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# Pedagogy in Online Graduate Business Learning Environments

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*University of San Diego*

# PEDAGOGY IN ONLINE GRADUATE BUSINESS LEARNING

# ENVIRONMENTS

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A Dissertation

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In Partial Fulfillment

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Doctorate

in

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by

Alicia Maria Gallegos Butters

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# DEDICATION

I dedicate this work to my husband, James A. Butters, who has always supported and loved me.

# ABSTRACT OF THE DISSERTATION

Pedagogy in Online Graduate Business Learning Environments

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Many higher education institutions have decided to offer graduate business online courses and full degree online programs. Offering a quality education for graduate business students online is of concern to business school professors, administrators, and students. Instructors are concerned with the content, delivery method, and level of student achievement. Instructional design support for the online instructors is often lacking in the online curriculum and pedagogy, leaving the faculty with a great deal of freedom to create their own course content, structure, and delivery without any formal distance education training. For this reason, it is imperative for universities to establish online best practices guidelines. This study examined the pedagogical beliefs and best practices of professors who are considered experts in the field of teaching in online graduate business programs.

The panel was composed of thirty-six business professors from various AACSB accredited universities who have taught online graduate business courses. The Delphi method was employed to examine the study's research questions given that the subjects were geographically dispersed across three countries. Iterative questioning allowed professors to give meaningful input on pedagogical best practices for online teaching; the anonymity afforded by the method enabled leaders to freely express their perspectives. Data collected indicated that professors who teach online need support from a central location on their campus so that they can master the technology provided to them by the university, and more importantly, learn the pedagogical principles of teaching online. There was a clear consensus that incentives to professors and a top-down commitment would encourage faculty to discuss online pedagogy with their colleagues, but also design, develop and implement more online graduate business courses. Professors identified what they believed to be the ideal number of students for an online graduate business course, and set forth guidelines for building rapport with students and for electronic mail correspondence with students. Findings also included the most ineffective pedagogical principles that professors employ when teaching online.

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Lastly, many have asked why I was pursing my doctorate when I was so busy raising my triplet daughters. The reason is that life is about challenges and achieving goals, even if

they seem impossible. I hope that one day my daughters are able to look at this as proof that they can achieve anything they set their minds to. More importantly I hope that they follow the same path of a love for life-long learning.

# CHAPTER 1

# INTRODUCTION

In the United States, the use of computers is common in the workplace, at home and in educational institutions (Kleinman, 2005). The use of both personal computers and workplace technology has resulted in the demand for educational options that years ago were simply not available. People are able to access information anytime, which creates a diverse set of options in all aspects of their lives, for example, a person can shop online, bank online and earn an entire college degree online. As a result of the widespread use of computers, administrators involved in all aspects of education from K-12 to universities to business are struggling with the transformation of both their traditional and non-traditional educational programs. Step into most classrooms and one sees students using computers and incorporating technology into their educational environment. Online education has become a popular model for many college degree programs. In addition, the changes that have occurred in the workplace such as the increased number of employees working from home and working in global environments have increased the need for students to learn via computer technology.

Companies are increasingly hiring job candidates who hold Masters of Business degrees (Management, 2005). Additionally, a recent survey conducted by the National Association of Colleges and Employers found that companies looking to hire candidates with advanced degrees increasingly preferred MBAs (Management, 2005). Rather than earn a degree first and then go job-seeking, students often prefer programs that enable them to pursue an MBA while working full-time. Consequently, online learning is becoming a more attractive option for students. Traditionally, lecturing – that is standing in front of a class and presenting information to a room full of students – has been the most widely used method of instruction in higher education (Clow & Wachter, 1996). However, this method is difficult to use online. Professors designing online courses are concerned with curriculum issues and how face-to-face instruction can translate in an online environment. Online courses and

degrees are quickly expanding into traditional educational disciplines of business education including finance, international business, accounting, and global management.

According to Allen and Seaman (2005), students will take advantage of online learning. As universities expand their online offerings, students increasingly will take online courses as well as obtain online degrees. As researchers for the Sloan Consortium, these authors surveyed over 300 chief academic officers at public and private universities. The study showed that 97% of all public higher education institutions surveyed offered at least one online course and almost 50% offered an online degree program. Allen and Seaman (2005) reported that over 2.3 million full and part-time college students took at least one online course during the Fall 2004 semester. Also important was the growth of particular distance education delivery methods. Institutions reported that the Internet and two-way video were the primary modes of instructional delivery. Twenty-nine percent of the institutions reported using CD-ROMs as a primary mode of instructional delivery and 19% used mixed modalities. It was also reported that 43% of all business schools in the United States that offered a face-to-face program also offered at least one online degree program. Sixty-four percent of the courses taught online are being taught by the core tenured or tenure-track professors.

This trend is allowing students to become more like customers while universities become more like businesses competing for customers (Aggarwal, 2003). The rapid growth of the Internet and online learning has resulted in speculation that traditional classroom-based teaching will be displaced by online courses (Williams, Paprock, & Covington, 1999). This speculation has forced an "unprecedented need for flexible teaching and training environments and for adaptable instructors who not only can adjust to the new teaching distance learning setting but who can help their learners adapt as well" (Williams, et al., 1999, p.7).

A growing trend is the number of partnerships between corporate training departments and universities. A typical program in this partnership usually allows for an MBA program to be set up with a group of employees at a company and taught at the corporate facilities (Richards-Wilson, 2003). With this shift, it is crucial to examine the quality of online teaching that universities offer and the pedagogy behind it. As a result, professors and universities are taking a proactive approach to pedagogy. For example, at the

Haas School of Business at the University of California, Berkeley, graduate teaching assistants are required to enroll in courses on pedagogy (Haas School of Business, 2005). Professors at Stanford, the Wharton School and the Tuck School, are educating themselves about how to serve their students better in both diverse classroom environments and in online education environments (Dyrud & Worley, 2005). Additionally, Barker and Stowers (2005) propose a unique approach to teaching MBA students. The authors suggest that by teaching, observing and listening to MBA students, the professors will be better instructors and be able to apply a pedagogy that is well suited to the MBA student.

## RESEARCH ON ONLINE EDUCATION

As online education has gained momentum in the past few years, so has the research on the methodology of instruction. An annotated bibliography of over 350 papers, articles, and research studies dating from 1928 to 1998 compared traditional classroom learning to distance education (Russell, 2001). Distance education included a variety of delivery methods, so not all studies concerned computer distance education. This compilation repeatedly stated that there is no significant difference between face-to-face classroom instruction and distance education from the standpoint of instructors, students, and curriculum. The findings suggest that students learned as much or more in a distance education setting as in a traditional classroom setting.

Gagne and Shepherd (2001) conducted a research study comparing students who were enrolled in a face-to-face accounting class and students in an online education course. A one-way fixed-effect analysis of variance was used in their study to determine if there was a difference in the learning that occurred between the two samples. The analysis of variance was applied to four class performance measures, four class evaluations, and three demographic factors. The authors concluded that there was no significant difference between the online course and the face-to-face course.

Research is also being conducted on students' perception of online education. Payne and Johnson (2005) interviewed 15 students from in the Financial Family Planning graduate program at a Midwestern university who were enrolled in an online course or who had recently taken an online course. Participants were asked a variety of questions about their

experience in an online course. Students stated that courses offered online were often more difficult than traditional courses.

Rosenfeld (2005) compared the performance of approximately 800 students taught by the same instructors in the same courses - some in a traditional face–to–face classroom setting, and others in distance education classes that used WebCT, a Web-based course management tool. The students were enrolled in a variety of courses at the graduate level and undergraduate level. The researchers concluded that there was no significant difference between the two groups of students.

## RESEARCH ON PEDAGOGY FOR ONLINE EDUCATION

Many studies have looked at the impact of social interaction, student satisfaction, the students' ability to develop relationships with the professor and other students, and the perceived course effectiveness as viewed by the student. However, researchers (Moore & Kearsley, 2004) believe more study is needed on the relationships between traditional face-to-face instruction and online teaching to see if there are pedagogical differences between them.

Nuckles (2000) states that students all have different ways of learning. Some may be auditory learners; some may be visual, while others may be kinesthetic. He also notes that every teacher has a particular approach to teaching. Quitadamo and Brown (2001) presented a number of components that instructors adapt to form their personal style of teaching. The way an instructor presents information, interacts with his or her students, facilitates and designs learning tasks, and advises and encourages students all are components of teaching style. The job of an instructor is to provide information to students so that they can understand the subject matter. This can be done in numerous ways, such as lectures, demonstrations, presentations, group work, questioning, or by using technology. However, providing an understanding of a subject matter is not always easy for a teacher, especially if the teacher is not modifying his or her teaching styles to suit the needs of the students or the environment in which they are placed (Grasha, 1994).

There are many styles for both traditional and online teaching (Grasha, 1994). The two most common styles can be classified as teacher-centered or student-centered. Teacher-centered instructors tend to look at themselves as the sage on the stage and typically teach by

presenting structured lectures (Grasha, 1994). Student-centered professors, tend to teach via small group study and problem-based learning with activities that are designed to mimic real world scenarios (Grasha, 1994).

## MASTERS OF BUSINESS ADMINISTRATION ONLINE

A significant concern of online education in any academic genre is the pedagogy the instructor employs (Dellana, Collins & West, 2000). Currently, over 50 accredited business schools in the United States offer online Master of Business Administration (MBA) degrees solely online. For example, the University of San Diego offers a Master of Global Leadership degree through their School of Business Administration completely at a distance. This program is designed using a variety of modalities to deliver the curriculum. Students of this program offer a unique challenge in that many are stationed in Iraq and have limited computer time (Singleton, June 2004). In graduate business programs technology is available to tap a market that has not been utilized before, although research examining the pedagogy of online instruction is lacking.

## PROBLEM STATEMENT

Many higher education institutions decided to offer online graduate business courses and full degree programs online. Offering a quality education for graduate business students online is of concern to professors, administrators, and students. Instructors are concerned with the content, delivery method, and level of student achievement. Instructional design support for online instructors is often lacking, leaving the faculty with a great deal of freedom to create their own course content, structure, and delivery without any formal online education training. For this reason, it is imperative for universities to establish online best practices guidelines. Technology offers instructors' state-of-the-art online courses with delivery platforms developed to ensure that they have the technical tools to create innovative and exciting courses. However, there is a lack of guidelines available to professors to assist them in developing curriculum for their online courses. Pedagogical assistance should be offered to professors in the same manner that technical assistance is offered.

# PURPOSE OF THE STUDY

The purpose of the study is to identify the best practices of professors who are considered experts and identify a core set of elements in the field of teaching in an online graduate business program. A Delphi study will be conducted to determine what online graduate business professors consider best practices, what and who enables them to be standout professors in online graduate business courses, what barriers they encounter at both the university and individual level, and what online teaching pedagogies are ideal for graduate business courses.

# RESEARCH QUESTIONS

Four research questions guided this study.

1. What core elements both pedagogical and technical are essential to create an effective online environment for gradate business education?

2. Barriers

   a. What are the main barriers to best practices in current online graduate business programs and courses?

   b. What could universities do to address and remove barriers?

3. What are the main enablers for best practices to be implemented?

4. What training occurs and what else is needed to prepare instructors for online graduate business courses?

# SIGNIFICANCE OF STUDY

Although the Delphi panel was composed of professors in online graduate business environments and the focus of this study was to report on pedagogy in online graduate business courses, the findings will be generalized to other fields. The findings may have significance for institutions of higher education, professors preparing to teach online, faculty development professionals, institutional commitment, administrative decision-making, and doctoral course development. Although the research focused on pedagogical practices in graduate business courses, the panel included experts in graduate education.

The extant literature indicates that issues related to the quality of graduate level business courses are not confined to those that were delivered online. Specifically, the significance of this study includes the generation of the following:

1. A list of indicators regarding best practices, quality, or outcomes of online graduate business programs that have been developed and agreed upon by a panel of experts.

2. A list of best practices for online courses and programs that can be used by faculty and distance education staff to design and develop online graduate business courses.

3. A list of quality indicators for use by campus administrators, accrediting agencies, the state, and students as the basis for evaluating online graduate business courses.

## DEFINITIONS OF TERMS

1. *Best Practices*: practices with redeeming qualities that have been proven through implementation and evaluation and are beneficial for others to use and from which to learn.

2. *Distance education*: delivery of instruction in which the majority of the instruction occurs when the student and the instructor are not in the same location.

3. *Online education*: the course is delivered with 50% or more of the instruction offered through the Internet.

4. *Face-to-face instruction*: a traditional class in which the instructor and the student are in the same location, classroom, or other setting.

5. *Online degrees*: degrees where at least 50% of the courses are offered at a distance using the Internet.

## ASSUMPTIONS

Throughout this research study, the following assumptions were made:

1. All participants provided honest and thoughtful responses.

2. The expert panel members had expert knowledge in online education, graduate education, teaching pedagogy, and instructional design.

3. The expert panel members were the persons providing the responses.

4. The expert panel members were selected because of their experienced in online education. The panel members were able to respond based on their past experiences.

5. The Delphi Method was a valid research tool for this expert panel in establishing a group consensus.

## LIMITATION OF STUDY

This research was designed to determine the best pedagogical practices in online graduate business courses. However, the researcher acknowledges certain limitations to the study.

First, the research was conducted in a relatively short period, from December 2006 to March 2007. Given more time, research would have been conducted regarding the changing technology used in the online classroom and how the experts manage it.

Second, this study was limited to professors who taught in an online graduate business environment. Readers, therefore, may find that the results cannot be generalized to all higher-learning institutions or to be applicable to any other related academic programs.

Third, 36 graduate business faculty members from various universities in the United States and other countries participated in this Delphi study. It is appropriate in a Delphi study to have numerous groups of experts responding to the same questions in several groups. This did not occur in this study. There was one group of 36.

Finally, the study was limited to responses from the Delphi panel of experts. The responses to the three rounds of survey questions were subjected to unknown biases and perceptions. In addition, the possibility may exist for some researcher bias due to past involvement in the development of online graduate business courses. During the validation process of the study, periodic reviews by scholars without said bias provided feedback.

## ORGANIZATION OF THE CHAPTERS

This study is presented in five chapters. Chapter 1 is the introduction of the study. Chapter 2 is the literature review. Chapter 3 describes the methodology and provides an explanation of the procedures used in the study. Chapter 4 reports the results from the three rounds of the Delphi Study. Chapter 5 is the discussion and recommendations for future study.

# CHAPTER TWO

# REVIEW OF THE LITERATURE

This chapter examines the research on the following topics to support the need for further research on pedagogy in an online graduate business course. In addition the expertise of university professors and administrators was used to identify specific literature to support this study. The sources searched in this review of the literature were book and article databases, dissertations data banks, web sites pertaining to pedagogy, graduate business courses and distance education, and MBA programs.

This chapter is organized around the following sections:

- History of distance education
- Successful online teaching environments
- Pedagogical approaches in education
- Growth of business programs
- Online business programs

## HISTORY OF DISTANCE EDUCATION

### Correspondence Courses (First Generation)

Many researchers agree that the philosophical, methodological and historical roots of distance learning can be found in correspondence education (Brown & Brown, 1994; Sherron & Boettcher, 1997; Moore & Kearsley, 2004). By the end of the 19th century, a number of American universities were offering correspondence education courses. The Colliery Engineer School of Mines in Pennsylvania began a correspondence course on mine safety. As the school and its courses continued to grow it began offering courses to over 150 railroad companies. By 1894, it was offering courses to students in Mexico, Canada and Australia (Moore & Kearsley, 1996). Today, Thomson Education Direct which was the Colliery Engineering School of the Mines is one of the largest commercial providers of at-home education in the world (Moore & Kearsley, 2004).

A common element in correspondence courses was that the learner was primarily working on skills he or she needed for jobs or lifelong learning enrichment. Communication

was primarily one-way via the postal service, which also allowed all materials to be pre-packaged and ready for the student to work independently within a certain time frame (Sherron & Boettcher, 1997). Examinations, if required, were sometimes proctored at a local site (Porter, 1997). Some of this early methodology still exists today in distance learning, and the success of a student rests heavily on the ability of the learner to work independently and to complete educational tasks without an instructor present (Porter, 1997).

Correspondence courses set the foundation for distance learning and allowed those who may not have had access to a formal education the ability to learn using a set curriculum developed by subject matter experts. This mode of education is still thriving in many countries (Moore & Kearsley, 2004).

## The Open University (Second Generation)

The second generation of distance learning integrated print, broadcast media, audiocassettes, and videocassettes and in some cases computers (Verduin & Clark, 1991; Sumner 2000; Moore & Kearsley, 2004). With the new technology, two-way communication could be incorporated into the curriculum, but some believe the opportunity was squandered by not also incorporating good teaching pedagogies into the communication (Sumner, 2000). With the advent of this technology came the British Open University in 1969. Due to interest and growth, four open universities were established in Europe and more than 20 were established around the world. These universities had a student population that was relatively larger than that of a traditional university (Matthews, 1999).

At the time of their conception the open universities were attracting students who were isolated from a university or in remote locations (Mason, 2001; Miller & Lu, 2003). The first American open university was established 1971. New York's Empire State College was established to offer college courses to students who were not able to attend traditional face-to-face classes (Lefor, Benke & Ting, 2001). By 1979, the college established the Center for Distance Education and began exploring computer-supported mediums for their distance education courses (Lefor et al., 2001). As open universities began to grow in popularity and necessity, many universities looked beyond the print-based correspondence curriculum of the first generation to the possibilities that new technologies could offer (Moore & Kearsley, 2004).

## Broadcasting and Teleconferencing (Third Generation)

It is estimated that the third generation of distance education began after the availability of radio and television (Moore & Kearsley, 2004). Later, electronic mail, chat sessions, audio conferencing, fax machines and print media drove the third generation (Sherron & Boettcher, 1997). In 1934 the State University of Iowa offered television broadcasts in a variety of subjects (Moore & Kearsley, 2004). During this time other universities were offering television broadcasts, and some began producing radio broadcasts for college credit. Educational television was able to thrive due to the Ford Foundation, which gave millions of dollars in grants for educational broadcasting (Moore & Kearsley, 2004). "By the mid 1980's, there were around 200 college level telecourses produced by universities, community colleges, private producers, and public and commercial broadcasting stations, distributed either by the producers themselves or by the Corporation for Public Broadcasting" (Moore & Kearsley, 2004, p. 32). Courses are also delivered by the Adult Learning Services (ALS) of the Public Broadcasting System (PBS) to over 2,000 colleges around the country. Other courses are taught via television with packaged textbooks and study guides that include either a schedule of when the courses will be on television or VHS tapes of the corresponding lessons (Freed, 1998, Verduin & Clark, 1991). Today, educational television remains a popular and effective option for distance learning especially for those students who have limited Internet access (Martin, 2005).

