know what standards are used by certifying or accrediting associations in the field.

2. Know the student market:

a. Know your target population.

b. Know how many potential students there may be.

c. Know the economic influences that affect students' interest in the program.

d. Know that a survey of student interest does not translate into enrollments. Only a smaller percentage of students interested in the program may be ready to enroll.

e. Know about your potential students:

i. Demographic characteristics:

1. Are they in a single geographic location or in many locations across the nation or world?

2. Are they in a particular occupation?

3. Are they traditional-aged or adults?

4. Do they need entry-level preparation or professional certification?

5. Can they afford the price of the program?

ii. Student skills:

1. Are they educationally prepared with the appropriate degree for this program?

2. Do they have the skills or preparation necessary?

3. Are they computer savvy or novices?

4. Do they believe that online education is easier, or are they experienced with the demands of online education?

5. Do they have the necessary equipment and ISP access with sufficient speed?

6. Is DSL necessary or will dial-up work for the program?

7. Do they have CD-Rom or DVD technologies?

8. How will you address any deficiencies in their skills or understanding (e.g., through orientation or training sessions)?

3. Know your competitors.

   a. How many competitive programs or institutions exist?

      i. Make sure you include programs at institutions in the region, nation, and world.

   b. What delivery methods do they use?

   c. Do they require on-campus experiences?

   d. What do they charge (tuition and fees)?

   e. How long is the program (e.g., time or credits)?

   f. Does the program have the same focus as yours?

   g. Who do they market to?

   h. What is the title of the program?

   i. What level (baccalaureate, graduate) is it?

   j. What prerequisite courses does it require?

   k. Are they fiscally successful?

      i. How are they funded?

ii. Are they licensing courses?

l. How many students do they enroll?

m. Are they accredited? By whom?

4. Know your secondary and tertiary markets.

a. How does your program fit into other programs at your institution or partner institutions?

b. Can your curriculum be adopted by other programs? Will you allow your curriculum to be adapted by other programs?

c. Are you directly competitive with other programs at your institution? This may require internal coordination with your institution's administration.

d. Can you forge a transfer or articulation agreement?

e. Can you license courses to other schools or companies? What process must be followed to license to other institutions or companies?

5. Know your competitive advantage.

a. How loyal are the potential students to your institution?

b. Does your program have the preferred accreditation?

c. Have programs entering or exiting the market changed the dynamics of the marketplace?

d. What is the preference for your program? Who decides?

i. Is it based on price?

ii. The program's focus?

iii. Employer preference?

iv. Students want part-time or full-time?

v. Can your program be flexible (e.g., use multiple delivery methods, have open-ended courses, etc.)?

e. Be sure to update this analysis annually. Technology and competitors change rapidly.

6. Take a hard look at your data on students, competitors, and jobs.

a. Is there room for your program?

b. Can you adjust your program to make it more marketable or fit better with student or job needs?

c. What level of enrollments can you expect?

i. You may need a low and high estimate.

7. One mechanism to help with the process above is to form advisory boards with members drawn from groups appropriate for the program.

a. Include representatives from business, education, professional organizations, the community, or government.

b. The board can help identify the market, design curricula, advertise, recruit students, and form helpful partnerships.

2. **Know your costs**.

A. Why? It is essential to set a price and generate a surplus to reinvest in the program.

B. How to do this:

1. Create a process to identify and estimate costs with all parties.

2. Investigate your institution's method of identifying and classifying costs.

3. Or, use cost categories from Jones (2004), *Technology Costing Methodology* for more details:

a. Instruction:

ii. Curriculum planning/course design

iii. Instructional materials, including development, production, and acquisition

iv. Course content delivery

v. Tutoring, mentoring, interaction with students

vi. Assessment of learning including assignment of course grades

b. Academic Support:

i. Computing support

ii. Telecommunications support

iii. Library and information support services

iv. Assessment support services

v. Academic logistical support

vi. Academic administration

vii. Academic personnel development

c. Student Services:

i. Academic advising

ii. Counseling and career guidance

iii. Student access services/student records

iv. Advertising and marketing

v. Recruitment

vi. Admissions

vii. Financial aid

A. Financial aid counseling and evaluation

B. Records maintenance and reporting

C. Student employment services

viii. Student records

4. Or, use alternative method for classifying costs into

a. Development costs (which generally is higher for online learning to take advantage of redesigning instruction and is key to improving the quality of learning),

b. Delivery costs, and

c. Administration costs (Rumble, 2001).

5. Consider improving cost-efficiencies through the following substitutions (Meyer, 2006) by using instructional design to also improve quality:

a. Higher scaleability (using large enrollment classes or repetitions of courses over time);

b. Lower-cost for higher-cost labor;

c. Technology for higher-cost labor;

d. Technology for capital space.

e. This process requires careful planning and assessment to ensure quality learning.

6. Identify and calculate direct costs.

7. Know the policies that govern your program.

a. Do you fall under the rules of Academic Affairs, a particular college,

extended programs, or continuing education?

b. If this is not known, negotiate where the program will be governed and document that decision in writing.