## The Information Age and the Advent of the Computer (Fourth Generation)

The fourth generation of distance learning involves the use of computers in education (Sherron & Boettcher, 1997; Moore & Kearsley, 2004). Recent advancements in technology and computers have fueled a revolution in education. According to Pattison (1999):

Technological tools are changing the way we educate and deliver adult education. Distance delivery is allowing higher education to reach populations of learners and workers once excluded. Technology based distance education is emerging as an increasingly important component of higher education. Information technology and distance education have been key factors changing education (p. 15).

Modern technologies offer educational opportunities unheard of 100 years ago (Miller & King, 2003). According to Carr-Chellman, Dyer, and Breman (2000), distance learning is one of the fastest growing areas of education today. Almost every university offers some form of distance education (Moore & Kearsley, 2004). The involvement ranges from degrees offered exclusively online to traditional "brick-and-mortar" classes supplemented with web-based course management systems for students (Carr-Chellman et al., 2000).

Distance education has moved into business and industry, allowing companies to train their employees and offer courses for employee development (Carr-Chellman et al., 2000). The new generation of distance education and technology offered previously unrealized opportunities for educational growth and lifelong learning. Draves (1999) believed that distance education would soon constitute over 50% of all learning.

## Online Learning

According to Khan (1997), "'online learning'" or 'web-based instruction' is a hypermedia instructional program that uses the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported" (p. 6). The University of Phoenix offered the first online program in 1989, but not until the web browser, Mosaic, was introduced in 1993 did online learning gain attention (Baker, 2005). In 1992, the California Institute of Integral Studies, an accredited private university in San Francisco, developed the first online Ph.D. program. That same year, George Washington University offered an M.A. in Educational Technology via cable and used a computer bulletin board system for course discussion and student feedback.

Founded in 1993, the International University College, now known as Jones International University, established a virtual university. That same year, the University of Nebraska-Lincoln offered the first online doctoral program in Educational Leadership and Higher Education. In 1996, Duke University began a Global Executive M.B.A. program that allowed students an option to study overseas, and Western Governor's University, a non-profit online university, was founded. By 1997, the California Virtual University, a

consortium of almost 100 California colleges with over 1500 online courses, was developed. In 2000, the first online law degree was offered in California through Concord University School of Law (Baker, 2000).

As the Internet gained in both popularity and ease of use, the universities began seeing its potential and programs began emerging. Within 10 years, online education went from single courses to advanced degree programs offered by major accredited universities.

## PEDAGOGICAL PHILOSOPHY OF LEARNING

### Traditional Approaches to Pedagogy

There has been a great deal of research on the roles, responsibilities and pedagogies of instructors. As more universities enter the online teaching environment there is a need to study traditional face-to-face instruction to see if and how it will translate into the online classroom (Karber, 2001). It is also important to gather information from professors who teach in an online environment to assess and benchmark practices that are working in their virtual classrooms (Crumpacker, 2001). A teacher's pedagogical approach with may need to change to meet the demands of an online environment (Crumpacker, 2001). If that is done online education can continue to grow to meet students' needs.

Instructors provide information to their students in a number of ways, through lectures, presentations, demonstrations, questioning, group work, and technology. Good instructors are able to modify their teaching styles to suit their students' needs and the environment in which they are teaching (Grasha, 1994). The number of modifications an instructor makes, including the amount of instruction he or she is willing to give, can affect the learning environment (Perry, 1999). Online courses may be designed and delivered using an instructivist, teacher-centered approach or a constructivist, student-centered one (Reeves & Reeves, 1997).

In the United States teacher-centered styles have predominately been used (Conti, 1990). According to Heermann (1988), in a teacher-centered learning environment, the student is a passive recipient of information, and learning is something that has taken place and is measured by a change in test scores or behavior. This type of learning is particularly suited for undergraduate courses where the instructor is concerned with disseminating a large amount of information and wants a higher level of control with the learning environment

(Heermann, 1988). Heermann also notes that in a teacher-centered environment students learn by taking notes, studying assigned reading, and taking exams at the end of lessons. It is believed that teacher-centered teaching is still so prevalent because instructors tend to develop their styles based on those that their own instructors used (Heermann, 1988). The teacher-centered approach has been criticized for placing little emphasis on the learner (Reeves & Reeves, 1997).

Student-centered learning tends to focus on the needs of the students, rather than on a set of teaching standards (Brookfield, 1987). This type of instruction is considered the constructivist philosophy (Grasha, 1994). The student-centered instructor employs activities that include questioning and guiding so that students can explore options and make their own decisions or choices (Grasha, 1994, 1996; Grasha & Yangarber-Hicks, 2000). The role of an instructor in a student-centered environment is as facilitator or consultant; the instructor encourages students to work together to find answers to questions that students have posed (Grasha, 1994, 1996; Grasha & Yangarber-Hicks, 2000).

In the student-centered environment, trust must exist between the instructor and the students (Conti, 1990). When the instructor challenges students to think critically and beyond their level of comfort or knowledge, students will be exposed to other ways of viewing materials taught (Brookfield, 1987). This level of thinking encourages students to reflect and discuss elements of the course material they might not have if they were not in a student-centered environment (Mezirow, 1990).

Sellappah, Hussey, Blackmore & McMurray, (1998) conducted a study on how instructors ask students questions. The researchers examined the level of questioning in graduate nursing classrooms by using Bloom's Taxonomy. They found that many instructors were asking low-level questions and that the students were not engaging in critical thinking. They concluded that to facilitate the development of critical-thinking skills, instructors needed to adopt a more student-centered approach. Grasha and Yangarber-Hicks (2000) found that some of the best teaching in a student-centered environment includes case studies, research projects, group discussion and group work, problem-based learning, role playing, and lessons where the students learn information and then teach their fellow students. Many of the activities that promote critical thinking skills, such as journaling, case studies, reciprocal teaching, debates, group work and seminars, are also used in student-centered

teaching (Schaefer & Zygmont, 2003). Generally, students in a student-centered environment are more satisfied with the learning process and have greater critical thinking skills than their counterparts in a teacher-centered environment (Schaefer & Zygmont, 2003).

Sellappah et al. (1998) point out that many faculty members using strategies that support teacher-centered learning. Grasha (1994) found that changing from existing teaching practices was difficult. He discovered by working with faculty that many preferred the teacher-centered style because it gave the instructor more control over the classroom environment. Some instructors who teach via teacher-centered learning believe that allowing students to work in a small group or watch a videotape would take away valuable classroom time from professors (Grasha, 1994). Many instructors in teacher-centered environments are the products of an educational environment that stressed learning a large amount of content out of context, so they may have difficulty in transitioning to a student-centered environment (Schaefer& Zygmont, 2003).

## Pedagogy in Online Learning

Researchers in distance education have recognized the need to modify the role of teachers in an online environment (Jeris & Popple, 2002; Donaghue, 2003; Rogers, Graham, Ure, Rasmussen & Cambell, 2003). Initially, computers played a secondary role in educational settings, functioning either as an optional tool for student use or for projects limited to the computer lab (e.g., performing a uniform task, learning a new software program, or checking spelling) (Becker & Ravitz, 1999). As technology advanced, computers not only served as tools and delivery systems but also became learning environments, allowing teachers to design instruction via active-learning methodologies and student engagement. The challenge for instructors in this environment was to design and develop courses that fostered learner-centered education (Williams et al., 1999).

Instructors' beliefs about online teaching were influenced by their knowledge of technology, what they believed were the best practices in teaching, their teaching discipline, and their comfort level with technology. Saunders (1998) stated that distance course design, learner characteristics, and the design and interactive potential of the online course were key factors determining the learning potential and effectiveness of the online course. Effective online courses needed to employ a variety of features (e.g., discussion forums, online chats,

online meetings in real time, online assessment, and collaborative projects). As distance education became common in higher education, continually assessing the pedagogy in the offered became essential (Nalley, 1995).

To meet the needs of professors who teach in an online environment, universities must develop ways to ensure that they are knowledgeable about online pedagogy (Mishra, Koehler, Hershey & Peruski, 2002). Mishra, et al. (2002) conducted a study examining faculty development for designing online learning environments. The impetus for the study was a lack of continuity in the design phase of course development at the university where they both taught. The researchers described an atmosphere where technology and pedagogy were separate. Faculty typically went to the university's technical department to seek assistance for technical issues, and turned to the technical department to help design their course. This practice had a serious impact on the pedagogy of the online courses because the technical experts had no instructional design background (Mishra et al., 2002).

Mishra, et al. (2002) conducted a case study of a course being taught with six tenured faculty members who were each teamed up with three or four educational technology master's students. Each group's task for the semester was to design a course that would be taught by the tenured faculty member the following semester. Faculty who participated in the course and taught the newly designed online course the following semester were given a laptop computer, while graduate students were attracted to the opportunity to work as the instructional designer to a faculty member.

In many ways the course was like any other graduate-level course. Students, both the faculty and graduate students, read assigned materials, required to posted reflections online regarding the readings, explored technology, participated in online discussions, worked in groups and offered peer reviews of the final projects. Researchers collected data through interviews with the faculty members, final papers of the graduate students, an online questionnaire for students and faculty, course observations, and online postings by faculty and students. They also analyzed the courses designed by the faculty and graduate students.

Mishra, et al. (2002) found that faculty developed online pedagogical skills in a number of ways. Faculty members expressed that they had to confront their pedagogical issues in ways they never had to in their traditional courses because they had to discuss the course content with an outsider and explain the course objectives to the instructional

designer. Faculty members found that they had to develop a new set of procedures, tools and materials to present to students in their online course. Mishra, et al. also found that faculty members developed a broader understanding of technology. Faculty members found that the course discussions that were offered helped them understand the possibilities of technology, and how they could apply them to their new online course.

Mishra, et al. (2002) found that the graduate students viewed the class as a typical graduate level course. Students reported that they learned a lot about technology, and were exposed to new technology. Students expressed in their questionnaires that they were more interested in learning about the new technology because they would be using it for the online course they were helping to develop. Researchers also found that students were able to apply their knowledge of educational methodologies to a real context by working with a faculty member. Most students responded that this was one of their best courses because they were able to solve a real life problem.

The researchers concluded that faculty members gained online pedagogical insight by working with an instructional design team. Faculty were able to apply online pedagogies to their new courses and experience some of the teaching techniques by being students in a course that used a variety of technology to assist in the learning.

As courses go online, instructors are struggling with how to translate pedagogical methodologies from a traditional face-to-face environment to an online environment (Christensen, 2003). Christensen examined this through case-study methodology in two hybrid online courses. In each course the instructor used the constructivist pedagogy for course assignments. The first was a seven-week, summer-session course with 11 students. One student participated completely online while the other 10 attended one 90-minute class a week, leaving 5 1/2 classroom hours to be completed online. During the first course data was collected via instructors' perception and notes from the course, a formative student questionnaire at the end of the course, and students' assignments, projects and online comments made during the course.

The 15-week fall-semester course had 17 students and all were able to attend the weekly face-to-face course and the online sessions. During the second course data were collected were collected in the same way as the first course.

Christensen (2003) found 100% of students in the first course and 80% of the second course thought the class was valuable and effective. In both courses students felt the projects designed with constructivist principles were their favorite parts of the course. In general all students thought there was value in the real-life teaching projects. Christensen (2003) states, "Using an online solution appears to be an effective strategy when trying to implement a constructivist pedagogy" (p. 242).

An essential step for institutions to develop or improve their online education is to develop a set of best practices for online pedagogy (Kemerait, 2004). Quality on the Line: Benchmarks for Success in Internet-Based Distance Education, prepared by Phipps and Merisotis (2000) for The Institute for Higher Education Policy is a guide designed to serve as a standard for any online course. To prepare their guide Phipps and Merisotis conducted a comprehensive literature review and identified 45 specific best practices benchmarks, which they grouped into seven categories. Next, they identified institutions whose instructors had substantial experience in the online teaching environment. Finally, they visited six campuses to observe how well the individual universities incorporated the best practices benchmarks into their online courses (Phipps & Merisotis, 2000). The six were chosen because they each had substantial experience in online education, was recognized as a leader in the online education community, was regionally accredited, and offered more than one degree program online. The institutional visits consisted of in-depth faculty, student and administrator interviews, and a Likert-style survey administered to each interviewee. In total 27 faculty members, 62 administrators, 16 people who were both an administrator and a faculty member and 42 students were interviewed. The information obtained was both quantitative and qualitative. The respondents were interviewed after they had taken the survey and many of the interview questions were based on their survey responses.

The researchers state that working in groups, and using problem-solving techniques is an ideal way of teaching. Phipps and Merisotis (2000) also state that teaching in modules is ideal since students can master one task before moving on to another. Setting expectations early in the course would also fosters the ideal online learning environment.

As online courses and programs continue to be part of the way universities deliver courses it is important for faculty and administrators to study online pedagogy and see how it can be applied to their university. Phipps and Merisotis (2000) offer a set of benchmarks for

the online environment. Christensen (2003) examines online learning in a constructivist environment. Mishra, et al., (2002) offered a model for how universities can motivate faculty members to move into the online arena with pedagogical tools for course design and implementation.

## Teaching Presence

Garrison, Anderson, and Archer (2000) developed a model for critical inquiry in online environments. They argue that there are three prerequisites for a successful experience in an online environment in higher education: social presence, cognitive presence, and teaching presence. Anderson, Rourke and Archer (2001) define teaching presence as "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p. 5). Since the inception of education in the United States, instructors have performed multiple roles, including direct instruction, instructional design, and classroom maintenance, all while building a community of learners. Online learning is similar to the one-room schoolhouses of early American education in that instructors are also responsible for direct instruction, instructional design, maintenance of the virtual classroom, and community-building for distance learners (Anderson, et al. 2001). The instructor in an online class must shape, initiate, and remove distracting triggering events so that the remains focused on the educational outcomes (Garrison, Anderson & Archer, 2004).

Whether in the traditional classroom or in an online environment, the instructor is responsible for the design of the educational experience (Garrison, et al., 2000). This experience includes the objectives of the course; selection of the material; organization; the design, development, and implementation of the learning activities; and the direction of instruction.

Teaching presence begins with the design and organization of a class, often the most time-consuming portion of the process (Anderson, et al., 2001). Instructors build curriculum materials corresponding to their learning outcomes, including posting teacher commentary (e.g., lecture notes) online. The instructor also designs group and individual activities and assignments for the online course, including detailed instructions for students to navigate easily through the requirements of the online class. During the planning phase of teaching

presence, the instructor must establish time parameters and incorporate examples of proper "netiquette" (Garrison, et al., 2000).

Facilitating discourse is the second component of teaching presence (Anderson, et al. 2001). It is important to maintain the interest, motivation, and engagement of the students with productive and valid knowledge acquisition (Garrison, et al., 2000). To fulfill this component, the instructor must actively communicate with the students, including regular reading and commenting on postings, answering student questions, and continuously improving learning (Anderson, et al., 2001). The instructor's interaction establishes him or her as an active member of the community, carrying a higher level of responsibility for creating and maintaining discourse that meets the intended learning objectives. (Garrison, et al., 2000) state that

> It is a process of creating an effective group consciousness for the purpose of sharing meaning, identifying areas of agreement and disagreement, and generally seeking to reach consensus and understanding. Through active intervention, the teacher draws in less active participants, acknowledges individual contributions, reinforces appropriate contributions, focuses discussion and generally facilitates and educational transaction. (p.25)

Designing activities that promote active engagement of the student in quality dialogue with both the instructor and other students is important to critical thinking (Rossignol, 1997). It is important for the instructor to be present in the online dialogue to prod students to dive into a more complex level of inquiry. Open dialogue creates many more possibilities for the student and represents the pedagogical practice that falls in line with the student-centered approach.

Direct instruction is the final category in teaching presence. Offering intellectual and scholarly leadership while being able to communicate the subject matter and objectives of the course is the main focus of direct instruction (Anderson, et al., 2001). According to Salmon (2000), many experts in the field of online education adopted the pedagogy of "guide on the side" instruction. Salmon wrote that courses were not taught by the subject matter experts, but rather by tutors who were comfortable with the subject matter and expert in dealing with students. Anderson et al. (2001) states, "We believe that such minimal subject level competency provides less than the ideal that defines high quality professional education" (p. 10).

Through direct instruction, the instructor provides students with explanatory feedback and facilitates reflection and discourse by presenting the students with ideas and concepts to promote inquiry (Garrison, et al., 2000). During direct instruction, the instructor clarifies misconceptions, leads students in a Socratic dialogue, and allows students to discover their own insights based on the learning activities. The instructor for an online course also possessed a wealth of outside sources (e.g., published articles, websites, books) for students to make further inquiry and to clarify concepts (Anderson, et al., 2001). In addition to serving as the subject matter expert, the instructor also served as the technical advisor for questions related to the bulletin board, e-conferencing tools, and other technical aspects of an online course.

According to Anderson et al. (2001), the online course offered roles somewhat different from students' previous educational experiences. Both students and instructors might have felt isolated and possibly viewed themselves as anonymous individuals in the class. These feelings forced instructors and students to define roles and guidelines while in an online class. Therefore, a system needed to be in place to assist instructors and students to better understand their new environment.

In addition to Anderson et al. (2001), Coppola, Hiltz, and Rotter (2002) examined the role of the "virtual professor" through a longitudinal study of 20 instructors who taught in an online environment, They identified three major categories of change when teaching online: affective, which is the classroom atmosphere, including the instructor-student relationship and student-student relationship; cognitive, which relates to the process of learning, thinking and retention of ideas, and managerial, which is the classroom management. It was found that these roles change in an online course. Through interviews about faculty experiences in creating and delivering online courses, the researchers found that three out of the 20 instructors did not change their personal teaching style in an online environment. The researchers found that for the 17 instructors who changed their teaching "persona" the following. The cognitive role shifts to a much deeper cognitive complexity for the instructor in an online environment. The affective role required the online instructor to find new tools to express emotions that would be easily expressed in a traditional classroom setting. The managerial role required greater attention to all classroom details, and additional student monitoring was needed in an online environment.

Coppola et al. (2002) concluded that as universities continue to offer online courses instructors who teach in an online environment must change their teaching "persona" to meet students' needs. The researchers suggest that professional development is needed to prepare faculty for online instruction. If offered it should result in more satisfied and successful students.

Heckman and Annabi (2003) also studied face-to-face pedagogy and online pedagogy. In their study, they observed 120 students in an Information Management course in eight case study discussions where four were conducted online and four were in a traditional face-to-face environment. They developed a model to examine the social, cognitive and teaching processes in an online teaching environment. The researchers were interested in creating a tool to identify the similarities and differences between learning in a traditional face-to-face environment and online. The study was based on the research conducted by Anderson et al. (2001). All classroom discussions were recorded and transcribed and the complete text of all online discussions was taken from logs so that the researchers could compare and analyze the discussions. By using direct instruction and discourse facilitation to indicate teaching presence, the researchers found that there were 125 more instances of direct instruction in the face-to-face classroom than in the online environment. In the online environment there were only 18 instances of direct instruction.