8. Know what your institution expects you to pay.

a. Paybacks (also known as "charge backs") to the department, college, university, system, graduate college, continuing education, etc.

b. Overhead calculations (these may be taken from indirect paid by a grantee or be a direct charge to you)

c. Get agreements in writing.

8. Know costs borne by your institution.

a. These may be the same as above or the paybacks the institution expects the program to pay, but they may not.

b. Know which services are "free" to you and which will cost you.

c. Monitor these costs because they may change as a result of budget cuts or other reasons.

d. Be sure to get approval for copyrighted material in your program.

e. Investigate your institution's intellectual property policy and licensing policies.

9. Know costs borne by partners.

a. What costs will partners contribute for free?

b. What costs must be reimbursed to the partners?

- Ensure these costs are built into the price.

10. Calculate number of students needed to cover costs and generate a surplus.

11. Be alert to hidden costs.

a. Identify knowledgeable individuals at the institution and ask about costs that are not obvious or talked about.

3. **Determine a price.**

A. Why? You need to cover costs and generate a surplus to reinvest in the program.

B. How to do this:

1. Define the price charged to students as the sum of tuition and all fees.

2. Questions for the institution:

a. Identify the institution and/or system policies on tuition and fees.

i. Are waivers from these policies or fees necessary or possible?

ii. Is there a separate "distance learning" fee that students must pay?

b. Is there state subsidy available to support the program and students?

c. If the price is already set by existing policy and the cost exceeds the revenue generated by this price,

i. Will the institution subsidize the program?

ii. Can enrollments be increased? What are the impacts on learning and faculty workload?

iii. Will increasing enrollments diminish the market?

iv. What student fees do distance or online students pay (e.g., parking, athletics, on-campus services)? Can they be excused from these?

v. Will the price cannibalize enrollments of similar courses taught by the institution?

vi. Negotiate the number of years the program has to get to the financial breakeven point, but be realistic. Review your market information and competitive advantage.

3. Questions about students:

a. Identify the target population's ability to pay.

b. Can a student rationalize a higher tuition level if it results in a more lucrative position?

c. Determine financial aid options for your students.

d. Pursue grant funding to help pay costs of students.

4. Questions about other institutions or programs:

a. What do other competing institutions or programs charge?

b. If there are no competing institutions, what is the moral or practical limit to what can be charged?

5. The price needs to be low enough to attract students and high enough to cover your costs PLUS generate a surplus for contingencies.

a. Know where excess funds go. Will they be taken by the institution? Can you negotiate that these funds be retained by the program?

b. Need funds for unexpected expenses in future.

c. Need funds for retooling the program in future.

d. Need funds for new programs.

4. Negotiate with the institution(s).

A. Why? All educational programs are offered by the department, college, institution, or system. You need to follow the appropriate rules or negotiate exceptions.

B. How to do this:

1. Work on agreements before offering the program with the department, college, university, graduate school, continuing education, etc. and/or partnering institutions.

   a. If your program generates revenue for the institution, ask what dollar amount or percent of revenue can be returned to the program or department. In the absence of policy, negotiate.

   b. If courses will be licensed, what percent of royalty will go back to the faculty, author, program, school? In the absence of policy, negotiate.

   c. If your project is grant funded, find out how indirect costs are shared with the program, department, school, etc. In the absence of policy, negotiate.

   d. Negotiating takes time; allow sufficient lead time to do this.

   e. Document decisions resulting from negotiations.

2. Agreements should cover:

   a. **Fees** to be paid to any and all institutional parties.

   b. **Services** provided by other institutional parties.

3. For partnerships among institutions, include:

   a. How financial aid will be provided.

   b. How other institutions can access student records.

   c. How courses will be transferred or accepted at institution(s).

d. How charges will be shared.

e. If partnerships are within or between systems, check on system or state-level rules on collaborations.

4. Get all agreements in writing and have them signed and dated.

a. An example Memorandum of Understanding from the Great Plains IDEA Project can be found at: http://www.gpidea.org/alliance/ResourceCenter/modelDocuments.html

5. Remember that many practices and policies are negotiable.

a. May need to negotiate with department, college, university, system.

b. Make consistent arrangements with all parties.

c. Determine who is best placed to do negotiations: program coordinator, department chair, etc.

6. Identify approval processes, timelines, and content needed for approval of courses or program.

a. There may be separate approval processes for department, college, university, system, or state.

b. Each approval process has a different audience and reviews different issues.

7. If not already possible, make sure students can:

a. Order and pay for transcripts online.

b. Register for courses online.

8. Identify an institutional succession plan if the program's main advocate(s) leaves or retires.

5. <u>Observe good financial management rules</u>.

A. Why? You need to know and follow financial rules. You are now a money manager.

B. How to do this:

1. Identify the financial rules at your institution.

2. Know how to set up a budget with the institution.

3. Know how to keep your own books (you may need a "shadow budget" to stay up-to-date on what has been spent).

   a. If you can't do this, make sure you have a highly qualified and trustworthy person do this.

   b. Regularly review charges against budget.

   c. Ensure payments are made, especially important when paying people in timely manner.

4. Know:

   a. How to work with accounting.

   b. When dollars are available or "released."

   c. What account types are available:

      i. Some accounts allow for rollover and others do not.

      ii. Other account types have restrictions.

   d. How to get reimbursed.

   e. How to pay people.

   f. How students are billed.

   g. When student financial aid is available or paid.

5. If at all possible, you need to have a separate program budget.

a. Have a designated account within the university's accounting system

b. Try to avoid having funds go into an account that others can use.

c. If this is impossible, be sure you understand what charges and amounts you can obligate.

6. Have contracts for all work subcontracted to others outside the institution.

7. Pay attention to building and sustaining relationships with various offices and individuals at your institution and partner institutions.

6. <u>Develop and implement marketing</u>.

A. Why? You need a reliable way to locate and communicate with potential students.

B. How to do this?

1. You need to find the right clients (students who succeed and stay enrolled)

2. Review what you know about your market and identify routes to distribute information about the program.

a. Geographic location of students.

b. Their occupations.

c. Organizations that train for targeted occupation.

d. Employers (may be willing to identify students and pay for their education).

e. Certifying agencies.

f. Professional associations.

g. Agencies knowledgeable about occupation.

h. Advisory boards, if you have them.

3. Develop marketing plan.

a. Check out newsletters, alumni publications, newspapers, web sites, listservs, professional association newsletters, state agency bulletin boards, media channels, etc. (some of these may be free and others cost money.)

b. The institution may have personnel or departments with expertise.

c. Develop materials appropriate to target population (this may include a web site (see next) or published materials).

4. Find the "right" students.

a. Help students understand if online learning is for them.

b. Help students understand if the course or program will fit their needs.

7. Have a web identity.

A. Why? Your program needs a "face" and ways to help the right students find you and choose your program.

B. How to do this:

1. A good web page googles well and allows potential students to find you.

2. Use institutional guidelines for web design.

3. Provide information about your program:

a. What it does (e.g., the jobs it prepares students for).

b. What it requires (e.g., number of courses, timeframe).

c. When it is offered (e.g., what semesters courses are offered).

d. Who is it for (e.g., students with a certain educational preparation, certification).

e. How it can be used (e.g., if it transfers).

f. Learning preferences (e.g., are you able to work comfortably in an independent, computer environment?).

g. Whether it is available in different formats (e.g., pdas, podcasts, CD-Roms, cell phones, other new technologies).

h. Approvals (e.g. is the program approved for certification in your state?).

i. Success of earlier students or graduates, if available (e.g., number promoted, employed, etc.)

4. Provide links to:

a. Application forms or process.

b. Registration or enrollment.

c. Information about costs and financial aid.

d. Information about deadlines.

e. Library or other necessary resources.

f. Policies about enrollment and continued enrollment in the program.

g. Other policies (e.g., grading).

h. Tracking systems (e.g., DARS or other degree audit systems) for program advisement.

5. Provide a way for students to contact someone for more information.

a. Email link or phone number.

b. Can be a single point-of-contact or many, if all individuals can provide same information and can coordinate information.

6. Have an automatic process for managing and following up on contacts.

a. Respond quickly.

b. Collect contact information.

c. Contact student if you have not heard from them to ask if they need more information.

d. Identify status of that contact (not interested, not appropriate, very interested, applying, accepted, will enroll later, will enroll).

7. Have a process for students to receive updated information from the web site.

a. Use an RSS function so that students receive changes to the web site.

8. Identify the responsibilities of students:

b. Make sure program satisfies certification or employer needs.

c. Have appropriate equipment, ISP access.

d. Have educational preparation necessary for success.

e. Be ready for demanding online coursework.

9. Can automatically survey potential students to find out how they learned about program.

a. Find out if they are qualified.

b. Helps you identify if you are reaching market.

c. Helps you adjust your understanding of the market.

10. Find out who maintains the web site.

a. Get the skills to make changes as necessary or hire someone who can do this.

b. Changes happen all of the time, so you need to make sure your program's "face" is up-to-date.

8. Identify and develop good faculty, including adjunct faculty.

A. Why? It is critical to find and develop good faculty, but also good adjuncts to handle enrollment growth.

B. How to do this:

1. Identify faculty:

a. Who are interested in teaching online and learning how to do so well.

b. Who are flexible and able to troubleshoot some problems.

c. Have faculty new to online learning participate in an existing course to see if they are a good fit.

d. Identify institutional policies on workload and course enrollments that govern core faculty. Such policies can affect whether your program can grow and how many adjuncts you may need to address growth.

2. Identify key administrator advocates.

a. Administrators at the program, department, and college level are essential to ensure that faculty are recruited, paid, and developed equitably and without detriment to their careers.

3. Identify adjuncts.

a. May be found through professional associations, employers, program graduates.

b. Do they have proper credentials or educational preparation?

c. Will they be successful and like teaching online?

i. If you don't know this, then involve them as a teaching assistant or co-teacher in an existing course so they can experience online coursework.