Analyzing discourse facilitation yielded the same results (Heckman & Annabi, 2003). However, the researchers reported that the students initiated discourse between instructor and student and student and student in both environments. They found that in a face-to-face environment the exchange between individuals were more formal and turn-taking occurred, whereas in a online course students and teachers did not follow a set discourse and in many instances were answering questions and starting discussions randomly. The researchers concluded that a traditional lecture method was not a clear option for online instruction. The researchers advised instructors in an online environment to switch from a teacher-centered style to a student-centered style.

Perreault, Waldman, Alexander and Zhao (2002), collected data from 81 business professors who taught online courses at 61 accredited U.S. universities. The purpose of their study was to examine perceptions of the online teaching experience, course development, training, enablers and barriers to online education and to determine factors considered most

important to online learning so that they can be shared. Perreault et al. developed a questionnaire, which was validated by 12 experts in the field of online education, and solicited 335 business schools in the United States asking for professors who teach online courses. Sixty-one universities agreed to participate and provided 184 names of professors who met the criteria. Out of the 184, 81 returned usable surveys. Perreault et al. reported that over 75% of the participants were new to teaching online.

The findings from the Perreault et al. (2002) study provided insight into issues that occur in an online environment. The researchers reported that 80% of the professors found the reliability of the technology to be a major concern. Sixty-three percent of the respondents reported that they taught themselves how to design, develop and implement an online course without any formal training. Some indicated that graduate assistants were available to offer technical support. They also found that 59% of respondents said it was important to use a student-centered rather than teacher-centered style. As a result of the study, Perreault et al. recommended instructor training to improve online courses. They suggested formal workshops to help professors use the technology effectively and to focus them on the pedagogies of online learning. Teaming professors with instructional designers and technical support would be ideal.

Teaching presence is a crucial element in the online environment. In a traditional face-to-face classroom an instructor is able to encourage, guide, facilitate, and motivate students (Moore & Kearsley, 2005). In an online environment this presence is much harder to accomplish due to the lack of visual cues. A challenge for instructors of online courses is to translate teaching presence to the online classroom so that the students do not lose their motivation or drop the course. Instructors are able to do this by engaging students in the student-centered pedagogical style. This will allow students the opportunity to engage with their online classmates, direct their own learning and accomplish the course objectives.

## Transactional Distance

Transactional distance theory describes pedagogical relationships in a distance education environment: for example, a relationship that can be defined as "the family of instructional methods in which the teaching behaviors are executed apart from the learning behaviors, including those that in contiguous teaching that would be performed in the

learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical or other devices" (Moore, 1993). Moore (1972, 1993) developed his theory with three key elements that define a distance education program: dialogue, structure, and learner autonomy. Dialogue is the communication between a teacher and student, both how they interact and how much they interact. Structure refers to the course design as created by the instructor. Dialogue and structure are the teaching elements and are mainly controlled by the course instructor. Learner autonomy is the extent to which a student accepts or rejects structure and communication with the instructor. The theory sought to isolate the elements that would most affect a learner in a distance education environment (Jung, 2001). According to this theory, it is necessary is to find the correct balance between the three elements to foster optimal learning in an online environment. An example of transactional distance would be when students had no interaction with their instructor or with each other and all material was prepackaged and sent to students, similar to the first generation of distance education (Jung, 2001).

Moore first introduced the transactional distance theory in 1972, arguing at the time that distance was a pedagogical, not a geographic phenomenon (Chen, 2001), but since then the concept has been reworded and redefined as external changes in distance education have occurred, with the most significant change being delivery technologies (Jung, 2001). Empirical studies are beginning to be conducted to test the transactional distance hypothesis using different technologies such as videoconferencing, audio conferencing, interactive television and WBT. Bischoff (1993) sampled 221 students in 13 nursing graduate courses at the University of Hawaii to evaluate their perceptions of transactional distance. Students were asked questions about transactional distance and the course content of the courses they were taking via the Hawaii Interactive Television Service at the University of Hawaii. This study focused on two points in transactional distance: the dialogue between teacher and student and the interaction among students. Participants responded that they felt various degrees of transactional distance.

Saba and Shearer (1994) examined the relationship between transactional distance and teacher-student interaction in a computer conferencing environment. Students sat at computer workstations that included voice and video conferencing technology. Using the work stations, students interacted with the professor one at a time, allowing Saba and Shearer

to measure four types of interaction: direct, indirect, active and passive interactions. The researchers found that being in a distance education environment did not determine the effect of instruction, but rather the amount of transaction between instructor and student. This was an important finding because it showed no difference between distance education and traditional classroom instruction.

Transactional distance is an important factor for instructors to consider when they are planning online courses. Moore and Kearsley (2005) recommend that instructors who teach in an online environment review their pedagogical approach to assure that it closes the distance that may occur in an online environment. The use of dialogue and course structure can help instructors close the distance that they and their students may feel in online courses (Moore & Kearsley, 2005).

Transactional distance is present in almost all educational activities (Moore & Kearsley, 2005) and is an important factor for instructor to consider when developing a course that will be taught online. Course structure determines how the course is developed and should include the learning objectives of a course, the themes, the information to be taught, presentations, case studies, projects and tests (Moore & Kearsley, 2004). Care (1996) states that the transactional approach to online education is learner-centered. Care offers student-centered teaching strategies for instructors by using Moore and Kearsley's components of transactional distance-dialogue and course structure. Care contends by using focus groups, reflective journaling, and learning contracts between the instructor and student, the transactional distance that is often felt in an online course can be overcome or reduced.

The use of course structure and dialogue of an online course can help the instructor close the distance between instructor and student, in turn increasing the probability of good course outcomes, motivation and higher order learning taking place. Moore and Kearsley (2004) offer two suggestions for bridging the distance. First is for the professors to considered student-centered learning, and second is to offer instructors useful guidelines for online instruction.

Being an instructor has changed over the last 20 years. Students can be anywhere and take a class anytime. The pedagogical approaches that worked in generations past are now being called into question as more instructors take their traditional courses online. Researchers have begun to examine how this process can be most effective, and suggest that

instructors must be able to engage the student and bridge the distance that many students feel in an online environment. This takes knowledge of pedagogies and insight in instructional design. Many studies are being conducted to examine how instructors can translate traditional teaching pedagogies into online environments, and are finding that it is a possible task that only takes planning and for some the willingness to change traditional teaching practices.

## MASTER OF BUSINESS ADMINISTRATION PROGRAMS TRADITIONAL AND ONLINE

According to Hahs' (1999) survey of almost 1500 CEO's, job candidates possessing an MBA were more desirable than those with computer science or engineering degrees. Hahs believes this preference helps to explain why one-third of graduate students seek degrees in business. The Association to Advance Collegiate Schools of Business (AACSB, 2005) reported that, in 2002 alone, over 120,000 business master's degrees were awarded in the United States. In addition, only 22.8% of the Master of Business Administration programs in the United States were full-time traditional 2-year programs while 45% were part-time, evening, weekend, and accelerated programs. In 2002, only 3.9% of MBA students were in distance education programs. The Sloan Consortium (2005) reported that in 2004 business programs had the highest number of schools that offered at least one online course to their students.

In 2003, over 150 graduate business programs were being offered either partially online or completely online. Many students opted for an online graduate business program, since many of them were full-time professionals who did not have the luxury of going to school during the day or full-time (AACSB, 2005). The advantages of obtaining a graduate business degree online include flexible scheduling, anytime access to course material and instruction, and no travel to or from campus. Universities offering online programs could increase enrollment for a single class, use fewer university resources, and standardize course materials (Gagne & Shepherd, 2001).

Online education, however, may not for everyone, because it requires self-discipline and commitment (Young, 2000). Past literature has indicated that online learning is better suited for the older adult learner (Gagne & Shepherd, 2001); however, this is not the case according to Bruce Francis, chancellor of Capella University. He states that it is up to the

individual to bring his or her desire and motivation to learn to a university course whether it is traditional or online (Francis, 2006). Chang (2005) states that although online MBA degrees offer a great deal of flexibility, they still require commitment.

Kathawala, Abdou, and Elmuti (2002) identify three types of online MBA programs that are widely available. One type offers self-paced independent study. In this type of program the student sets his or her own schedule and studies at his or her own pace. The materials are prepackaged and sent either electronically to the student or are accessible online. Responses for student work are usually preprogrammed. It is believed that this form of online program requires the highest level of self-motivation by the student because it is independent study.

Another online MBA program is the asynchronous interactive model. In this model, students are able to interact with their professors and fellow students in a bulletin board-type setting. Students attend classes online whenever they have the time and for any amount of time. Feedback is available to them from their professors and fellow students.

The third form of online MBA programs that Kathawala et al. address is synchronous learning. Here, students are able to attend live lectures or classes via the computer and can ask questions and interact with fellow students online. This type of online course is the most interactive of the three and is the least flexible. It is also the format that is the most similar to a traditional face-to-face environment.

In the same article Kathawala et al. (2002) identify three strengths that an online MBA has over a traditional face-to-face MBA. The first is that an online MBA offers a quality business school education to students from around the world who in many instances would not be able to attend one due to the cost of relocation. Another strength of an online MBA program is the ability to customize the program. This is often the case because many online MBA programs are designed around specific companies' needs thus employers can provide the students and drive the curriculum. The third benefit is the improvement in technology. Kathawala et al. suggest that the partnership between the companies and the universities produces powerful Internet tools that allow for faster and better delivery of online MBA programs.

Ponzurick, France, and Logar (2000) conducted a study to analyze MBA student perceptions and preferences with regard to traditional instruction verses online instruction in

a marketing management course. To analyze the students' perceptions and preferences the researchers developed and administered a field market survey. The participants were enrolled in three separate sections of the same marketing class being offered to three separate groups of graduate students. There were six different cohorts during the 2-year study, with a total of 143 participants: (a) part-time online students, (b) full-time traditional students, and (c) part-time evening and weekend students. All participants graduated from traditional face-to-face undergraduate universities. Ponzurick et al. (2000) reports that three professors taught the marketing management class to each group. The three professors jointly developed the curriculum for the course. During the second year of the study the professors rotated teaching sections of the course to eliminate instructor bias. Each professor had experience teaching this course at a graduate level and had terminal degrees in Marketing or a similar discipline.

Ponzurick et al. (2000) report that student preferences were analyzed using a questionnaire administered by a third party at the conclusion of each marketing course. The questionnaire contained Likert-type questions focusing on the effectiveness of and satisfaction with various class activities. Students were asked about time requirements for certain tasks and how satisfied they were with the course tasks. Open-ended questions were also part of the questionnaire where students were asked what they liked or did not like about the class and how they would change the class if given the opportunity.

The researchers concluded that students viewed their online graduate business education as convenient but less effective and less satisfying compared to a face-to-face course (Ponzurick, et al., 2000). The findings suggest that for the graduate business student, online courses are convenient; however, they are not as effective or satisfying as a traditional course. Previously, educators believed that the pedagogy behind distance education should not differ from that of traditional course work; however, as the popularity of distance education grew so did the realization that many traditional methods of instruction would not work in the online environment, and that the pedagogy should be adjusted for online courses (Glahn & Gen, 2002).

Sauers and Walker (2004) conducted a study examining student learning, the perception of the course, active learning and the ability to address diverse learning styles and skill levels in an online business communication course. The researchers examined 261 students enrolled in eight sections of the same business communication course. Two courses

were compared in the study. The first was a traditional face-to-face course where the students met twice a week and used an online classroom management program, Blackboard. The second was an online hybrid course, where the students met in a traditional classroom one day and met online the next, this course also used Blackboard as their online classroom management tool.

Sauers and Walker (2004) used three methods for gathering information. First they tracked student use of the material on Blackboard. To do this Blackboard's tracking was activated. The researchers tracked the students' use of email, student access of course material, student use of the discussion board and how often the students checked for their grades (Sauers & Walker, 2004). Second, the researchers compared the degree of learning through pre and post assessments of the students' writing. Students were required to evaluate a business document and provide a written analysis of it to determine their ability to identify and evaluate designated areas of course competencies. Upon completion of the course the same diagnostic test was given to the students and scores were analyzed. Third, the researchers administered a questionnaire at the end of the course for students to discuss their experiences and feelings regarding the course. The researchers categorized the results of the questionnaire into two types of learning, active and passive.

By tracking student interaction on Blackboard, the study found that the group discussion board was used 67 times greater in the hybrid course than in the traditional course. Additionally, students in the hybrid course communicated with other students more frequently than in the face-to-face course. The writing diagnostic results found that there was not a notable difference in student performance between the hybrid course and the traditional course. The results from the questionnaire indicated that the students in the hybrid course used Blackboard more often than their counterparts. Sauers and Walker (2004) also found that the users of Blackboard participated in active learning, particularly the discussion and team-building activities, at a higher rate than those in the traditional classroom.

The findings of this study indicate that online courses can promote and support active learning and discussion. Sauers and Walker (2004) state,

> It is time for the debate about the disadvantages and advantages of online education to move forward and for researchers to focus their efforts on more narrowly identifying the best uses of online instruction and how best to implement these. (p441)

Kim, et al. (2004) conducted a study to examine the impact of online facilitation as an effective instructional tool. The areas that the researchers focused on were: online activities, social presence and learning communities, and virtual teamwork. A case study in an accredited online MBA program was employed to conduct the research. Data collection was obtained by using one-on-one interviews, surveys of both the instructors and the students, focus groups, and content analyzes of course content and class assignments.

A total of 29 faculty were interviewed in person, three of whom taught only in a traditional face-to-face environment. Background information, perceptions on case-based learning, self reported teaching style, and faculty's feelings regarding online learning in general were asked. Forty students, 20 of whom were first-year MBA students participated in the first part of the study. Questions varied for the first year students and the second-year students. The first-year students were asked about their expectations for the online program, while the second year students were asked about their experiences in the online MBA program. For the qualitative analyses a constant comparative method was used and multiple researchers were involved to test the coding of the reliability.

Kim, et al., (2004) used a paper-based Likert-scale questionnaire to survey the first and second year students for the study. One hundred sixty-two first year students and 102 second year students returned the survey. First year students were asked about their expectations for the MBA program, while second year students were asked about their experiences in the program thus far. Open-ended questions were included in both questionnaires. Instructors were given a Likert-scale questionnaire focusing on their perceptions and attitudes teaching an online MBA courses. Open-ended questions were also included asking instructors how they would improve the online MBA program.

Twenty-seven courses from various graduate business disciplines were selected for analysis reports Kim, et al. (2004). Coding schemes were used to analyze the course content. Descriptive statistics were obtained by counting the number of occurrences based on the coding scheme. Two researchers analyzed the data.

As a result of the study, Kim, et al. (2004) found that both students and faculty members had high degree of satisfaction regarding the effectiveness of the online courses in this MBA program. In the online program studied, the researchers found that most of the MBA instructors used various forms of case-based learning and incorporated team-based

learning approaches by giving the students ample opportunities to interact. Both students and professors felt, however, that there was not enough sense of community amongst the students and professors.

Though students and professors were satisfied with their online MBA experience this study confirms the need to research the methods that are being used to ensure active learning and participation in an online environment. Instruction regarding community building pedagogies is also needed.

As MBA programs continue to go online, delivering quality education to the students is imperative. Researchers are finding that it is simply not enough to take their traditional face-to-face course and place it online. Many instructors must rethink their courses and find ways to actively engage students while at a distance. Researchers are beginning to take notice of that need and conduct studies that will aid in this growth process.

## Master of Business Administration Trends

Recently there has been a trend in MBA programs across the board. Employers are now expecting their employees who hold an MBA to come equipped with skills such as communication, leadership, teamwork and other soft skills that in the past were not considered part of the MBA training (Butler, 2007). In a survey conducted by the Graduate Management Council, two fifths of employers said that they are looking for candidates who have soft skills (Council, 2006). More and more business schools are offering courses such as ethics, business writing, and negotiation (Butler, 2007). For example the University of San Diego is currently offering a full-time MBA program with an emphasis on ethics (Kinsman, 2006). In addition to the soft skills that employers are seeking out in graduating MBA students, business schools are a introducing negotiation, and networking (Fisher, 2007). Many attribute this change to employers looking for graduates who have the ability to speak and write clearly, a skill that employers felt recent MBA graduates lacked in the past (Fisher, 2007).

As the soft skill curriculum in business schools becomes more popular, some believe it is because business schools are becoming more in touch with the demands of their students who they are treating more like customers (Butler, 2007). Potential MBA students have the ability to select from a variety of business schools and curriculum. More than ever this is an

option due to online degrees. Employers are no longer looking at online degrees as less than degrees, but they are viewing them as just as good as degrees earned in the traditional face-to-face environment (Fisher, 2007).

## SUMMARY

Online education is part of our educational landscape. Its roots came from correspondence courses that required course content to be delivered manually, now it has gone high tech. This evolution has presented institutes of higher education with many challenges. Instructors struggle to develop courses that will engage students online and that will meet at the course objectives.

Research shows there are many pedagogical styles that instructors use when teaching (Grasha, 1994; Grasha, 1996; Grasha & Yangarber-Hicks, 2000; Heerman, 1988). These are most often classified as teacher-centered and student-centered style of teaching. Heerman (1988) describes teacher-centered teaching as the instructor who lectures his or her students and projects him or herself as the subject matter expert. Student-centered teaching is described as learning through small groups and problem-based learning (Grasha, 1994, 1996; Heerman, 1988).

Teaching presence is an important part of the online classroom. Moore and Kearsley (2005) state that instructors are needed in the classroom to guide, instructor, facilitate and encourage students in their coursework. Developing a teaching presence is much harder in an online environment because visual presence must be a part of the online environment or the physical cues are not present in an online environment, however it must happen in an online environment or instructors may run the risk of losing students or students not feeling satisfied with the course.

Moore and Kearsley (2005) argue that transactional distance is present in most educational activities. These authors offer the suggestion that when an instructors plan an online course, they should always consider that students are at a distance and modifying their pedagogical approach for the online environment in order to help minimize the transactional distance.

Many universities are offering online MBA programs. As a result, instructors are searching for ways to take their traditional face-to-face courses and put them online in an

effective manner. Ponzurick et al. (2000) conducted a study to gauge the perceptions of MBA students in an online environment. Students reported that the online courses were convenient, but less effective. Sauers and Walker (2004) studied instructors' use of active learning styles in their online classrooms. The researchers found that students who participated in a hybrid online course participated more actively than students in a traditional face-to-face environment. Kim, et al. (2004) examined the impact of facilitation as an effective instructional tool. The researchers found that instructors were using a variety of case-based learning and team-building activities, which they believed contributed to the satisfaction in the course.