4. Provide faculty and adjuncts with training.

a. Need to explore new and different pedagogies, technology applications (e.g., learning objects), and instructional design principles.

b. Need to know the course management system (including automatic assessment tools and tracking functions); how to use campus resources (but know the cost of training if it must be subsidized for adjuncts).

c. Need to understand university, college, departmental policies.

d. Need to know expectations of students, how course fits into program, and program philosophy.

e. Need to know the professor's role in the course, how to manage interaction, amount of discussion/interaction expected, how to conduct student assessment.

f. Training and experience is essential to helping faculty improve what they do online.

5. Have key faculty serve as co-designers for courses.

a. Faculty involved with designing programs should know how to improve quality and use substitutions to increase efficiencies.

6. Focus on student learning and quality improvement.

a. This makes it easier to recruit new students, increasing the program's financial viability.

b. This also improves retention of existing students (see next), which will impact the program's sustainability.

7. Have an assessment plan in place to document levels of student learning, and how the curriculum was changed based on this information.

9. **Improve retention**.

A. Why? Because recruiting new students costs more than retaining students.

B. How to do this:

1. Improve your screening methods so that students who are ready to learn online are enrolled.

2. Provide students with an orientation to learning online, program expectations, and using the CMS.

3. Build community among class members.

4. Encourage interaction among students and with faculty.

5. Design high-quality courses.

6. Encourage faculty to reveal their personalities online.

7. Contact students:

   a. Decide who will be responsible for this function (faculty or staff).

   b. Identify students who don't enroll in a course or don't log into the course earlier rather than later.

   c. Contact them and express concern for them.

   d. Encourage them to enroll again when it is appropriate to do so.

8. Provide regular feedback to students about progress in the course or program.

10. Improve courses or program.

A. Why? The quality of a program can help recruit and retain students, which has an impact on the program's financial viability.

B. How to do this:

1. Continuously assess student learning and the curriculum and make improvements each year. Document this work.

2. Identify and use rubrics or assessment tools appropriate to your discipline or program (e.g., the "Quality Matters" rubric is available at http://www.qualitymatters.org/documents.htm).

3. Keep curriculum up-to-date.

4. Listen to and visibly use student feedback (during and after the course, at the end of the program, and five years after leaving the program).

5. Continuously evaluate faculty instruction and role in the course so improvements can be made.

6. Ask an instructional design professional to recommend improvements to the course.

7. Perform regular scans of the market – other programs, other innovations, students, etc. – to reassess your competitive advantage.

8. Monitor changes to accreditation standards.

9. Seek external evaluations (e.g., advisory board members can do this, professional associations, etc.).

What Do Online MBA Professors Have to Say About Online Teaching

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Abstract

Online MBA programs have grown exponentially in recent years. Yet, the prevailing literature indicates that research on online MBA education remains extremely limited. This article

summarizes 28 instructor interviews from those teaching online courses in an online MBA program at a Midwestern public university. Instructors were interviewed regarding their perceptions of the benefits and barriers of teaching online, as well as their suggestions for improvement of the online courses and the overall MBA program. The results are expected to help better understand issues related to online teaching and learning, and provide implications for designing and delivering online MBA courses.

Introduction

Online MBA programs, which allow students to partake in graduate management education while maintaining their full-time jobs and staying with their families, are gaining increasingly interest across the globe, and are especially attractive to mid-career professionals (Arbaugh, 2000a; 2000b; Kathawals, Abdou, & Elmuti, 2002; Larsen, 1999). The population of online MBA students in the United States alone is estimated to have grown from about 5,000 in 2000 to more than 100,000 in 2003 (Braun, 2003). According to Phillips (1998), education delivered via the Internet is projected to be a primary delivery vehicle for MBA programs in the future. However, the literature in this area indicates that research on online education, in particular that conducted on online MBA programs, is still extremely limited (Arbaugh, 2005; Parnell & Carraher, 2003). To keep pace with the exponential growth of online MBA programs, there is a pressing need to conduct strategic research in this area.

This paper presents the results of a recent study we conducted at an accredited online MBA program in a large Midwestern university. Initiated in 1999, this program has grown exponentially during the past few years. Student enrollment increased from 14 in 1999 to nearly 1,000 in 2007. During this same time period, the number of program staff members increased from just 3 in 1999 to over 20 in 2007. Importantly, to maintain course and program quality standards, instructors were recruited from the full-time faculty of the residential programs of the business school where the program was hosted.

Three research questions guided this study:

1. What are the benefits that the online MBA professors perceive in teaching online MBA courses?
2. What are the barriers that these professors perceive in teaching online MBA courses?
3. What suggestions do they have for improving the online MBA courses and/or programs?

The results of this study are expected to help better understand issues related to teaching and learning in online MBA courses and to provide implications for designing and delivering online MBA and professional education courses. The present study was a part of a larger research project in which online MBA students' perceptions of the benefits, barriers, and suggestions regarding online learning were also studied. Our research findings related to student perceptions concerning this program are published elsewhere (i.e., Kim, Liu, & Bonk, 2005).