Although there is literature focusing on pedagogy in online environments (Crumpacker, 2001; Mishra, et al., 2002; Christensen, 2003; Phipps & Merisotis, 2000) and literature focusing on pedagogy in online MBA programs (Pozurieck, et al. 2000; Sauers & Walker, 2004; Kim, et al., 2004) there is a lack of research in the area of best practices in online graduate education, specifically graduate business. This project is being proposed due to the lack of research in the area of pedagogy in online graduate business courses. Utilizing the Delphi study method, this researcher anticipates adding a different perspective to the research that has already been conducted in online education.

# CHAPTER 3

# METHODOLOGY

This chapter describes the research methodology for determining the best practices for online pedagogy in graduate level business courses. This chapter will begin with a brief overview of the Delphi technique and will be followed by a discussion of the population, procedures, data collection, and data analysis.

The Delphi method was used in this study because it allowed for the participation of a number of experts spread throughout a global online community, similar to that of an online classroom environment. Compared to a case study, this technique is superior because it provides a wider diversity of perspective and descriptions of different site practices. In addition, the Delphi allows for several rounds of questions, which allowed the experts three chances to reflect on their answers and this is better than the survey. The Delphi method was also selected because it allowed the expert panel to view responses from other experts in the field and in doing so, the study elicited more reflective answers from the panel.

## DESCRIPTION OF THE METHODOLOGY

The Delphi technique was developed during the 1950s by Dalkey and Helmer while Dalkey was working at the RAND Corporation (Rowe & Wright, 1999). The Delphi method is used when a group consensus is desired (Isaac & Michael, 1995). A Delphi study is valuable because it can bring together experts in a field to generate ideas and form a consensus; it is the method of choice for complex problems where there have not been pre-established guidelines in the past (Linstone & Turoff, 1975).

Linstone and Turoff (1975) noted that the Delphi technique is most useful when:

1. The problem does not lend itself to precise analytical techniques but can benefit from subjective judgments on a collective basis.

2. The experts in the study cannot be brought together due to time and cost constraints.

3. The heterogeneity of the participants must be preserved to assure validity of the results, e.g., avoidance of domination by quantity or by strength of personality (p. 4).

One advantage of the Delphi method is the use of a qualitative technique to elicit a consensus of the expert's opinions and judgments. The thinking and writing that the experts do to answer the questions enable the experts to consider their responses thoroughly prior to committing them to paper; therefore, the responses are regarded as more precise, accurate, and distinctive than oral responses (Pollard & Pollard, 2004-2005).

The four main features of the Delphi Method are anonymity, iteration, controlled feedback, and statistical aggregation of expert response (Rowe & Wright, 1999). Anonymity among the experts is achieved by the use of questionnaires, either in paper form or on a computer. This allows participants to offer opinions privately and without judgment from the more influential members of the expert panel. Experts also have the opportunity through iteration to change their opinions and judgments without the fear of being scrutinized or questioned by their expert colleagues.

Controlled feedback is another main feature of the Delphi method and may influence continued responses. Feedback usually consists of a graphical representation of the scores from questionnaire iteration. It might also include edited comments from previous iterations (Scheibe, Skutsche & Schofer, 1975). Once the polling is complete, the consensus is derived from a statistical average of the group members' final iteration (Rowe & Wright, 1999). In their study, Scheibe et al. found that when participants were given altered feedback, a change occurred in the expert's future responses, whether that feedback was a graphical representation of the mean or edited comments.

Disadvantages of the Delphi method include the possibility of participant attrition, which could affect the validity of the results. The lack of face-to-face contact with the expert panel could also be considered a disadvantage, since the researcher is unable to view facial expressions and body language.

Despite the disadvantages, the Delphi method was deemed the most appropriate method in this study for a number of reasons. First, the concepts of pedagogy and best practices in a graduate-level online business online course have not been explored within business schools in the United States. In addition, experts who currently teach or have taught online courses in graduate business programs have not had the opportunity to pool their knowledge in a consensus of what they deem necessary for a successful online course. Using the Delphi technique allows the experts to explore their beliefs and practices as they pertain

to online pedagogy in the classes that they teach. It also allows them to review their responses and add to them as they reflect.

## SELECTION OF EXPERT PANEL

The selection of the expert panel is critical to the validity, outcome and success of a Delphi study. Selection bias is often a concern in the choice of experts for a Delphi study (Mitchell, 1991). Another concern is that panelists might have a certain bias surrounding the Delphi methodology influencing their participation in the study. Tersine and Riggs (1976) determined there were five criteria to considered when selecting experts for this study:

1. They must have an expert knowledge of teaching their subject area in an online environment and be able to apply that knowledge.

2. They must have a good performance record in their subject matter area.

3. They must show expert knowledge of teaching in an online environment by mentoring other professors at their university or by publishing articles focusing on teaching in an online business environment.

4. They must have the time to participate to the conclusion of this study.

5. They must be willing to give the time and effort necessary to do a thorough job of participation.

Mitroff and Turoff (2002) recognized that a diverse panel of authorities was needed in an expert panel. Therefore, a broad base of panelists with diverse opinions will be needed because the objective of this Delphi study is to take the different expert opinions and fit them together to determine the best solution for the issues at hand. Linstone and Turoff (1975) and Okoli and Pawlowski (2004) suggested that a Delphi panel have a minimum of eight experts, no more than 50 members, with an average of 25 participants.

## INSTITUTIONAL REVIEW BOARD

This study was submitted to the Institutional Review Board (IRB) at San Diego State University during the Summer 2006 session. On July 11, 2006, the researcher received notice that the study had been approved.

## ADVANTAGES AND DISADVANTAGES OF ELECTRONIC MAIL AND ONLINE QUESTIONNAIRES

The researcher chose electronic mail as the most effective communication with the experts. All communication between the panelist and the researcher was conducted via

electronic mail with the researcher setting a timeline of answering emails within six hours of receiving the correspondence. The depth of the panelists' responses and the promptness with which they replied indicated that the panelists were highly motivated. In addition, the low attrition rate served as an indicator of the panel's commitment to the study.

Panelists were able to access the online survey by clicking on links embedded in their electronic mail messages. Electronic mail and the Internet allowed experts access to the survey from multiple locations and allowed the researcher the ability to transmit letters and surveys instantaneously to panelists. Schaefer and Dillman (1998) found that electronic surveys provided more detailed information than a non-electronic surveys. They found that only 56.6% of mail respondents completed at least 95% of their survey, but 69.9% of electronic survey respondents answered 95% of their survey. In addition, Comley (2000) states that electronic surveys generate a higher response rate than do surveys administered via paper. Schaefer and Dillman (1998) point out the format of an electronic email survey is very important if it is cumbersome to follow, it may discourage respondents from completing the survey.

This researcher anticipated that there would be technical difficulty in conducting the study. Associate deans ignored or misdirect the initial electronic mail to an assistant who failed to forward it to a qualified professor. University firewall protectors also prevented the email recipients from opening a web page through an embedded link; therefore, the researcher always provided an alternative web address for the survey.

One of the key factors of a Delphi study is anonymity among the expert panel. Vital to the study's success is secure electronic mail addresses for all participants so that they cannot learn one another's identity. Accordingly, the researcher constructed an address list, called the Delphi Expert List, which did not reveal any participants identity. Because the researcher knew the identity of the panelists, any related information was secured in researcher's personal computer to maintain confidentiality.

One disadvantage to electronic mail and computers use in general, is the risk of losing all information that is stored solely on the computer. Every 48 hours, the researcher backed up the expert panel's responses, electronic mails, and the results on an external hard drive.

Panelists were initially contacted to participate in the study via emails in November 2006. The weekend that the emails were sent, the university electronic email system that the

researcher was using went down due to heat and the emails went out without any text. Therefore, it is the researchers belief that many of the emails that were delivered were immediately deleted. This proved the first disadvantage of using email. A week later after receiving zero responses, the researcher resent the email using her home electronic mail address and was able to set up a panel of experts from the responses. Another problem was that a few universities had firewalls that blocked certain emails.

To ensure anonymity through the questionnaire rounds, the electronic mail addresses were confirmed individually prior to the first questionnaire being distributed and a distribution list was created. Panelists' names and addresses were never revealed to other participants throughout the study.

All data was downloaded from the online survey system website each day and placed on an external hard drive to ensure data would not be lost incase of technical issues. Paper copies of responses were also printed out and kept as another safeguard.

## RESEARCHER ROLE

The role of this researcher was to serve as the knowledge facilitator. Therefore, the researcher set the criteria for the expert panel, made contact with the expert panel utilizing an ACCSB database, developed the surveys, gathered background information on panel members, and conducted each round of surveys. The researcher analyzed the results from the iterations of the questionnaires and compiled the information from the background questionnaire. Once the study was complete, the researcher offered recommendations and appropriate follow up.

## PARTICIPATION SELECTION

Participants chosen to serve on the expert panel were selected in a two-step process. First a list of United States universities that currently have online graduate business degree programs according to the Association to Advanced Collegiate Schools of Business (AACSB) was compiled. All schools contacted for this study were endorsed by a U.S. accreditation agency as well as the AACSB or they were in the process of obtaining their AACSB accreditation. To find panel participants with expertise in online graduate business education, the researcher first considered the history of each potential institution. Programs

that have been in online operation for a minimum of three years and have at least 150 graduate business students were approached.

Once target schools were identified, the researcher sent out a letter via electronic mail to associate deans (see Appendix A). The letter explained the study, stipulated the criteria for participation, and invited each dean to select one or two professors who taught online. In addition, the researcher allowed professors to self-nominate. This was accomplished by sending out invitations directly to professors who met the requirements.

Once a professor was nominated or had nominated him or herself, the researcher sent an electronic invitation to the professor. The invitation included an estimate of the time commitment, a pre-survey, and an explanation of the importance of the research. The background questionnaire asked a series of questions regarding the professor's academic background, how many years they have been teaching in both an online environment and a traditional face-to-face environment and general information such as gender, university employed at, curriculum vitae, etc. (see Appendix B). After a professor agreed to participate in the expert panel, they were sent Round One of the questionnaires.

## DATA COLLECTION

This Delphi study used three iterative questionnaires. The research questions were addressed in different rounds of the process. It was the goal of the researcher to answer the following research questions during this study:

1. What core elements both pedagogical and technological are essential for an effective online environment for graduate business education?

2. Barriers

   a. What are the main barriers to best practices in current online graduate business programs and courses?

   b. What could universities do to address and remove barriers?

3. What would allow the best practices to be implemented?? are the main enablers for best practices to be implemented?

4. What training occurs and what else is needed to prepare instructors in online graduate business courses?

Participant responses were analyzed and summarized by the researcher in each round. Once a summary was developed, a subsequent round of questionnaires was sent for a total of three rounds. The subsequent questionnaires were based on the responses from the previous

answers. Round Two and Round Three also contain questions that elicited a deeper understanding of previous responses.

All data was collected using Survey Monkey. This allowed the panelists the opportunity to answer the questionnaires at their leisure within a given timeframe.

For this Delphi study, it was important to keep the participants motivated to continue with the subsequent rounds. Once all participants had replied, the researcher compiled their responses and returned a summary within two weeks via electronic mail. The following round of questionnaires was sent out approximately two and a half weeks after receiving the responses from the previous questionnaire. Panelists had the opportunity to view the anonymous responses from the other panel members, which may or may not have influenced their responses for the next rounds.

## DATA COLLECTION BACKGROUND

To gain an understanding of whom the panelists were, the researcher conducted a background questionnaire prior to beginning the Delphi Rounds. The background questionnaire was also used as a tool for the researcher to ensure that the panelists did fit the profile of an expert who teaches online graduate business courses. The background questionnaire was based on prior models used in other Delphi studies.

The background questionnaire contained a total of 15 questions about the respondent, his or her university and his or her online teaching experience. The background questionnaire did contained one opened-ended question were potential panelists were urged to share with the researcher any additional information they thought relevant. The background questionnaire was distributed on November 7, 2006 with a requested submittal date of November 15, 2006. Forty-three potential panelists responded to the questionnaire, and 36 members were selected based on the criteria to be expert panel members. A letter was sent via email to seven respondents who did not meet the requirements thanking them for their interest.

## DATA COLLECTION ROUND ONE

The Delphi process began with the researcher designing questions that asked the panel members general questions regarding the pedagogical principles they used in their online graduate business courses and how their universities have worked with professors who

teach online graduate business programs. Panel participants were sent the Round One Cover Letter (see Appendix C), an Informed Consent Form (see Appendix D) and the Round One questionnaire (see Appendix E). The Round One questionnaire asked questions such as what barriers did panelists encounter when teaching an online course, what successful instructional strategies did they used when teaching an online course, and what role that technology played in their online graduate business course. The Round One questionnaire was designed with questions broad questions so that panelists were not prompted to answer the questions in a certain way.

Questions 3, 6, 7, 8, 9, 10, 11, 12 were asked broadly so that themes could be elicited and the research could seek a consensus on Research Question One. The questions were:

- Describe three successful instructional strategies that you use or which you're aware when you teach online?

- Interactive communication in online courses is often cited as a weakness in online courses. From a pedagogical, not technical, standpoint describes how you facilitate online communication among students, and between yourself and students. For example: Do you set up online groups? Are students required to respond to classmate's work? Do students work on projects together?

- Do you perceive a difference in your teaching persona when you are teaching online vs. face-to-face? If so, what is the difference?

- Does your pedagogical approach to teaching online lean more towards direct instruction or one-on-one interactions?

- What do you visualize as the future of pedagogical approaches in online instruction in graduate business?

- Describe two ways you have used technology to successfully teach online.

- Thinking about technological advancements, how do you think teaching online will change within the next five years?

- Do you think business education uses more advanced technology for teaching online? Why or why not?

Questions 1, 2 4, 5, 13, 14 of the Round One questionnaire, were designed to begin to gain a consensus for Research Question Two. The questions were:

- What have been your experiences talking about pedagogy in online business courses, i.e.: teaching approaches and theories?

- At the university level, what would it take to increase discussion of pedagogical practices amongst faculty teaching online?

- What, in your opinion, are some common pedagogical principles in current practice that reduce effectiveness in online teaching?

- What do you think is the main barrier to using the recommended pedagogical practices? For example: lack of synchronous communication among students, lack of communication between teacher and student, class size, difficulty establishing online meeting times, etc.

- What, in your opinion, is a common mistake often made when using technology that reduces effectiveness in online teaching?

- What would it take to increase discussion of technological advances among faculty teaching online?

On November 30, 2006, the Round One questionnaire was sent out to 36 panelists. Attached to the first round of questionnaires was an informed consent form. Access was made available to the participants via an embedded hyperlink located in an electronic mail cover letter. Participants were given two weeks to respond to the questionnaire. By December 14, 2006, 30 panelists had responded to the questionnaire. A reminder email was sent out the same day prompting the remaining six panelists to complete the questionnaire.

As questionnaires were received panelists were sent a thank you letter and given a timeline for when they would be getting the survey results and the Round Two questionnaire. On January 4, 2007, the panelists were sent compiled data from Round One as well as a cover letter (see Appendix F). The purpose of sending the compiled data from Round One was to give them data to review prior to Round Two and so that they could digest the comments and opinion stated by the other panelists.

## DATA COLLECTION ROUND TWO

The goal of the Round Two questionnaire was to encourage the expert panel to reflect on their responses from Round One and to examine how they pertained to the other panelists (see Appendix G). During the Round Two questionnaire, it was anticipated that panelists would begin to reach a consensus.

Questions 3, 5, and 7 were designed so that panelists could start to move towards a consensus on Research Question One.

- In reference to Q#3 and Q#11, from the Round One Questionnaire, relating to successful instructional strategies in online teaching and the future of technology, do you feel instructional strategies will change and/or improve as technology advances? If so, please give specifics.

- Twenty-one panelists out of 33 who responded stated that they felt there was a difference between their online personas compared to their face-to-face persona. How

important is your online persona? Please explain why it is important or why it isn't important.

- As a professor, how much time is spent teaching an online class per week? Is this more or less than a face-to-face course?

Question 3 asked panelists to look into the future of technology and hypothesize how they feel technology will change the way they teach online. This question aimed to address the forecasting aspect of the Delphi study. Question 5 addressed a professor's online persona. This question was designed to delve deeper into Research Question One of the study, which aimed to research core elements of successful online pedagogy. This was important to the study because the literature suggests that a strong online persona is an important factor in online courses. Question 7 was designed to determine the compare if an online course is more time consuming than a face-to-face course.

Questions 2, 8 and 9 were asked to gain consensus for Research Question Two. The questions were:

- What might break the barrier in Schools of Business where no discussions takes place?

- What would be an ideal class size for graduate business courses online? Why would you consider that an ideal class size for courses online?

- If your class sizes were smaller, would your pedagogical approach to teaching online still lean towards direct instruction, one on one, many to many or all of the above? Please explain why it would stay the same or change.

Question 2 of the Round Two questionnaire asked the panelists to reflect on their universities and what could be done to increase the discussions of online pedagogy in graduate business courses at their university if it was not already happening. Questions 8 and 9 asked panelists questions regarding the barriers that they face when teaching online graduate business courses. The questions were designed so that each panelist could speak from his or her own online experience or could make general statements about online graduate business courses.

Question 4, "Please select two of the principles and explain how you eliminate them from your online class. For example: Timely feedback, when providing feedback to my students I always follow an xx hour rule. I find that is effective because ...." aimed to address the issue of the individual barriers that the online professor might encounter in his or

her online course. Panelists were asked to identify the main pedagogical principle they encounter in an online course and what they do to go about reduce it.

Question 6 asked, "How can a School of Business measure and monitor how well it is teaching online graduate business courses? What would be some success indicators?" This question sought to provide panelists an opportunity to discuss what they were doing at their universities and to begin to seek out areas where training is needed, which is addressed in Research Question Four. Lastly, the panelist were asked if there were any issues they would like to see asked in the Round Three questionnaire.

On January 18, 2007 36 Round Two questionnaires were sent to panel participants via electronic mail. Panelists were asked to complete the questionnaire by January 31, 2007. Two days prior to the requested submittal date, an email reminder was sent out to the panelist who had not responded. Thirty-four of the 36 panelists responded by the January 31, 2007 submit date. One panel member contacted the researcher to apologize and explained that he was in India and did not have access to the computer survey. He nevertheless requested that he be able to participate in Round Three. One panelist turned the survey in on February 2, 2007, and the researcher was able to add his responses. The total response rate for Round 2 was 35 panelists. Compiled results from Round 2 were sent out on February 22, 2007 via electronic mail along with a cover letter and a timeline for the final round (see Appendix H).

## DATA COLLECTION ROUND THREE

The goal of the Round Three questionnaire was to get the panelists to reach an agreement on the pedagogy of online business programs (see Appendix I). Questions were asked of the panelists to add depth to the topics that they had already addressed in the Round One and Round Two questionnaires. For questions 1 and 2, panelists were asked to further address how the barriers could be removed at universities where discussion is not taking place. Question 1 asked panelists what the commitment from the top down would look like at a university were online pedagogy is highly regarded. Panelists were then asked what type of incentives would be valuable to offer to professors to get them to teach online graduate business courses. Both of these questions had been addressed in Round One and Two, however, panelists had not been asked to give real examples that they took from the universities where they worked.