Literature Review

The literature in the field of online teaching and learning indicates that designing and developing of online programs involves many factors. Interaction has been highlighted as one of the keys to the success of Internet-based distance education (Picciano, 2002). Some researchers suggest that online learning can involve those who might not normally participate in a traditional classroom (Mills & Salloway, 2001). Other studies in this area indicate that online learning allows for higher levels of interaction than the large lecture classes typical of business schools (Hay, Peltier, & Drago, 2004).

In evaluating an online program, Moskal and Dziuban (2001) surveyed 48 instructors teaching online regarding their motivations for teaching online courses. The key motivators that they uncovered included: (1) increased interaction with students (29%), (2) more teaching flexibility (27%), (3) the teaching experience helped them improve their teaching by forcing them to rethink the way they delivered instruction and how they assessed their students (18%), and (4) the changed role of the instructor from "sage on the stage to coach or facilitator (15%). Additionally, Smith (2001) identified three benefits for faculty teaching online; namely: (1) enhanced ability to use technology while staying current in one's field, (2) excitement of doing something new, and (3) greater employment security because of expanding enrollments (p. 43). In reflecting his online teaching experience, Berge (1999) also stated that one of the most striking benefits of online education, from an instructor's perspective, was more personal dialogue with students.

Compared to face-to-face environments, courses delivered entirely online rely on more types of technology tools and systems (Liu, 2005). Not surprisingly, previous studies indicate that technology has been perceived as one of the major challenges for online teaching and learning. For instance, Smith (2001) summarized six problems concerning online teaching. Of these problems, two of them were related to technology issues; namely, time spent learning to use new technologies and frustration with the malfunctioning of technology. Perreault, Waldman, Alexander, and Zhao (2002) surveyed 81 business professors who taught online courses at 61 U.S. Business schools, examining participants' perceptions related to the important problems in the development and delivery of distance-learning courses. Four key problems that they identified involved technology, including: (1) reliability of technology, (2) technology support provided by the institution, (3) student technology competence, and (4) teacher technology competence.

Perceptions of extensive time required or heavy workload is another key barrier to online teaching cited in the literature (e.g., Kathawala et al., 2002; Lick, 2002). May and Short (2003) further detailed examples for why teaching online courses takes instructors more time and energy. Their list included such factors as the need to foster student motivation to learn online, the keyboarding time required to engage students appropriately, and the additional course maintenance requirements. However, when time is segmented or divided between tasks (e.g., planning the course, developing content, preparing lessons, presenting content, evaluating outcomes), it becomes quite evident that the dominant roles of the instructor tend to shift from

the delivery of content to the planning and development of content when teaching online (Bennett & Lockyer, 2004; Zuckweiler, Schniederjans, & Ball, 2004). If much of the content already exists for the online course, the time differences are minimized or perhaps even reversed. In the present study, we sought to verify and extend many of these previous findings related to the benefits, barriers, and suggestions for online MBA programs.

Method

Instructor interviews were employed as the major data collection method in this study. Given that the purpose of interviewing is to understand "the world from the subjects' points of view," and to unfold the meaning of their experiences (Kvale, 1996, p. 1), these interviews were meant to provide a window on what was working in this online MBA program and what needed further refinement and change. Twenty-eight professors teaching in the online program were interviewed face-to-face. The names and contact information of the interviewees were provided by the online program administrators. Except for two professors who co-taught one course and were interviewed together, the other participants were interviewed individually. Twenty-seven semi-structured interviews were conducted from May to August, 2004, each lasting from 30 to 60 minutes.

In addition to the authors of this paper, two additional researchers participated in the data collection. Before conducting the interviews, the research team met several times to discuss the interview protocol so as to ensure the quality and consistency of the interviews. In addition, each interview was conducted by at least two researchers in order to "ensure credibility and trustworthiness of the interview responses" (Song, Singleton, Hill, & Koh, 2004, p. 64). All the interviews were audio-taped and summarized right after each interview session by the interviewers. The tapes were then transcribed by a local professional company. We then analyzed the transcripts for key themes or patterns in faculty members' perceptions of online teaching. The lead investigator analyzed the transcripts and another investigator reviewed the results of these analyses to verify the accuracy and enhance the reliability.

Results

Several themes emerged from our analyses of the interview transcripts. The findings were organized by the aforementioned three research questions.

I. Benefits of Teaching Online

1. Working with "the Group of Students"

Teaching online provides faculty members with opportunities to teach certain groups of students whom they might not be able to reach in residential classes. A majority of the interviewed professors appeared to think highly of the online MBA students, and viewed working with them as one of the major benefits they received from teaching online. As one interviewee noted, "I just

really enjoyed the group of students." A few of the commonly encountered characteristics of the online MBA students are presented below.

a. Self-motivated. Many interviewees mentioned that the online MBA students were highly engaged and self-motivated in the learning process. As one professor argued, "MBA students are not just in the courses to complete the course. They are really in here because they want to learn a new set of materials." This high drive exhibited by the online MBA students fueled the instructors as well. Put in another interviewee's words, "their level of motivation helped keep my level of motivation high. It's much harder, you know, when you're staring at a class or dealing with a class, (wherein) you can't get a response." Many interviewees suggested that this characteristic of online MBA students, at least within this particular program, made online teaching "enjoyable" and "pleasurable."

b. From diverse backgrounds and experiences. Some interviewees claimed that the students' diverse backgrounds made online teaching more interesting. As one faculty explained, "they are from vastly different backgrounds and areas of the world, and they bring a lot to hear. They can make some very nice comments and it's interesting reading their papers."

c. More directly connected to the real world. Some faculty members noted that online MBA students tended to put what they learned from classes into practice more directly compared to residential students. This characteristic helped to make online teaching enjoyable. As one faculty member noted:

[what I enjoy most is] more real application of materials. People [i.e., students] would say "Hey, I saw this phenomenon in my last job and really want to share it"... I had a couple of students that said "this is exactly what I'm going through and this is really helpful." So they're really about how [they are] going to use this and they shared the stories of application opportunities.

2. Flexibility in Teaching

Temporal and geographical flexibility is among one of the benefits frequently mentioned in the literature on online teaching and learning (e.g., Arbaugh, 2000a). Not surprisingly, it was also noted by some faculty interviewees of this study. For instance, one faculty member mentioned that "I really like not being tied to the teaching schedule….So I can teach anywhere I have a computer."

3. Helping Students Learn More and Getting to Know Them Better

Some interviewees reported that they felt online students learned more knowledge than the average residential students, and this was the most enjoyable part for them. Moreover, some interviewees believed that teaching online helped them get to know students better than in face-to-face settings. One faculty interviewee explained why he thought that way:

In an online course it's harder for students to avoid the professor. And here is my example. You [a student] could take my class in the business school here and you could come every week or twice a week, never ask a question or talk to me after class. … So there are many students who sit in my classroom whom I do not get any relationship with. With the [online program] stuff, they [the students] have to talk to me every week. Whenever people ask 'is not online stuff kind of bad or you don't really see your students?' and I say "well, you know it's true I don't see the students but I interact with them a lot and I get to know them better.

4. Using Different Skills Needed for Teaching Online

During the interviews, quite a few faculty members mentioned that teaching online asked for different skills, and they enjoyed this intellectual challenge. For instance, one instructor summarized his online teaching experience as follows:

I find that [in the online MBA program] I [am] judged more purely according to content, structure, how quickly I gave feedback, [and] how detailed the feedback is. And I think that what is valued in the learning environment is by the students having the instructor who is just very conscientious, very organized, [and] good in communication; a somewhat different set of skills than the regular classroom.

II. Barriers to Teaching Online

1. Impersonal Nature of the Online Environments

Several faculty members viewed the impersonal nature of online environments as a barrier to effective online teaching and learning. To some faculty members, the most enjoyable part of residential teaching is when "sometimes all of a sudden in the middle of a class a student's face just kind of lights up… they are starting to understand something." Not being able to see this was what some instructors missed most in an online environment. As one interviewee noted, "the most difficult part about teaching online is simply that we're social people and we are used to having that."

2. Amount of Time and Heavy Workload Required for Online Teaching

There is a general impression that online teaching and learning takes more time than traditional instruction (Zuckweiler et al., 2004). Unfortunately, time is of limited supply with so many duties tugging at faculty members in higher education; especially those in MBA programs who have worldwide reputations. Not surprisingly, a number of the participants in this study mentioned the time barrier as an issue for them. A couple of faculty members, in fact, frankly stated that, "it's just a lot of work" and "it takes more time to teach an online course." Additionally, one faculty member showed a specific concern about striking a balance between teaching quality and time spent on one's online classes. According to him, "the big challenge is how I can find a way to keep the quality up and so it works for more students and it does not kill me."

3. ISP Cost

The Internet Service Provider (ISP) cost is another barrier identified from the faculty interviewees, especially for those who often travel around the world or who work from home. For instance, one online instructor stated that "Sometimes when I am away, I don't get broadband. I was teaching in Cancun, Mexico, on a dial-up, it was really slow. … I was in bunch of places and sometimes it's painful and expensive. …Being on the Internet of a hotel is highway robbery. I spent $250 on a weekend, just paying for the connect charge. It burned me up."

4. Some Unpleasant Students

While the interviewees generally agreed that the online MBA students were of extremely high quality and enjoyable to work with, a couple of faculty members mentioned that there was a small percent of students whose attitudes and behaviors were negative when compared to students in face-to-face classes. As one faculty said, "The thing that I don't like most is the few students that you get who are really mad when they feel like they've been trounced. They seem to go above and beyond what is diplomatic at times." Likewise, another interviewee mentioned, "I think students tend to be more that way online.… I think they feel they can say things in an email or a discussion that they wouldn't necessarily say the same way to someone face-to-face."