Questions 3 and 4 asked panelists to look into the future of technology, specifically audio and visual. Panelists were first asked to give examples of how they currently used audio/ visual components in their online classes. Again this was done in earlier iterations of the process, but for Round Three the panelists were asked for specifics from their courses. Panelists were then asked to explain how they would use audio/visual in the future if and when technology advances occurred. Forecasting is an important part of the Delphi Process.

Question 5 asked the panelists to give examples of how they built rapport with their students. The goal of this question was to have the panelists give examples that they use in their online courses and to share with the researcher, as well as the other panelists, techniques that they felt were successful in their online graduate business courses.

Finally, panelists were prompted to elaborate on any subject they wished. Panelists were also asked if the researcher could use his or her name and university in the study and if they would like to continue as a group.

The Round Three questionnaire was distributed to the panel by email with an embedded survey on March 6, 2007, with a submission deadline of March 16, 2007. As in Round One and Two thank you letters were sent to participants as they completed the survey. Thirty-two were received by the March 16, 2007 deadline with four panel members not submitting despite a reminder letter. Results from the Round Three questionnaire were compiled.

Throughout the iterations of the Delphi questionnaires, no participants contacted the researcher to formally withdraw from the study. In general, the panel members were timely in their responses and many commented that they enjoyed the experience and appreciated the summary of the responses. All panelists were directed to a website that the researcher created with a link allowing them access to a rough draft of the findings.

## DATA ANALYSIS

The Delphi Method requires the researcher to compile, analyze and disseminate the results after each iteration. This is done so that the researcher is able to use the results from the prior round to create the next rounds. After each round the researcher compiled all the results from the open-ended questions and emerging patterns were identified from the panelists written responses. They were then compiled into summaries with number and the

percent of panelist who reported in the category. The compiled results were sent out to the panel with a cover letter thanking them for their participation and informing them of when they could expect the next questionnaire. The summaries included, in some cases, direct quotes from the panel and in others a summary of ideas from the panel on any given topic. An item was included in a summary of at least 4 panel members selected it as a topic of importance.

During the analysis phase of the study, the researcher used analysis guidelines as presented by Creswell (1997). In order to analysis the data, the researcher followed the following steps:

1. Wrote margin notes on survey responses.
2. Wrote memos regarding possible emerging themes.
3. Drafted a summary sheet of survey findings.
4. Made contrasts and comparisons.
5. Noted patterns and themes.
6. Developed coding categories.
7. Sort materials into categories.
8. Count frequency of codes.
9. Summarize the findings,
10. Send findings to expert panel for review.
11. Revise findings.

In addition to following the eleven steps to analysis the data, the researcher also used the Data Analysis Spiral (Creswell, 1997) to ensure that the data was accurate and the interpretation was complete. For this technique the researcher used a series of Venn Diagrams to manage the data, and to begin to organize the categories. Once that was complete the data was put into categories so that it could be classified. As themes emerged, the researcher was able to compare the findings to the first analysis and interpret the data accordingly.

## INSTRUMENTS/RELIABILITY AND VALIDITY

The validity of this study was based on the following:

1. All participants were chosen based on their teaching background in an online graduate business program setting.

2. Three rounds of questionnaires were gathered and analyzed, allowing participants the opportunity to revise, modify, and examine thoroughly examine their responses.

3. Participants remained anonymous, although responses were be shared as a group consensus.

## SUMMARY

This study was designed so that the researcher could explore and benchmark pedagogical best practices for online graduate business courses. The study aimed to uncover the barriers and enablers that either hinder or enhance student learning. The Delphi Method was used because the experts on the panel brought diverse and complex ideas and experiences. This Delphi study comprised three rounds of open-ended questionnaires along with analyses of their previous responses. The complete study took approximately four months to complete. Chapter 4 summarizes the key findings of this study.

# CHAPTER 4

# FINDINGS OF STUDY

## INTRODUCTION

The purpose of this study was to explore what experts in the field of online graduate business courses would consider best practices in teaching an online graduate business course. The study also examined how business professors believed they could improve pedagogy in an online course at the graduate business level. The Delphi method was selected for this study because it allowed the expert panel the opportunity to have an initial exploration of perspectives from a diverse group of professors who taught online graduate business courses in the United States, Mexico and Canada. This topic had not yet been examined in the context that it was presented by the researcher.

This chapter highlights the key findings of this study. These findings reflect responses of an expert panel of 36 graduate business school professors who teach both online and face-to-face courses in 2006-2007. The findings presented in this chapter are organized by the by the questions presented in each round of questionnaires. The data presented were gathered through three rounds of questions. The process involved the researcher identifying and categorizing the findings, then asking the panel to explain or rate the findings, lastly coming to a group consensus on the best practices of online graduate pedagogy. Quotes by individual panel members are presented throughout this chapter to support the opinions provided by the panel members.

This chapter will also provide some background information on the panel members. The background questionnaire was sent out before the panel was formally addresses so that the researcher could determine that all criteria were met by the panelists in order to be a member of the committee.

## DEMOGRAPHICS QUESTIONNAIRE

The demographics questionnaire contained a total of 15 questions. The questionnaire was sent out as an electronic mail link to the 46 potential panel members who stated they

were interested in participating in the survey. All 46 potential panel members returned the questionnaire. Thirty-six were selected for the study.

Seventeen schools of business in four countries were represented by the panel. Schools in this study included: Arizona State University, Colorado State University, Cornell University, Drexel University, East Carolina University, Monterrey Technological Institute, Florida State University, Indiana University, Instituto de Empresa Business School, Marist College, New Jersey Institute of Technology, Salve Regina University, University of Dallas, University of Wisconsin, and Wayne State University. All but three of the universities had AASCB accreditation, with two being international and the other in the process of applying for the accreditation.

The expert panel included 11 associate professors, 10 professors, four assistant professors, and six who indicated they were adjunct professors, distinguished professors, deans, or professors of practice. Of the 31 panelists who answered the question, 13 were women and 18 were men.

Based on the questionnaire the average teaching tenure of the professors was 17 years, with 7 years being the average number of years the professors had taught online.

Sixty-one percent of the panel had never taken a course, either offered by their university or by another source, that focused on teaching pedagogy. Ninety-three percent of the panelists were using a classroom management system, such as Blackboard or Web Ct. Sixty-one percent of the panel taught an online course that was completely online, with no face-to-face class meeting, 29% of the panel taught the same course that was both online and offered face-to-face.

The panel represented a diverse group of individuals who were experts in the field of online graduate business.

## KEY FINDINGS

### Round One Delphi Instrument

Round One materials were sent out via electronic mail. The materials included the Informed Consent Form and a brief note from the researcher, followed by an estimated timeline of the study. These materials were sent out on November 7, 2006. Round One was completed by 36 expert panel members.

Round One was a set of 11 questions related to online pedagogy in a graduate business environment and the technology that is used in that environment. The Round One questionnaire set the foundation for data collection for Rounds Two and Three.

The researcher analyzed the responses for ideas regarding pedagogy in an online graduate business environment. The researcher then collated the panel responses by the emerging themes. The collated responses and key themes were then sent to the participants via electronic mail for their review prior to Round Two.

## Round One Results

During Round One, participants responded to 11 open-ended questions. These questions were developed so that the researcher could answer the research questions.

1. What core elements both pedagogical and technological are essential to be an effective online environment for graduate business education?

2. Barriers:

   a. What are the main barriers to best practices in current online graduate business programs and courses?

   b. What could universities do to address and remove barriers?

3. What are the main enablers for best practices to be implemented?

4. What training occurs and what is additionally needed to prepare instructors in online graduate business courses?

## Question One

In question one of the Round One questionnaire panelists responded to the question: What have been your experiences talking about pedagogy in online business courses, i.e.: teaching approaches to theories? Based on the panelists' responses, over a third stated that they had engaged in informal conversations with their colleagues who teach online. It was also revealed that some universities did hold seminars for their professors who teach online. One professor explained his conversation with colleagues regarding online pedagogy.

> I have had several meetings with faculty colleagues and an expert in educational technology during which we discussed teaching approaches and methods for improving student participation, group and team work among students in online courses and evaluating academic work.

Another panel participant detailed the seminars that are sponsored by this university. Below his is statement:

The Distance Learning Group at my university sponsors a lunch on graduation day each semester and invites graduating online students, online faculty and faculty interested in online teaching. There is an internal or external speaker, but above all there is a wonderful dialog among faculty and students about online teaching. Our discussions are not theoretical. They are practical. We share what works and what doesn't work. There are still faculty who are skeptical of the rigor and efficacy of online learning, so the formal gathering is a safe place to positively about online learning and to be open about its challenges.

According to the study respondents, discussions about on online pedagogy are taking place in some capacity at the university level, either in a formal group setting provided by the university or an informal setting where the professor seeks out colleagues to discuss pedagogical issues.

Responses were analyzed for key themes; Table 1 demonstrates the responses from the expert panel members. The table shows the top three responses.

**Table 1. Round One: Question One**

| Reported Items | Number | Percent |
|---|---|---|
| Informal conversations with other faculty who teach online courses | 10 | 37% |
| University offered seminars | 8 | 30% |
| Do not discuss | 5 | 19% |

## Question Two

Panelists were asked in Question Two what would it take to increase the discussion of pedagogical practices amongst faculty who teach online. The majority of the panelists felt that a commitment from their administration would increase the discussion of pedagogical practices at their university. One professor stated the following in regards to the top-down commitment that is needed at a university level.

I believe there needs to be a strong institutional commitment from top level administration so that resources are directed to departments and individual faculty (e.g. training, release time). If administration shows a real commitment and dedicates resources, this will encourage more deliberate effort and dialogue at the departmental - faculty levels.

In addition to a top-down commitment the panel felt that a culture change was needed so that talking about online pedagogy is considered important. One professor wrote:

Teaching would have to viewed as much more important than it is. I work at a research university, here we expect no firestorms. Unfortunately there is a raging disinterest in pedagogy, but there should be an interest, we are still a university. The university needs a culture shock then a culture change.

Lastly panelists felt that an incentive would help increase discussion of pedagogical practices at their universities. Those who replied incentives explained that incentives could be monetary, or it could be release time from regular teaching duties.

Table 2 lists the items reported by the panel. The four most mentioned responses are represented below.

**Table 2. Round Two: Question Two**

| Reported Items | Number | Percent |
|---|---|---|
| Top down commitment hosting seminars, guest speakers, brown bag discussions | 10 | 28% |
| Change university culture where discussing pedagogy is important | 6 | 17% |
| Incentives for those who teach online | 5 | 14% |
| There needs to be discussions to change the perception of online teaching, the quality of online teaching can be equal or better | 4 | 11% |

## Question Three

Question Three asked the panelists to describe three successful instructional strategies that they are currently using online. Thirty-three of the panelists, who are all currently teaching in a graduate business program stated that engaging the students in the class was a success instructional strategy. Panelists also emphasized the importance of structured lessons and materials for online graduate courses. Many felt that an online environment needed more structure than a face-to-face environment due to the lack of face-to-face contact. Panelists shared the following thoughts when asked to describe successful strategies:

> Keep the course very structured, so that weekly assignments are super-well laid out, also have many short leashed deadlines to keep students engaged, to avoid playing to our worst characteristic: procrastination

Another expert panel member states:

> I post the entire course material online before the term starts. Students really need to see what is expected, the amount of work, how it will be integrated, how work will be evaluated in detail, and specific dates for each deliverable.

The overall belief was that in order to have an online course to succeed the instructor needs to engage the students using a variety of methods. Many expressed that is was more time-consuming in an online environment than in a face-to-face classroom because it is harder to connect with students when one cannot read their body language and tone of voice. For example one professor made personal phone calls to every student at least once a semester to connect with the students and to answer any questions they may have. This professor also encouraged students to phone him if they needed an immediate answer.

Their responses are highlighted in Table 3. The seven most reported themes are shown.

**Table 3. Round One: Question Three**

| Reported Items | Number | Percent |
|---|---|---|
| Personally engaging students via email, phone calls, giving lots of feedback, round table discussions, etc. | 12 | 33% |
| Very structured materials | 10 | 28% |
| Small group discussions | 8 | 22% |
| Timely communication | 4 | 11% |
| Team presentations | 4 | 11% |
| Short deadlines to keep students from procrastinating | 4 | 11% |
| Use discussion boards for students to post responses to topics | 4 | 11% |

## Question Four

Panelists were asked to give examples of common pedagogical principles in current practice that they felt reduce effectiveness in online teaching. Eighteen issues were raised for Question Four, the most common problem was with not providing timely feedback to students when they have a question or a concern (17% of panel members cited this). Participants were asked to identify the common mistakes that reduces effectiveness in online teaching. Four primary practices emerged from these responses as named by four or more panel members. From Round One the barriers that were cited most often were:

1. Not providing timely feedback to students.
2. Overusing canned lectures, Powerpoint, etc.
3. Putting something online and the professor disappears.
4. Teacher centered rather than student centered.

In Round One an expert panel member responded to Question Four with the following quote:

> Online teaching effectiveness is reduced when the faculty member becomes an administrator managing content rather than a student guide and mentor. However online teaching requires so much time to create, update, and manage content that the most effective teaching interactions are hard to emphasize as well. Adult learning must be participatory and this may be a little more difficult in online classes. The instructor must find ways to interact with the class.

## Question Five

Question Five focused on specific barriers that the panelists felt hindered the utilization of recommended pedagogical practices. The main barrier cited was the class size. Twenty-four percent of the panel felt that dealing with a large class size in an online environment was a barrier to implementing successful pedagogical practices. One panel member describes below how he is able to work with a large classes, however he still feels that large classes are the main barriers to success.

> Class size needs to be limited in order to effectively facilitate synchronous communication. What I do is to split my classes into groups of eight-ten for the synchronous communication sessions. The slow typists are at a severe disadvantage and may appear to be less involved than they actually are due to their inability to get a word in. This creates a tremendous amount of extra work for me if I am to meet with each group for 45 minutes to 1 hour at a time. Technological problems are the other problem that my students have encountered.

Another panelist stated, "Online teaching is very demanding, it takes time, consistency and careful planning." Below are the main barriers that the panel felt hindered their successful implementation of pedagogical principles.

## Question Six

Online communication was the focus of Question Six of the Round One questionnaire. Panel members were asked how they facilitate online communication among

**Table 4. Round One: Question Five**

| Reported Items | Number | Percent |
|---|---|---|
| Class size in online courses- dealing with the number of students a professor needs to communicate with | 7 | 24% |
| Communication with professor | 5 | 17% |
| Poorly designed CMS, or outdated | 5 | 17% |

students and between instructor and student. Fourteen out of the 36 panel members felt that threaded discussions were the best way to facilitate both types of communication. As one panelist wrote:

> I believe asynchronous discussions are far more desirable than synchronous ones because the student has time to think about what they are going to say and usually they write longer and more well thought out contributions.

Another panel member wrote his thoughts on threaded discussion verses group work in an online course.

> Discussions are required and graded. I have been moving away from group projects in my 8-week courses as they are simply too constricted by e-mail communication in the in the available time. I only use cases in my seminar and they have to prepare the case discussion as a group. During the discussion I select the individuals that will address the opening questions, also the students will be asked to address other student's contributions. Students also have to prepare a final group project.

Panelists identified nine methods they use to facilitate interaction within their online course most often. Table 5 shows the breakdown, the five main themes are shown.

**Table 5. Round One: Question Six**

| Reported Items | Number | Percent |
|---|---|---|
| Threaded Discussions | 14 | 39% |
| Online Groups | 7 | 19% |
| Chat Sessions/Synchronous topic discussion | 5 | 14% |
| Team Projects | 5 | 14% |
| Attach a grade to discussion | 4 | 11% |

## Questions Seven

In the literature review in Chapter 2, the theme of online persona was discussed in regards to online pedagogy. Question Seven of the questionnaire asked panel members if they perceived a difference in their online persona compared to their face-to-face classroom persona. Thirty-three panelists responded to this question, 61% felt there was a difference. However, their feelings at to what the difference were varied greatly. For example, eight panel members stated that their personality did not come through online, three said they were not able to gauge their student's reactions online, so they could not modify their responses, and three also stated that they were more "stressed about online" since they felt it was more time consuming.

## Questions Eight

Direct instruction compared to one-on-one interaction was the topic of Question Eight. Panelists were asked if their pedagogical approach leaned more towards one or the other. The majority of the panelists felt that they were a combination of both. Many pointed out that they would like to have more of a one-on-one interaction, but with the large class size they do not have the ability or time to do so. Below are some of the panelists' responses from Round One:

> In the middle. I provide many learning materials and lectures, demonstrations, tutorials, etc. However, I also let students call me at home, one my cell or at school. I also have an MS Messenger account and I do many one on one chats. Of course, I also answer many emails.

> Lectures are direct. Projects, quizzes, and threads are individual. Every assignment gets personal, detailed comments on what needs improvement.

> Somewhere between the two, depending on the class -- both students and size-wise. Smaller classes allow for more interaction (same as FTF) and sometimes the group just doesn't 'gel' as much for that sort of thing.

Table 6 demonstrates the responses of the expert panel members. All responses are shown.

## Question Nine

The Delphi Method was developed for forecasting trends, therefore panelists were asked to hypothesize the future of pedagogical approaches in online instruction in graduate business courses and programs. One panelist showed his enthusiasm for what the future of

**Table 6. Round 1: Question Eight**

| Reported Items | Number | Percent |
|---|---|---|
| Both, provide many learning materials | 14 | 42% |
| Direct Instruction | 8 | 24% |
| One on one | 7 | 21% |
| More of a facilitator | 2 | 6% |
| Many to many, lectures are a component, online students interact with f2f students | 2 | 6% |

online teaching would bring.

> Real-time, synchronous interaction like the newly available Intel business videoconference system. That is one cool deal. Think of a 60' plasma screen in the instructor's office (classroom) with individual faces of each online student in a separate box on the screen. They could be anywhere in the world and still be in class.

This question yielded the following responses from other panelists:

> Practical distance education-doing field projects --with an on-line instructor. I know this is being done in the Medicine Schools, but I don't think this is widely used at the Graduate School of Business.

> Will continue to develop and will change in order to accommodate the needs of the next wave of graduate students (the i-pod generation). Future online instruction approaches will be more similar to Internet or online strategic games.

Table 7 demonstrates the five most common responses for Question Nine.

**Table 7. Round One: Question Nine**

| Reported Items | Number | Percent |
|---|---|---|
| Better synchronous capabilities | 7 | 21% |
| Better video capabilities | 7 | 21% |
| Technology will enable online classes to get more complex | 6 | 18% |
| Better voice capabilities | 3 | 9% |
| Interactive recourses such as online text book, Google, Skype, etc will be used to supplement lectures | 3 | 9% |

## Question Ten

Questions 10 through 14 asked panelists to direct their insight towards technology and how it affects their online graduate business course. Question 10 of the Round One questionnaire asked the panelists to describe two ways in which they have used technology to successfully teach online. Thirty-six panelists answered question 10. Links to web-based information, streaming video and discussion boards were selected by half of the panelists as ways they have successfully implemented technology into their online courses. This question yielded many answers where only one professor stated they had implemented the technique. For example: use of smartboard, online topic slides, webcasts, and MP3 files to comment on student papers. Below are some quotes that were generated from this question.

> In a videoconferencing setting the participants are organized into small groups (5-8) and each group is located in its own boardroom-style location. Technology allows me to have frequent short small-group discussions without disturbing the flow of the class (i.e., without the need to form small groups and then send groups to break-out rooms).

> 1) Bring top executives from different places around the world to present and discuss a problem they are facing where students could apply what they are learning in the seminar. I called this approach our 'Mystery Guest'. 2) For simulations in specific topics. I use hot links to guide students to useful resources and information, and will at times use an e-book format for material.

## Questions Eleven

Round One asked panelists to hypothesize how technology would change the way they teach in the future. The three top rated items were (1) technologic advancements will transform Classroom Management Systems, (2) online video conferencing will improve and (3) more effective interactive problem solving software will be developed. One panelist expressed his concerns regarding the improvement of technology:

> I think it will get more complex and worse. The people who control the budgets and technology are into bells and whistles, not pedagogy. My fear is that they will impose large costs on instructors to use marginal (but sexy) technology and this will interfere with making the classes informative and entertaining.

This question had many panelists thinking about how they could improve the technology that they already used, however, a few panelists thought outside the technology that they are currently using and brought up technology innovations such as hologram technology, webinars, and podcasts.

# Question Twelve

In Question 12, panelists were asked if they felt that schools of business used more advanced technology for teaching online? Twenty-two panelists responded to this question. Panelists gave the following reasons as to why they felt their school of business used more advanced technology.

> Yes. I believe this is the case for two reasons. First, most business schools have more money than their counterparts at universities and can therefore afford more technology. Second, the demand for business courses is great, allowing technology to potentially increase the reach of a business school faster than this would be the case for other academic units.

Another panelists shared his reasons why a school of business should use more advance technology.

> It needs to and that will evolve. One can simulate companies where the starting student has lower level jobs and with each courses they take higher-level positions in the same company which keeps evolving with each semester and has a virtual history

Table 8 reflects the three main themes.

**Table 8. Round One: Question Twelve**

| Reported Items | Number | Percent |
|---|---|---|
| Yes, more is available to our department | 9 | 41% |
| No, we use the same as other departments | 7 | 32% |
| Yes, because business students use computers on a regular basis | 4 | 18% |

# Question Thirteen

Question 4 of the Round One questionnaire asked panelists what they felt was a common pedagogical practice that reduced effectiveness in online teaching, Question 13 of the questionnaire asked the same question, but urged panelists to concentrate on technology. Twenty-seven panelists answered this question. Forty-one percent felt that concentrating on the technology and not the student reduced the effectiveness of online teaching. Some of the quotes from the panel that were made to support their answers are below.

Thinking it is an end. Technology does not teach, teachers still need to think through their material now completely thru the eyes of their students.

Dependence on the technology to make it happen. You always need the instructor and a well-prepared lecture. Garbage going into the online course is still garbage.

Thinking that all you need to do is post your slides and papers - there needs to be active involvement by faculty. Not using the best of the technology (i.e. making it a rich 3 dimensional class).Universities are buying packages that allow administrative capabilities and don't understand that the faculty and students need much more sophisticated communication tools to improve education.

Table 9 shows the results.

**Table 9. Round One: Question Thirteen**

| Reported Items | Number | Percent |
|---|---|---|
| Focus on technology and not student | 11 | 41% |
| Not enough interactivity | 5 | 19% |
| Too much canned material | 4 | 15% |
| Needed to create materials into many different formats to serve all students needs | 3 | 11% |
| Instructors implement features they do not really understand | 2 | 7% |
| Only use one method of instruction | 2 | 7% |

## Question Fourteen

Twenty-five panelists answered Question 14 asking them what would it take to increase the discussion of technology advancement at their university. Table 10 demonstrates the top three responses and a sample of quotes from the panelists.

**Table 10. Round One: Question Fourteen**

| Reported Items | Number | Percent |
|---|---|---|
| Faculty development where experts teach new technology, pedagogy is discussed, ideas are shared, etc. | 10 | 40% |
| Administrative support | 7 | 28% |
| Incentives | 6 | 24% |

Panelists wrote:

We are way beyond this issue in that most faculty are on board. However, early on the college held many open forums, created a distance committee, hired a director, etc.

1. Fear. If we thought we were losing ground and students to bad technology we might adjust faster. 2. Incentives. We must know our institution values this delivery mode before we spend more time on it.

Perhaps a survey of what different faculty are using followed by a seminar with different faculty demonstrating their expertise.

Webcasts and conference calls linked to tangible output for each faculty - answer 'what's in it for me' some sort of discussion and forum for all those in the country teaching a given topic on line to compare notes and techniques they are using. You need a critical mass of like 30 people and at many universities one individual at that university only teaches a given course. Not clear what organization is set up to sponsor this.

It should be tied to their pay!! Like anything else you want faculty to get serious about AND the institution would have to get serious about paying for the necessary resources!

Again, a greater focus on the benefit to the faculty (in terms of tenure and promotion) for bothering to learn the newer techniques. Online already takes longer than FTF, adding learning new technologies every semester makes that burden even greater.

## Question Fifteen

Lastly, panelist were asked to give their input regarding what they would like to see discussed in the future Rounds of the Delphi process. The responses were divided up into four sections: technology, trust issues, pedagogy issues, and general questions.

## ROUND TWO

Round Two materials were sent to the panel members via email on January 18, 2007. Prior to the Round Two materials being sent out, panelists received a summary of the responses from Round One so that they could review, clarify, add to or question their responses as well as other panelist's responses prior to receiving Round Two.

During Round Two panelists were asked to reflect on the themes that were identified during the Round One questionnaire. Panelists were asked to respond through a series of open ended questions so that they could expand and deepen themes that emerged as a result of the responses from the Round One questionnaire. Participants were asked to complete the Round Two questionnaire by January 31, 2007. Two days prior to the due date a reminder

email was sent out to the panelist who had yet to complete the Round Two questionnaire. Eventually 35 participants responded to the questionnaire. One participant was in India and could not meet the deadline, however he did participate in the Round Three questionnaire.

## ROUND TWO RESULTS

The main themes of pedagogy, technology, barriers and enablers and training that were identified from the Round One questionnaire were provided to the participants and they were asked to expand upon their answers so that the researcher could begin to draw a consensus of the themes being presented.

### Question One

Question One asked panelist to rank on a scale of 1 to 5 how essential they believed five factors are to the increased dialogue about online pedagogy in a School of Business. Unfortunately, Question One had to be removed from the study due to technical issues with Survey Monkey.

### Question Two

Question Two from the Round Two questionnaire asked the participants to expand on what would it take at a university level to break the barrier where no discussion takes place. Table 11 demonstrates the top four results from the panel of experts.

**Table 11. Round Two: Question Two**

| Reported Item | Number | Percent |
|---|---|---|
| Top Down Commitment | 12 | 35% |
| Study Research on Online Pedagogy | 5 | 15% |
| Faculty Incentives | 5 | 15% |
| Student Pull | 5 | 15% |

Participants stated that commitment from the administration would help break down the barriers in schools of business where no discussion takes place. Panelists wrote that if the deans supports discussion on pedagogical principles, and encourages it, the faculty would be more likely to engage in conversations and begin to evoke the change. Panelists also stated

that research on online pedagogy was needed to break the barriers. As one panelists stated, "Careful analysis of online teaching effectiveness is needed. Many faculty hold opinions not based on careful review of the research. Case studies on the success of other schools."

## Question Three

In Round One, participants were asked their of where online teaching pedagogy and online technology would be in the next five years. Panelists stated that they felt that technology would change the communication in their online courses by offering better synchronous capabilities and better Classroom Management Systems. Round Two asked panelists to give examples of how they feel instructional strategies would change or improve as technology advances.

One panelists expanded on the answer with the response below.

> More videos and real-time with multi-point videoconferencing with wireless connections. As online students have access to higher bandwidth and more audio and video technology, the online classes can take advantage of more synchronous interaction and/or more visual features.

Another panel member explained how the technology would become more user friendly.

> Technology will become more seamless and user-friendly and break down less frequently. I am not sure that STRATEGIES will change as technology advances, however because faculty have to actually USE the technologies. One fear is that faculty will begin a 'core dump of technology into the class w/o regard to what really works.

Table 12 represents the four most reported responses from the panel.

**Table 12. Round Two: Question Three**

| Reported Item | Number | Percent |
|---|---|---|
| Improvement of Audio/Visual | 13 | 38% |
| More User Friendly | 7 | 21% |
| PodCasting | 3 | 9% |
| Better Course Mgt Software | 3 | 9% |

## Question Four

Round One of the Delphi questionnaire yielded four main barriers that the panel felt hinder those who teach in online graduate business courses. In Round Two, panelists were asked to select two of the main barriers that jeopardize the effectiveness of online pedagogy and discuss how they eliminate them within their online course. The majority of the panel selected timely feedback as the barrier that they have eliminated in their online course.

Many panelists had a set amount of time in which they would answer an email from a student or to provide feedback to a student on an assignment. Many professors felt that a 24-hour or less rule worked well for an online course. One panelists explained how he is able to answer inquires and return assignments within 24-hours.

> I favor several short assignments over one long assignment; this generally allows me to return assignments within 24 hours.

Another panelist explained his 24 hour rule in more detail.

> I logon to an Instant Messenger program nearly every day during typical business hours, and engage students in chats 1-2 nights each week. I manage two Q&A discussion forums as well -- one for general course questions and one specific to the current assignment. I offer students a chance to have their work 'reviewed' w/o a grade if they turn it in early enough. This is effective b/c it keeps them on task better AND makes them feel as if there is someone there who is checking on them. Our college uses a 24 hour email rule -- faculty AND students are expected to respond to emails within 24 school-day hours. Faculty are expected to handle the majority of their own email (e.g. not have a grad asst do it).

Forty-one percent of the panel said they have worked on "not disappearing" from their online class once the course materials are set up. Panelists provided strategies such as getting involved in the live chats that they required students to attend, and adding points to the threaded discussions, while others suggested the use of tutors as a way to eliminate the professor disappearing during an online course.

Panelists also believed that using canned lectures was a practice that needed to be eliminated from their online courses. One panelist explained that he rerecorded introductions each semester making a particular lesson specific to the particular class. Panelists also stated that that each semester they update their materials by adding new graphics, up to date statistics and recent articles.

Table 13 shows the breakdown for Question Four. The top four responses are shown.

**Table 13. Round Two: Question Four**

| Reported Item | Number | Percent |
|---|---|---|
| Timely feedback | 26 | 76% |
| Not Disappearing | 14 | 41% |
| Updating Lectures | 12 | 35% |
| Student Centered | 9 | 26% |

## Question Five

Twenty-one panelists out of 33 who responded stated that they felt there was a difference between their online personas compared to their face-to-face persona. Round Two of the Delphi Study asked panelists how important their online persona is to them and what they perceive it to be.

Panelists rated approachable as the most important trait for their online personas. To be approachable in an online course, some professors stated that they compensated for the distances by sharing more personal information about themselves in the form of an introduction so that the students could get a better sense of who they were as people. Being very literal when responding to students was also a factor that panelists brought up in their responses when asked about their online personas. The majority of the panel stated that their online persona was important, the way that they managed it in their online courses varied from panel member to panel member.

Table 14 shows the top themes that emerged from the responses given the panel for Question Five.

**Table 14. Round Two: Question Five**

| Reported Item | Number | Percent |
|---|---|---|
| Approachable | 10 | 29% |
| Accessible | 8 | 24% |
| Same | 7 | 21% |
| Clear and Direct | 6 | 18% |
| Harder to Read Students | 5 | 15% |

## Question Six

Research Question Four sought to answer what schools of business are doing and could be doing to train professors who teach online. Before attempting to answer this question the researcher first wanted to find out how schools of business were measuring success in their online course. Question Six on the Round Two questionnaire asked panelists how they felt a university could measure and monitor how well they were doing teaching online graduate business courses. The majority of the panelists stated that evaluations were the main way a school of business could monitor how well they were doing. Many suggested that evaluations should be conducted of a class that is taught online and the same class that is taught face-to-face and compared. Others felt that a survey of the students who took the online class would suffice. Table 15 shows how panelists felt a school of business could measure and monitor online learning. The top four responses are shown.

Student work was also cited as a way to measure and monitor an online course offered by a school of business. Panelists stated that student work should be the same or better than that of a student who is in a face-to-face course. Also, surveys of employers of the graduates of the online courses should be conducted, evaluating whether the former student is able to apply what he or she has learned in their graduate program to their professional world.

**Table 15. Round Two: Question Six**

| Reported Item | Number | Percent |
|---|---|---|
| Evaluations | 23 | 68% |
| Quality of Student Work | 7 | 21% |
| Comparative Analysis | 4 | 12% |
| Quality of Students Applying to Program | 4 | 12% |

## Question Seven

A common theme throughout the Round One questionnaire was how much time teaching an online course consumed for the professor. Panelists wrote about it when asked about successful instructional strategies, again when they wrote about barriers in online courses and when asked about their teaching persona. With this being a common theme in

Round One, Question Seven of the Round Two questionnaire addressed the time issue by asking panelists how much time did they spent on an online class per week.

The majority of the panel members stated that they spent more time in their online course than they did in their face-to-face course. Panelists felt that online instruction was more time consuming because for many students they have the perception that the course is always open. One professor explained this:

> Providing the perception that my course is open 24/7 requires constant attention -- more so than an on-campus course. This generally arises due to the geographic and time dispersed nature of the students. Students will attend the video lectures, read the assignments, and respond at a time convenient to them. With the majority of graduate students employed and facing daily job responsibilities (meetings, travel, etc.), the flexibility of the course is paramount to the student. The online nature of the course also dictates, to some degree, an in-step, current linking to the subject matter (breaking headlines, etc.).

Another panelist explained that though online courses may require more time n the beginning, as the professor becomes more familiar with the course the time spent online does decrease.

Table 16 demonstrates the four main themes that emerged from the expert panel.

**Table 16. Round Two: Question Seven**

| Reported Item | Number | Percent |
|---|---|---|
| More Time | 23 | 68% |
| 10 to 14 Hours | 11 | 32% |
| Same | 5 | 15% |
| 15-19 Hours | 4 | 12% |

## Question Eight and Nine

Question Five of the Round One questionnaire asked panelists what they felt was the main barrier they encountered when attempting to use recommended online pedagogy in their courses. Panelists stated that class size was the number one barrier in their online courses. Trying to communicate with a large number of students was a difficult task. In the Round Two questionnaire panelists were asked what number they felt would be the ideal number for

an online graduate business course. Table 17 shows the two most reported responses from the panel.

**Table 17. Round Two: Question Eight**

| Reported Item | Number | Percent |
|---|---|---|
| 10-19 students | 12 | 35% |
| 20-29 students | 11 | 32% |

Below a panelist explains why he feels a class of 22 would be an ideal size for an online course.

> A class of twenty-two would be ideal. Big enough to have diversity of experience, which makes for good threaded discussions, but small enough so everyone could be in one group. Big enough to entitle me to one grading assistant, but small enough so that that assistant could do a good job. In my courses every student writes a 750 word footnoted essay every week. Small enough so that I don't have to completely ruin my eyes staring at the screen for hours and hours to answer all the emails and respond to all the discussion threads. At this size, all the students feel as if they are Noticed; they are WITH the professor. As it gets larger, they get whinier because since there is no face-to-face, the ONLY feeling of inclusion they get is when the professor is responding to them individually, which is less when there are more students.

In this response from a panel member, he explains why a large class is not a problem for him at his university.

> That doesn't bother us since for every 50 or so students we have facilitators/tutors that take care of them. Their staff is selected with specific characteristics, depending on the course. We as professors intervene only when the tutors can't help them. Presently I am teaching 2 online courses with more than 200 students each with no problem.

Panelists were also asked if their pedagogical approach to teaching online would stay the same or change if their courses were smaller. Thirty-eight percent of the panel felt that their pedagogy would stay the same. One professor explained why.

> Mine would stay the same even if the class were larger -- I strongly believe in group work, high interaction and directed learning, so I'd just kill myself trying to work it all in to a class of 60 -- having a class of 10 would make it easier, that's for sure!

Another professor stated that he would spend more one-on-one time with student if his online course had fewer students, especially since he felt that it was his personal interactions that were most essential to his courses.

## Question Ten

Communication within an online course also became a common theme during the Round One questionnaire. Round Two asked panel members to explain what communication in an online environment meant to them. For example panelists were asked if they had a set timeframe for answering correspondence, if they participated in online discussions, etc. Sixty-six percent of the panelists responded that they do try to respond to emails within a 24-hour period. Some they tried within a shorter time frame since they believed that 24 hours was a long time to wait for a response. Only one panel member stated that he follows a 48-hour response time frame. Most of the panelists also stated that they do participate in the online discussion groups weekly or more.

## Questions Eleven

Questions eleven through fourteen of the Round One of the Delphi questionnaire focused on technology. Question eleven of the Round One questionnaire asked panelists to forecast the future of the technology they were using to teach their online graduate business course. Many felt there would be advancements to their Classroom Management System. Question eleven of the Round Two questionnaire asked panel members to elaborate on the changes they would like to see to their CMS. Though there was a diverse set of answers to this question the majority of the panelists felt that better audio/video capabilities would be the most significant change to the CMS. One panelists wrote:

> A CMS should be easier to understand, then I could do more. Easier to build and incorporate videos, then I would use more of them, and I think they are an important component of instruction online.

### ROUND THREE

The Round Three materials were sent out on March 6, 2007. Participants were asked to return the survey no later than March 16, 2007. A reminder email was sent out on March 14, 2007 to the panel members who had not responded to the questionnaire. Due to the Spring Break schedule at various universities, 10 panel members requested additional time.

In total, 32 panel participants returned the survey. Two weeks prior to the Round Three questionnaire, a summary of the Round Two questionnaire was sent out to all panel members via electronic mail.

## ROUND THREE RESULTS

As in the Round Two questionnaire, panelists were asked to respond to a series of open-ended questions that were used to narrow and to draw a consensus of their responses from the Round One and Round Two questionnaires.

## Question One

Round Two yielded responses from the panel that suggested that, in order for the barrier to be broken in schools of business, a commitment from the top was necessary. Question One from the Round Three questionnaire asked panelists to describe from either their own university or what they have seen at other universities what that commitment would look like.