III. Suggestions for Improvement

1. Improving Online Technology

The suggestions that the vast majority of the interviewed faculty provided were related to the specific technology issues. Such technology suggestions included making the learning environment better support interaction, adding audio messages and videoconferencing capabilities, and improving the online testing tools, grade book, and chat tools. For instance, one online instructor mentioned that he felt extremely frustrated when he conducted online chatting. He would have liked to have tools that would allow him to type a message as long as he wanted and to track what each student said more conveniently. Another instructor indicated that he would prefer students to be able to take tests and get their grades without seeing the answers so that they could repeat the tests several times if they wanted.

It is interesting to note that when the interviewees offered the above suggestions, many of them mentioned that these issues were "minor," "trivial," or "narrow." And some of them emphasized that they had not discussed these with the technical support staff; therefore, they were not sure whether the current technology tools they used actually had the functions and they had not yet had time to ask about this.

2. Enhancing Faculty Support

In addition to specific functions that the interviewees wanted in the online tools and technologies, the interviewees provided several key suggestions related to the instructional and

technical support they would like to have. Suggestions in this regard included providing some nice user-friendly software packages or more templates to help instructors design online courses, making the course and system resources available to faculty even when they were not teaching, and keeping in touch with them year around with training, announcements, and resources. A few of these instructors also requested providing cutting-edge technology but only if it was easy to understand, readily available, and easy to use.

3. Fostering a Learning Community for Online Instructors

Several interviewees indicated their interest in sharing experiences with each other. As one faculty member stated, "we [are] all out there doing our own thing, but it would be nice to know what everybody else was doing." Some interviewees further suggested specific ways for how to do the sharing. For instance, one online instructor suggested having a central location where all of those who were teaching or considering teaching in this program would be able to observe what others were doing in their courses.

Additionally, quite a few interviewees commented in a highly positive way on the training opportunities and activities (e.g., brown bag lunches) that the program arranged for the online instructors. At the same time, they would have liked additional opportunities to discuss online teaching with colleagues in the program.

Finally, a couple of interviewees suggested asking online instructors who taught well to do some short presentations. Noticeably, one interviewed faculty member mentioned that while he benefited from attending a presentation given by a more experienced colleague, he was concerned that this strategy put the administrators in a difficult situation in that they had to identify which instructors, in fact, did a better job teaching online first.

Discussions and Implications

The major findings of the study are summarized in the table below.

Online MBA Professors' Perceptions of Online Learning

Benefits	Challenges	Suggestions
• Working with "the group of students" • Flexibility in teaching • Helping students learn more and getting to know them better • Using different teaching skills	• Impersonal nature of the online environments • Perceived amount of time and heavy workload required for online teaching • ISP cost • Some unpleasant	• Improving online technology • Enhancing faculty support • Fostering a learning community for online instructors

	students	

As with previous research in this field, this particular study indicated that professors teaching at this program perceived flexibility as a major benefit of teaching online. Online environments also were perceived to have potential in providing more interactions between faculty and students. These two findings coincide with the results of our parallel study on student perceptions of online learning in this program (i.e., Kim, Liu, & Bonk, 2005). Such benefits need to be considered in the design and development of online courses so as to realize the full potential of the online environments.

Online teaching requires extensive task structuring and organizational skills as well as other support skills and competencies. While using different teaching skills in online environments was perceived as a benefit in this study, it was regarded as a barrier by online instructors in other studies (e.g., Smith, 2001). As Lick (2002) discovered, the instructors of this program found that "if you taught in the classroom for 20 years, you have to reinvent yourself." Perhaps the people we interviewed were more innovative and risk taking than the norm. Still, to get other instructors on board and enthusiastic, online program administrators and instructional designers may need to provide corresponding support for the roles that they will have to take on. And they must be savvy at promoting the benefits of teaching online.

Online environments were perceived by some professors as less personal compared to face-to-face settings. Similarly, students viewed communicating with their peers online as a challenge (Kim et al., 2005). Such challenges indicate that more training in effective teaching and learning strategies needed to be provided in this program. For instance, faculty might be trained to use such activities as virtual coffee hours, eight noun introductions, and student expectations and course commitment exercises to add more social flavor to online environments (Bonk & Reynolds, 1997). In addition, they might be exposed to online team blogging, short podcast lectures, Wikibook projects, and a few collaborative tools for team collaboration and competition. With proper exposure, the pedagogical possibilities are endless.

Consistent with the prevailing online learning literature, some professors in this study perceived that the amount of time and workload required for online teaching was a challenge. Three points are worth noting in this regard. First, we did not actually clock instructor time spent on different course-related tasks or with different technology tools or features; of course, perceptions of time spent in an online class may not match reality and may significantly vary with the instructor's familiarity and experience with online learning.

Second, literature indicates that time saved on traveling when teaching online and time spending on setting up a live classroom when teaching face-to-face are often forgotten when making comparisons between the two environments (Zuckweiler, Schniederjans, & Ball, 2004). Online instructors might use the time saved from less course-related travel and class set-up needs, for furthering their research and writing efforts. In other words, while online learning can add to time pressures with increased email and course development needs, it can also reduce the time by

limiting time required for other tasks such as traveling to work. Furthermore, online teaching can offer high profile business professors opportunities to consult with distant institutions and organizations or present at international conferences while continuing to teach their courses.