Forty-two percent of the panel felt there needed to be a central office on campus where they could go to receive assistance in both their pedagogical needs and their technical needs. One panelist wrote:

> The University has a central unit to provide support for the development and delivery of online programs. Audio, video, and technical help is available as well as instructional design and marketing assistance. The degree of help seems to be declining rather than increasing.

In addition to a central office panelists felt that having a university president or a dean who publicly states that online education is a priority would remove the barriers and encourage professors and administration to discuss pedagogy on their campus. One panelists described the top down structure as follows:

> The President says, in a top-down fashion, that this is the wave of the future and we will not be missing it. The Academic Vice-President, therefore, requires the Deans to require the faculty to develop the courses, and either teach them or get adjuncts to do so.

On the level of top down commitment occurring within a designated school of business one panelists envisioned it occurring in this fashion:

> Dean's public statements that the face-to-face MBA program is as good as and uses the same highly regarded faculty as the online MBA program rather than the current statements they make.

Table 18 demonstrates the top four themes.

**Table 18. Round Three: Question One**

| Reported Item | Number | Percent |
|---|---|---|
| Central office on campus to help with online courses | 13 | 42% |
| Dean states as a priority | 12 | 39% |
| It is promoted by the university | 7 | 23% |
| Compensation | 5 | 16% |

# Question Two

In Round One and Round Two of the Delphi method panelists also stated that incentives would help break down the barriers where discussion of online pedagogy does not takes place. In Question Two of the Round Three questionnaire panelists discussed the type of incentives that were being offered at their universities or the type of incentives they would want at their university. One panelist explained his university's monetary incentive plan for teaching online courses. Below is the incentive structure:

> My school offers the following: $5,000 for course development; $2,000 each time the course is offered; $200/student royalty. Do the math. For a first time offering course with an attendance of 60 students, that is a payout of $19,000 for what is generally a six to ten week course. Even when the course is offered a second time, attendance of 40 students produces a $10,000 payday.

Another panelists explained his monetary incentive package from his university.

> Faculty teaching online courses have a small additional increment of pay at the time of each offering of an online class. It is more of a token payment, but it represents a commitment to online education that is appreciated. In addition, faculty are paid for development in the semester before a new course is launched, and occasionally when a course is handed over from one instructor to another if extensive revision is needed. In addition, a course counts as two courses if its online enrollment is above 25. Then it counts as two sections for the instructor, or if the instructor prefers, an adjunct instructor is added to either handle the 'second' section or to handle 50% of the workload on an integrated basis. Large on ground classes are not so compensated.

The universities that did not offer incentives for teaching courses did not because they felt that there was no difference between a course taught online and a course taught face-to-

face, panelists reported. Table 19 demonstrates the top incentives that panelists identified for this question.

**Table 19. Round Three: Question Two**

| Reported Items | Number | Percent |
|---|---|---|
| Money to teach and develop new course | 26 | 81% |
| Graduate Assistant | 5 | 16% |
| Training | 3 | 9% |
| No incentives | 3 | 9% |

## Question Three

When panelists were asked to forecast the future of technology, better audio and video capabilities were often cited. In Round Three panelists were asked specifically how they use audio and visual is in their current online courses and how they envision using it in the future when technology advances. Out of the 22 panelists who are currently using audio and visual in their classroom, six are using it with Power Point slides and voice-overs to support lectures, four are using it as an introduction to a new unit or course, and two are using it for a 100% broadcast. The professors who used audio and visual in their online courses felt that it brought a personalized component to their course and it attracted the "MTV" generation that were enrolled their graduate business courses.

## Question Four

Panel members were asked how audio/visual components in the their online courses, the panel members were asked how audio visual could be improved in the future to meet their online needs. Table 20 reveals that there was not a consensus from the panel.

Panelists did provide many suggestions as to how technology could improve. For example the quote below supports the idea of all students being online at the same time.

> Virtual classrooms will allow everyone to attend class regardless of their physical location on the globe. The technology is quickly improving to offer this option. The hurdle will be to mimic the classroom on your PC where everyone can see and hear everyone else.

**Table 20. Round Two: Question Four**

| Reported Items | Number | Percent |
|---|---|---|
| Improve ease of Use | 7 | 23% |
| Allow all students connected at the same time | 5 | 17% |
| Access for the professors to use the on campus facilities | 4 | 13% |
| Support students with low bandwidth | 4 | 13% |
| Real time views | 3 | 10% |
| Larger screens | 2 | 7% |
| Build audio/video into PC like the Mac | 2 | 7% |
| Make the technology more accessible to students | 1 | 3% |
| More money for professor who teach online | 1 | 3% |

Panelists also expressed a desire to be able to interact with students directly while teaching their online courses.

> I would enjoy being able to interact directly with the distance students. It would be nice to be able to have audio capability of direct discussion while the class is in progress.

Another expert panel member said "The best advancement would be ease of technology use - like going from DOS to Windows, something everyone could use."

## Question Five

Online persona and communication were major components of an online course in Round One and Round Two. Therefore, it was important to address how professors are able to build an online rapport with their students. Over 50% of the panel members felt that they built rapport with their online graduate business students by staying in touch. There were a

variety of approaches that they used to do this. Many used the 24-hour electronic mail rule that they discussed in an earlier round, others scheduled phone calls, while others preferred to stay in touch through a 48-hour turn around on all assignments.

Adding a personal touch was also a way that the panelists built an online rapport with their students. To garner the information to do so some panelists have students fill out an online profile the first week of the course. The instructor is then able to pull out information regarding the student and use it in conversation. One panelist gave this example:

> I go through their profiles and note their nicknames and interests. When giving feedback on assignments I use their nicknames and often make a reference to their interests, e.g. How is your daughter's soccer team doing?:

Another panelist explained how he sees his online courses as a part of a business and therefore building rapport with this students is vital to the survival of the business.

> The university today is a business, regardless of what faculty and administration officials would have you believe. And you run a business for its customers; in this case students, parents, future employers. A business needs to be there for its customers when its customers call. I monitor my online course throughout the day when I am on campus (7:45 a.m. through 3:00 p.m.) and on weekends. Within the first week of class, students know I am online and will respond immediately to e-mail and phone requests. I send daily course updates that apply to the course principles (relevant news items, etc.) and work to keep the students constantly engaged. Students learn to use the convenience factor to their advantage (i.e., responding to a discussion board posting at 2:30 a.m. when the student just came off work and wants to shift their focus). My online course success comes from creating an environment in which students believe I am there for them any time they call.

Although there was not a consensus, the majority of the panelists built rapport with their students by staying in touch and adding personal details to their online conversations.

## Question Six

In Round Two panelists stated that evaluations were the best way to measure and monitor a school of business's success. In order to better inform the practice, panelists were asked to give specific measurement goals that are used at their universities. Again there was not a consensus. Eight universities are conducting comparative analysis within their schools of business. One panelist explained how they compare face-to-face courses and online courses at his university.

> Comparing students taking on-line courses in comparison with students taking face-to-face or traditional courses. We measure them in terms of: knowledge of

concepts, attitude toward self-learning, team-work, discussion tools, advantages and benefits for each method.

Another panelists stated that his university developed an assessment tool to measure their online courses.

> We have developed an assessment tool for our online classes. We require proctored exams for a portion of the grade as well. We measure outcomes and attempt to determine if outcomes for online students are the same as those for on campus -- and thus far, they have.

Table 21 shows the top four methods are used at the universities of the expert panel.

**Table 21. Round Three: Question Six**

| Reported Items | Number | Percent |
| --- | --- | --- |
| Compare online to face-to-face | 8 | 27% |
| Objectives are measured | 7 | 23% |
| Student Work | 6 | 20% |
| Student feedback | 3 | 10% |

## Question Seven

In addition to asking panelists how a school of business could measure and monitor their online courses, the survey also sought to explore the training required to teach in an online graduate business course. Question Seven of the Round Three questionnaire asked panelists, "As a professor in an online business environment, what kinds of specific skills, formal training, and experiences do you believe might help other professors who teach online business courses be more effective in their online classroom?" Half of the panelists (50%) stated that knowing and understanding how to use the technology platform was the main skill that a new professor who is going to teach an online course should know. Many panelists stated that courses to learn the technology platform should be, or in many cases are offered by their universities to professors who are new at teaching online.

In addition panelists also stated that professors who are new to teaching an online graduate business course should train with their Distance Education specialists, so that they can understand the basic pedagogical principles of online learning.

## SUBQUESTIONS

In Round One and Round Two of the Delphi process panelists were given the opportunity to offer suggestions for topics that they would like to see addressed during Round Three. Panelists had many issues they wanted to see discussed. Ideas were divided up into the following categories:

- Technology
- Cheating
- Pedagogy
- General Teaching Issues

The issues with the most requests were presented to the panel as part of the Round Two questionnaire. Below is Question 12 of the Round Two survey and the responses from the panel.

Please select the top two topics you would like to see discussed in Round Three.

**Table 22. Subquestion**

| Reported Items | Number | Percent |
|---|---|---|
| How do you assure that the student who submits the work really did the work? | 16 | 51% |
| How do we best simulate the dynamic interaction that adds to a person's education that we have in the face-to-face classroom? | 14 | 45% |
| How are other universities compensating professors (not necessarily in money terms) for developing teaching materials | 13 | 42% |
| What do you consider cheating | 11 | 35% |

## Subquestion One

Based on the results from the Round Two questionnaire, panelists were instructed: 50% of the panel requested that the topic of student work be part of the final round. Please give examples of how you address the issue of ensuring that the student who submits the work is the person who really DID the work.

Thirty panelists responded. Though there was not a consensus, there were many ideas that emerged. Table 23 displays top the results.

**Table 23. Subquestion One**

| Reported Items | Number | Percent |
|---|---|---|
| Develop Trust | 6 | 20% |
| Turnitin.com | 5 | 17% |
| Exams that cannot be answered unless done assignments | 3 | 10% |
| Case method | 3 | 10% |
| There is no way | 3 | 10% |
| Assign too much work for anyone else to want to do | 3 | 10% |
| Proctors | 3 | 10% |

Six panelists stated that developing trust was the way they monitored students in regards to cheating. Panelists reported that they had their students sign an ethics contract, and felt confident in students who signed it. Other panelists built trust through getting to know their students, for example taking a personal interest in them. While other panelists who answered trust believed that at a graduate level, the student should know better than to cheat.

Panelists also reported that if they were going to use something to check on student's cheating, they would use turnitin.com. This is a website where a teacher can submit a paper and a database will compare words and phases to a large network of published documents. Professors stated that this is a great tool for research papers, but for smaller assignments it is burdensome.

## Subquestion Two

During Round One and Round Two panelists also requested a questions that focused on how a professor is able to simulate online what they do in the face-to-face classroom. Sub-question two asked: 43% of the panel requested that a question addressing how individual professors best simulate online the dynamic interaction that adds to a student' education that he or she has in the face-to-face classroom. To better inform our practice, please give specifics detailing how you do this in your online course.

This question did not elicit a strong consensus. Table 24 shows the main themes that emerged.

**Table 24. Subquestion Two**

| Reported Items | Number | Percent |
|---|---|---|
| Chat | 6 | 21% |
| Discussion Groups | 6 | 21% |
| Real Time Talk | 4 | 14% |
| Teamwork | 3 | 10% |
| Immediate Feedback | 3 | 10% |

One panelists wrote:

> I devote time to each student and every comment that is made. For me, online teaching takes more time (but it is time well spent) than face-to-face instruction. I require student-to-student interaction throughout the entire term. I encourage students to state their opinions in their postings, in addition to what they know. Students seem to be able or are more willing to do this on-line than in a classroom.

## SUMMARY

This chapter presented and analyzed the data gathered from experts in the field of online education in an online graduate business course. The data provided insights into online pedagogy, the enablers and barriers to successful teaching online and training needed for professors who teach online. There was a clear consensus that incentives to professors and a top-down commitment would encourage professors to discuss online pedagogy with their colleagues, and to design, develop and implement more online graduate business courses. Professors also identified what they believed to be the ideal number for an online graduate business course, a guideline for building rapport with their online students and an appropriate timeline for electronic mail correspondence with their students. Findings also included the most ineffective pedagogical principles that professors employ when teaching online.

In chapter 5, the study and the key findings are summarized. Implications of the findings are discussed in relation to the literature on online pedagogy in graduate business

courses. Limitations to the study are presented, along with suggestions for recommendations for universities, administrators and professors and future research.

# CHAPTER 5

# DISCUSSION

## INTRODUCTION

This study examined pedagogy in online graduate business courses. Specifically, in this study the researcher attempted to identify the best practices employed by professors who teach online graduate business courses.

This chapter begins with a summary of the study and its key findings. The implications of the findings are then discussed with specific detail. The limitations to the study are discussed, followed by recommendations for teaching online graduate business courses and suggestions on how the findings, which specifically were geared towards online graduate business courses can be generalized to other online graduate courses. This chapter concludes with recommendations for future research.

## Summary of Purpose and Process

Graduate business students have traditionally sought programs that would work around their schedules, which for many included working full-time jobs. As a result, business schools have added online courses and programs at a rapid pace. Now that the need for convenient, student-friendly programs is being met, questions regarding the quality of the instruction are on the minds of business school professors and administrators. This study was designed to explore professor's beliefs and insights on the online pedagogical approaches that they use in their online classes and what they believe will be the future of both pedagogy and technology in online graduate business courses. This study also explored the barriers that professor's face in teaching online business courses and what could be done to eliminate them. Study participants offered their insight to what possible indicators might predict a successful online course.

The Delphi method was selected as the most appropriate method to address the research questions in this study because a wide range of experts opinions were sought. Participants included professors from universities in Canada, the United States and Mexico.

The Delphi method was also used because to date, a panel of experts has not been consulted as to the best practices of online pedagogy.

Based on a set criteria, 36 panelists were selected to participate in the study. The criteria included: having an expert knowledge of online pedagogy, having a good performance record in their subject matter, being considered experts in online teaching at their university, and were willing to commit to the entire study. The panel consisted of 36 graduate business school professors from 17 universities, who on average have taught 17 years at a university with 7 of those years including online teaching. Most panelists were self-taught online professors with most never taking a formal class on teaching online. All panelists expressed strong motivation to participate.

This study consisted of three rounds of open-ended questions distributed using Survey Monkey, an online survey tool. In some cases participants were asked to rank previously reported items so that the researcher could determine the best practices of online graduate business education. The open-ended questions were analyzed to identify categories and themes. After each round of questionnaires, tallies were made once a theme was identified to record how many participants mentioned it in their response.

After each round of questionnaires, participants were sent a copy of compiled results to review before the next round's questions were distributed. As stated in the informed consent letter, participants and their universities were kept anonymous throughout the entire study. The data collection began in early December 2006 and finished mid March 2007.

## Summary of the Findings

The data were collected from this study that may inform the practice of online pedagogy and form a basis for future research. The essential features of pedagogy in online graduate education and the technology that is needed to administer the pedagogical best practices revealed in this study provide tools for business professors, administrators and instructional designers who work in an online teaching environment. Each round of the Delphi study yielded findings that were used to narrow ideas and thoughts down in order to gain a consensus from the expert panel. Study results suggest a need for more in-depth research, using alternative research methods to further the findings of this Delphi study.

The findings from this exploratory study were gathered from panelists' responses to questions; however, these questions were designed and created as a unit and not meant to stand-alone. The Research Questions worked together to gather insight from a panel of experts who teach online graduate business courses. After each round, the researcher was able to develop new questions to expand on emerging themes. Findings were presented by survey question in Chapter 4, however in chapter 5, themes will be presented by research question.

## Research Question One

*What core elements both pedagogical and technological are essential to be an effective online environment for graduate business education?*

Throughout the Delphi iterations the panelists were asked questions in order to gain a consensus for Research Question 1. Panelists felt that personally engaging students at both the teacher-student and student-to-student level was essential for an effective online environment. Data revealed that most of the panelists believed that engaging students early in the semester was a necessary for success in an online graduate business course. Table 25 reflects the top three responses panelists provided when asked about successful instructional strategies.

**Table 25. Successful Instructional Strategies**

| Reported Items | Number | Percent |
|---|---|---|
| Personally engaging students via email, phone calls, giving lots of feedback, round table discussions, etc. | 12 | 33% |
| Very structured materials | 10 | 28% |
| Small group discussions | 8 | 22% |

To implement these strategies in an online course panelists often would have students create a homepage or an online profile that they use to gather information about the student and include in their correspondences with the students. As one panelist reported, it was not unusual for him to ask a student about his/her child's soccer game that weekend. They also

build rapport by staying in touch with their online students. Either by email, discussion groups, online chats or even personal telephone calls to the student.

Panelists also emphasized the importance of structure in their online courses. The overall consensus was that an online environment needed more structure than a face-to-face environment due to the lack of a face-to-face contact.

The consensus from the panel suggested timely feedback was a core element to an online course when answering questions or corresponding with students. See Table 26, which displays the responses from panelists when asked about successful pedagogy.

**Table 26. Successful Pedagogy**

| Reported Items | Number | Percent |
|---|---|---|
| Providing timely feedback | 26 | 76% |
| Regularly updating curriculum | 14 | 41% |
| Being present for the class/not disappearing | 12 | 35% |

The majority of the panel agreed that a 24-hour return correspondence rule should apply, however many contacted students via electronic mail within hours of receiving a question or comment.

In addition to essential pedagogical approaches to teaching an online graduate program, panelists were asked about their technological approaches to teaching online. Panelists believed that in the future of online technology would improve by offering more advanced audio and visual components to their online courses. It was their hope that the audio and visual technology would be easier to use, therefore allow enabling them to use it more in their online courses. In addition, panelists would like to see technology move more towards real-time teaching where all the students are online at the same time.

## Research Question Two

*Barriers:*

    *a.  What are the main barriers to best practices in current online graduate business programs and courses?*

    *b.  What could universities do to address and remove barriers?*

The panel found class size the main barrier they encountered when trying to implement best pedagogical online practices. Many reported that having too many students to work with online was exhausting and there was not enough time to give the students individual attention. Table 27 shows the top three barriers the panel identified.

**Table 27. Barriers**

| Reported Items | Number | Percent |
|---|---|---|
| Class size in online courses-dealing with the number of students a professor needs to communicate with | 7 | 26% |
| Communication with professor | 5 | 19% |
| Poorly designed CMS, or outdated | 5 | 19% |

The majority of the panelists felt that an online class size of no more than 29 students would be ideal. See Table 28 for all the panelists' responses.

**Table 28. Class Size**

| Reported Item | Number | Percent |
|---|---|---|
| 10-19 students | 12 | 35% |
| 20-29 students | 11 | 32% |
| 30-39 students | 3 | 9% |
| Doesn't matter | 2 | 6% |
| 50 + students | 1 | 3% |

However, panelists who currently had class sizes larger than 29 admitted that they would probably not change their pedagogical approach to teaching online if they had a smaller class. To remove the size barrier, panelists agreed that more sections of the course should be offered if enrollment exceeds 29 students or professors should have a graduate student work with them to help with the course.