Thirdly, there are myriad solutions for the time challenge. For example, Bonk, Wisher, and Lee (2003) suggested that instructors establish regular times each week for conducting their online teaching rather than teaching around the clock. Another idea they noted was to have students assigned critical friends or email pals who give each other weekly feedback on their work or conferencing discussion posts. In addition, they advised that instructors need not respond to all the student postings in online discussion. Rather, they might just give feedback to a percent of students' posts or focus on responding to heated discussions or major threads.

Asking for departmental support such as having teaching assistants is another solution for solving the workload challenge when the course size exceeds what is humanly possible (e.g., 25 or 30 students). Likewise, to solve the barriers concerning ISP cost, Smith (2001) advised to provide the faculty members with monetary stipends for the cost of a home office.

As previous studies revealed, technology plays a critical role for success of online programs like the one evaluated here (Zhai & Liu, 2005). Improving the technology for online teaching and learning was reiterated by the faculty members interviewed in the present study. Given the many consistencies in these findings, administrators, instructional designers, and technical support staff need to pay attention to the specific needs that the faculty members conveyed in this particular study about technology tools and supports. Perhaps as Arbaugh (2000a) advised, programs with available expertise and sufficient resources could develop their own software or systems that incorporate the best features of a variety of packages and are tailored to their specific faculty members and student populations. Noticeably, this program has hired some technical support staff to customize the technology tools that the program uses and to better meet the technical needs of the professors. How to keep the professors updated on the features of the tools and teach them how to use the tools seem to be another issue that administrators and supporting staff need to consider.

Finally, fostering learning communities for online instructors is another area that administrators and practitioners of online education should consider in the design and delivery of online MBA courses. In the end, each suggestion provided here as well as in our related research is intended to further break down the barriers to online teaching and learning while adding to the perceived benefits encountered in online MBA programs as well as other Web-based professional degree programs and beyond.

Limitations of This Study

Three limitations are associated with this study. First, the list of the potential interviewees was provided by the online MBA program under investigation. There might have been a possibility that the faculty members who agreed to participate in the study held more favorable or unfavorable perspectives toward online teaching than those who did not participate. Second, this

study used interviews as its major data collection method. Like other studies of this kind, these self-reported data represented the perceptions of the participants, which might not always match reality. Finally, in terms of generalization, as Fraenkel and Wallen (2003) point out, "generalizing is possible in qualitative research, but is of a different type than that found in quantitative studies. Most likely it will be done by interested practitioners" (p. 445).

Back and Forth Reflections of Study Significance

Given the above limitations as well as the plethora of research on student and instructor perceptions of online teaching and learning, what is the significance of this particular study or for any additional studies in this area? As anyone reading this journal realizes, online programs continue to proliferate in higher education settings. The rate of growth is, without a doubt, one of the most monumental changes and challenges to arise in higher education since Plato held his first classes on Academos. Back then, the technology and medium of educational delivery was oral speech used for didactic purposes from a teacher to the learner. Such oral practices still pervade all educational levels and environments. In just a decade or two, however, with the emergence of fully online and blended learning, instructional delivery systems and formats have expanded educational practices beyond the rigidity of the typical time and place constraints of learning that were part of his 4th century B.C. teaching and learning environments. Institutions and instructors are now being asked to give up, or at least modify, instructional practices that they have used--and often found (at least from their perspectives) highly effective--for millennia. Such changes do not come easy or without significant questions, concerns, and casualties.

Understanding the benefits of as well as the barriers to effective online instruction can better inform both the administrators developing such programs as well as those in the teaching and learning trenches. Just knowing that dozens, if not thousands and soon perhaps millions, of online instructors each day face the same problems that you encounter should ease the tension of novice or slightly hesitant online instructors as well as those who are more steadfast in their reluctance or resistance.

Of course, knowing that many unique and engaging pedagogical possibilities are also there for the taking should stimulate many educators to not only follow in the footsteps of the 28 instructors we interviewed here, but to take experimental risks and lead still others to new visions and realizations of what is instructionally doable on the Web right now! It is here that we all should be striving toward—to find ourselves in the midst of pedagogically exciting instructional situations wherein learning opportunities and formats are made available for learners of any educational need, monetary status, background, or age level.

To realize such visions, we need still further studies into the possibilities and constraints of teaching online as well as additional suggestions and guidelines related to how to improve online learning for all learners of this planet. This study, in a very modest way, was an attempt to do just that. We look forward to reading from those who conduct online learning studies that break new ground in exploring student and instructor perceptions of new forms of blended and fully online learning including cross-institutional collaborations, innovative international mentoring,

the creative use of free and open educational resources, and participatory learning with technologies such as Wikibooks, video blogging, and YouTube videos. We have completed a decade of increasingly exciting and rapid use of the Internet in instruction; however, the coming decade will likely be much more fascinating and tumultuous. What will online professors (and their students) have to say about online teaching then?

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