In addition to class size being a barrier to implementing pedagogical best practices in online graduate business courses, panelists also stated that the time that it takes to teach

online courses is a barrier. Overall, panelists believed that they spend more time teaching the online course than their face-to-face course. Panelists believed communication with students added to the increased time factor in online courses. Online students tended to feel that the class was open 24 hours a day,7 days a week, therefore they asked questions and interacted with the CMS throughout a 24-hour period. This was a barrier that panelists were willing to work with, because they understood that many of their students took online courses because of the time flexibility. A solution that was brought up was to limit the class size so that the interaction is manageable.

## Research Question Three

*What are the main enablers for best practices to be implemented?*

Throughout the iterations of questionnaires, the panel reported that there was a lack of top-down commitment to those who teach online graduate business courses. Professors reported they were not having the conversations that many of them felt they should be having with their colleagues. Panelists agreed that a top-down commitment from the administration at their university was needed to improve the use of sound pedagogical principles. Panelists agreed this commitment should take the form of the administration providing a central office on campus where instructional designers and computer technicians would be available to help the graduate business professors design, develop, implement and evaluate their online courses. See Table 29.

**Table 29. Best Practices**

| Reported Item | Number | Percent |
|---|---|---|
| Central office on campus to help with online courses | 13 | 42% |
| Dean states as a priority | 12 | 39% |
| It is promoted by the university | 7 | 23% |
| Compensation | 5 | 16% |

Panelists felt that a central office was more important to them than the administration simply stating that online pedagogy was a priority. Many panelists stated that this would

show, through actions, that the administration believed that online courses and the pedagogy
that drove them was important to the university.

Faculty incentives were also cited as a method that would enable professors to
implement pedagogical best practices. Panelists felt that paying faculty extra for designing,
developing and teaching a new online course would encourage more professors to do it, thus
making it more common on their campus. Panelists also agreed that since an online course
was more work than a face-to-face course they should be compensated for the additional time
and energy it took to teach the online course. See Table 30.

**Table 30. Incentives**

| Reported Items | Number | Percent |
|---|---|---|
| Offer extra money to teach and develop new courses | 26 | 81% |
| Provide a graduate assistant | 5 | 16% |
| Provide training | 3 | 9% |

Many panelists explained in that online courses took more time to teach and develop.
There was also perception by online students that online courses should be more up-to-the-
minute in content. As a result panelists said they were continuously updating their courses.

## Research Question Four

*What training occurs and what is additionally needed to prepare instructors in online
graduate business courses?*

The majority of the expert panel felt that instructors needed to be very familiar with
the technology platform they were planning to use to teach their online course prior to
teaching. Many suggested that the central distance education office where they could get both
pedagogical help and technical help would assist in the preparation of online graduate
business professors. See Table 31.

### LIMITATIONS TO THE STUDY

The purpose of the study was to determine best pedagogical practices in online
graduate business courses and to compile the experiences of professors who teach online. In

chapter one several limitations to the study were predicted, but as the study progressed several additional limitations became apparent.

**Table 31. Training**

| Reported Items | Number | Percent |
|---|---|---|
| Know tech platform | 18 | 58% |
| Train with the DE specialists on your campus | 9 | 29% |
| Work with other faculty | 7 | 23% |
| Be a good reader of people | 4 | 13% |

In reviewing the results of the study, it became apparent that there was redundancy in the questions pertaining to technology and pedagogy. Many of the participants felt that they should not be two separate categories and that they went hand-in-hand when forecasting the future of online graduate business practices.

It also became apparent that the timing of the study was a disadvantage. Originally, the researcher did not anticipate that online graduate professors would be teaching under the constraints of the academic calendar, however, towards the end of Round One many professors stated that they would not be available to answer the questionnaire until after a certain date due to final exams. Ideally, it would have been better to schedule the round to coincide with the academic calendar. Despite these limitations, valuable recommendations can be made based on the study's findings.

## IMPLICATIONS OF FINDINGS

The findings from this study have both theoretical and practical implications. Overall, the study found that graduate business professors who teach online were interested in the pedagogy of their craft and were interested in applying pedagogical methodologies in their online courses that would promote student success. The study also found that some of the participant's universities were promoting pedagogical discussion that related to online methodologies, and at those universities that were not formally promoting conversations, the faculty were still seeking out and engaging in conversations with other faculty members. It is

hoped that the data from this Delphi study will add to the body of literature on online pedagogy and will help universities plan for the training of online professors and the implementation of more online programs in business schools.

Most of the findings were consistent with the literature on online pedagogy and instructional technology (Christensen, 2003; Phipps & Merisotis, 2000). In general the literature supported the importance of timelines for online communication (Phipps & Merisotis, 2000), building a rapport with students in your online courses (Garrison, et al., 2004), guidelines for appropriate class size (Phipps & Merisotis, 2000), and the need for pedagogical and technical support at the university level (Perreault, et al., 2002). In particular the literature supports the importance of online persona, online pedagogy, strong leadership that promotes online pedagogy, and specific guidelines for the logistics of an online courses.

## Online Persona

Participants in this study expressed a need to personally engage online students in their courses and to build a positive online persona with their online students. The following quote reflects these sentiments:

> I break my wrists responding to each and every one of their posts each and every day in the discussion groups. That is where my rapport gets built. I try to be amusing as well as informative.

These findings are supported by research that suggests that in order for an online professor to have teaching presence with his or her students he or she must perform active communication with the student. This includes reading and commenting on discussions, answering students inquires and interacting with the entire class (Garrison, et al., 2000). This idea is also supported by literature on professor's online persona (Coppola et al., 2002; Heckman & Annabi, 2003). Studies suggest when a professor is teaching online it is important that he or she find new tools to use when communicating with students. The emotional expressions that students would be able to see in a face-to-face environment are not available in an online environment. As a result professors are taking extra steps to get to know their students by viewing their profiles, and they are injecting more humor or less academic jargon into their correspondence. Consequently, the essential role of teacher persona in an online graduate business course cannot be overlooked.

# Online Pedagogy

The findings from this study suggest that business school professors who are teaching online use a variety of online pedagogical methods to engage their students. In Round One of the Delphi study, the number one reported method to keep students engaged in their course was to make some sort of personal contact with the student. This theme was carried on through the study. In addition to engaging students panelists reported that they engaged in student-centered pedagogy when teaching online business courses. The panel reported teaching using a student-centered philosophy in their online courses, which suggests that online graduate school professors are teaching using the constructivist method Grasha (1994). Student-centered as described uses questioning and guiding provided by the professor (Grasha, 1994; Grasha & Yangarber-Hicks, 2000).

Interestingly, in Round Two, panelists did discuss the issues of professors placing a course online then disappearing and leaving the course for the students to "fend for themselves" as being one a trait of online courses that should be avoided. Though no panel member brought up the history of distance education in their responses, the practice of delivering a course to a student then disappearing is similar to the correspondence courses that were part of the First Generation of Distance Education (Brown & Brown, 1994; Sherron & Boettcher, 1997; Moore & Kearsley, 2004). This type of independent study course was described by Kathawala, et al. (2002) as one of three types of online MBA courses that is available. The fact that professors brought this up as a negative was important because most of the panelists felt they taught using the student-centered methodology. Thus, putting a course online and disappearing would prevent them from having students conduct debates, journal online, reciprocal teach, work in groups, and attend webinars, which are all activities that promote critical thinking (Phipps & Merisotis, 2000; Scheafer & Zygmont, 2003; Moore & Kearsley, 2005).

Sellappah, et al., (1998), conducted a study that found online professors did not ask their students higher order questions, which in turn did not engage the students in critical thinking. However, findings of this Delphi study suggest that panelists felt that questioning their students while employing student-centered pedagogy was occurring. In a testimony to how important student-centered teaching is to graduate online business courses, when the panel was asked if they would change their pedagogical style of teaching if their class size

changed, the majority stated they would continue to teach using the student-centered methodology, even "if it killed them".

Though online pedagogical principles were important to the panel members, some did state that they did not think that the pedagogy that professors use online should be different from the pedagogical principles they use in their face-to-face courses. Research (Jeris & Popple, 2002; Donaghue, 2003; Rogers, et al., 2003) has suggested that there may need to be modifications to pedagogy when an instructor teaches online. However, it is important to note that instructors must first understand the basic principles of pedagogy whether they teach in an online environment or a face-to-face environment. Mirsha, et al., (2002), suggest that universities must meet the needs of the professors who teach online by ensuring they are knowledgeable about online pedagogy, but some panelists in this study expressed that effective teaching was effective teaching, regardless of its venue.

## Leadership Commitment

Panelists agreed that in order to be successful teaching online, they need support from the leadership at their university. This is consistent with the research conducted by Mishra, et al., (2002), that found in order for a professor who teaches online to be successful the university must develop methods to ensure the professors is knowledgeable about online pedagogy. The findings from this Delphi study suggest that panelists felt in order to be successful at teaching online courses they would need a central distance education office where they could go to receive pedagogical assistance and technical assistance. Literature suggests that professors typically go to the informational technology office on their campus to seek assistance for their online course (Mishra, et al., 2002), where they are only getting technical assistance and not assistance with the pedagogical aspect of online instruction. Although panelists indicated that technical assistance was very important and the main skill a professor new to online teaching should have, they also felt that having a location where a professor could learn about all aspects of online teaching was important.

Literature suggests that when professors are obligated to talk about their course content with an Instructional Designer they will develop new skills to use when they are teaching online (Mishare, et al., 2002). One panelist's support for a central distance education department is expressed below:

The university needs to provide personnel who can help with teaching methods and web design/ technology based on best practices. Encourage forums and seminars. Send 'leaders' to conferences to learn best practices so they can teach them to the faculty, perhaps online.

Technical assistance for professors who teach online was also mentioned as a way the university leadership could show they support online education. Perreault, et al., (2002), concluded that professors who teach online found the technology and its reliability to be a major concern when teaching online. A central location where technical support is offered to professors could assist in eliminating that concern.

Panelists in this study expressed several ways they believed that the culture in business schools could change to include more discussion of online pedagogy and more support for those who are teaching online business courses. Panelists said that it was not enough for the university administration to state they want to make their online courses a priority, the administration needed to act on making online pedagogy a priority. Panelists stated that a central department on the university campus whose only focus was online class support was needed to begin the culture change.

In addition, the majority of panelists felt that incentives were needed for those professors who design, develop and teach online courses. Research suggests that course development, teaching and learning and course structure are all very important to the success of an online course (Phipps & Merisotis, 2000). The panel agreed with this and felt that a clear top down commitment from the administration of the university would take the form of monetary incentive for those who teach online. In addition, dedicated time to develop a course would also be considered an incentive.

## Logistical Guidelines

A theme that was conspicuously absent from all the rounds of the Delphi study was a need for benchmarking best practices. Rarely did the panelists state there should be best practices benchmarking. This was not consistent with the literature that suggests that the best way for a university to improve its online education is to set up a set of best practices for their online courses (Kermerait, 2004). However, throughout the iterations of questionnaires, the panelists were able to develop guidelines that could be used as best practices, such as class size and timely feedback.

From the first iteration of questions, the panelists made it clear that timely feedback was the most important pedagogical factor of online courses. All professors had a self imposed timeline as to when they answered email. Most agreed that within a 24-hour period a correspondence should be answered, but many answered within hours of receiving correspondence from a student. As a result, professors also stated that online courses were much more work than face-to-face courses. Panelists spoke of the time factor, the health factor, of always being online and typing, and the commitment factor of online courses. The 24-hour rule is consistent with the guidelines that were created by Phipps & Merisotis (2000).

In addition, panelists felt that there should be guidelines to the number of students who could be in an online course. Findings concluded that a class over 30 students was too big for an online course. This is consistent with the benchmarks that were created by Phipps & Merisotis (2000).

Studies show that benchmarking best practices in both online courses and face-to-face courses promotes success (Phipps & Merisotis 2000). Most of the panelists were self-taught online professors, with over 60% never taking a formal course on pedagogy. Throughout the study it was apparent that the panelists were eager to discuss topics related to online pedagogy, but many did not employ jargon that is used in many formal pedagogy courses. A lack of formal pedagogical training was apparent. Therefore, it is believed the panelists would welcome and use formal guidelines if offered.

## MBA Professors Need to Connect

Panelists expressed the need to give students immediate and a great amount of feedback as part of the way they communicate with their students. Equally important was the need to personally connect with students and the means they used to do so. Literature suggests (AACSB, 2004) that the majority of graduate business students are part-time students who worked full-time jobs. Panelists stated in their responses that they read and took key points from their students' online profiles so they could connect with the students on when writing corresponding. Panelists mentioned that they would tie comments back to the student's job or family as a way to relate. This type of communication took place in the

online graduate business courses that Kathawala et al., (2002) described as asynchronous or synchronous.

Panelists felt that customizing the communication to fit the needs of the individual students was an important part of their online course. This is consistent with the literature (Kathawala et al., 2002; Ponzurick, et. al., 2000). In addition panelists felt that building communication and rapport with the with current students would help the university in the future by producing satisfied alumni who could possibly become donors, business partners, or simply recommend the university to others.

## Technology Verses Pedagogy

Throughout the Delphi study, panelists appeared to be excited about the technology and the future of online technology. Panelists expressed the need for continuous improvement to the computer management systems they were using, the need for better audio/visual tools and the desire to have all students connected online at the same time. However, there was a disconnect when panelists were asked how they currently use audio/visual in their online course. The majority of the panel stated that they currently did not use audio/visual components in their class, but they would like to start if the technology improved and they received training. Many professors cited a lack of knowledge of how to use the more complex technology as the reason they were not using it. Perreault, et al., (2002) study suggested that the technology in an online courses was a concern, and professors needed training on how to use the online technology prior to implementing it.

In addition panelists wanted to see an improvement to their current CMS. Improved threaded discussion areas, more access to online chats and the ability to write logic into course assignments were suggested; for example a student can only view assignments from other students when their assignment has been turned in online, were suggested. But in addition, panelist requested improvements such as better online grade books, and secure drop boxes.

It was apparent that panelists wanted to use technology to implement the best pedagogical practices that they could, however, many felt they were lacking the technical skills and the support to do so. Perreault, et al., (2002) recommended training professors in

both pedagogical methodologies and technical competence as the best way to improve online courses.

## Impact on Face-to-Face Courses and Programs

Throughout this Delphi study, panelists expressed their desire to be effective online professors in a graduate business environment. The panel members appeared to be thinking about the pedagogy that they were implementing in their online graduate business courses. Though the study primarily asked questions about professors teaching while online, some professors did comment that their pedagogical approach did not change whether they were teaching online or face-to-face. They used the same methods online, but implemented them using technology. As one professors wrote, "Many of my students study with me both online and on campus. They tell that the experience is closely aligned and I try to make this happen." Crumpacker, (2001) suggested that pedagogical principles may have to change in order to teach online. However, Grasha, (2000) has argued that good teaching pedagogy can be transferred to an online environment with minimal changes to the approach. Many of the techniques of student-centered teaching that Schaefer and Zygmont (2003) found to assist students in critical thinking could be transferred to an online environment with minimal changes to the structure. For example, journaling, case studies, reciprocal teaching, debates, and group work can be easily transferred to an online environment.

Though panelists were suggesting a distance education office that offered assistance in both technology and online pedagogy is needed, a department that is open to all faculty who teach both online and traditional courses coupled with technology support would be the ideal setting for the graduate business professors who are teaching online courses as well as face-to-face courses.

## ADVANTAGES AND DISADVANTAGES OF THE DELPHI
## METHOD AND ONLINE QUESTIONNAIRES

The Delphi method worked well for this study. Throughout the study participants stated that they appreciated the process and looked forward to reading the summaries from the previous rounds. During the Round Three Questionnaire participants were asked if they would like to continue interacting with the group, over 75% of the panel stated that they would like to continue in an ongoing discussion forum such as a list serve. Over 75% of the

participants also stated that they would like their professional information such as name, subject taught, and university shared with the group. Throughout the four-month study panel motivation remained high. This was demonstrated by very little participant attrition and the length and depth of the responses from the participants.

Using an online questionnaire was also beneficial to the participants. It allowed the participants the opportunity to begin the survey, take breaks, think about their responses, or review the summary that had been sent out earlier, and then complete the questionnaire. The online survey tool, Survey Monkey, also allowed the researcher the opportunity to monitor the responses as they came in. The researcher was also able to email a reminder notice to the participants who had not responded two days prior to the submission deadline. By using the online survey tool, the researcher was able to download the results and compile the information with a two-week turn around time, thus adding to the participants' motivation level.

The Delphi method did pose some disadvantages. The length of the study required a large commitment for the panelists. Panelists were first contacted in mid-November 2006 to participate in the study and did not complete all the questionnaires until mid-March 2007. Though panelists who were involved in the study did not complain about the length, some potential panelists declined participation citing the time commitment they would have to put forth.

Survey Monkey, did not always function correctly. During Round Two about half of the panelists reported that Survey Monkey was only allowing them to select two of the five items they needed to for Question One of the Round Two questionnaire. As a result, this question had to be discarded and addressed during Round Three of the iterations.

## RECOMMENDATIONS FOR FUTURE RESEARCH

This study suggests many areas for future research. It might be informative to conduct the Delphi study with an expert panel consisting of graduate business students who have taken the majority of their courses online. In this proposed Delphi study panelists would be asked similar questions as the expert panel was asked in this Delphi study. Once all rounds were completed and analyzed, a comparative case study could be conducted to see whether the students identified the same themes as did the professors in the current study. This study

could explore what type of training could be offered to professors to make their online courses more engaging and could serve as a second step in the best practices benchmarking process.

Second, a study where an online course and a face-to-face course are compared would add to the body of literature. This study would address the need to compare the effectiveness of online pedagogy, online persona and online communication with those of a face-to-face course. Though similar studies have been conducted (Heckman & Annabi, 2003) the focus of this future research would examine the issues that the expert panel in this Delphi Study found to be important.

Third, panelists requested that research be conducted on how it is possible for an online course to simulate the interactions that they are able to achieve in a face-to-face course. Research focusing on interactive communication in an online course would add to the breadth of literature on online pedagogy.

Fourth, throughout the study there was a lack of discussion regarding course outcomes and how they are measured and monitored in an online graduate business courses. To better inform the practice, future research should be conducted on the outcomes of online courses and how, if they are different, from the outcomes of a traditional face-to-face course.

Fifth, a Delphi study that focuses on graduate business professors who teach face-to-face courses and asks them questions focusing on pedagogy and technology. A comparison between a professor's online pedagogical practices and a professors who primarily teaches in a face-to-face environment would be the purpose of this study.

In addition, the expert panel was asked was if they would like to continue working with fellow panel members in some capacity. The majority of the expert panel responded that they would. Panelists expressed a desire to continue the conversations that were started and to explore some of themes that emerged in regard to pedagogy, student work and technology. The researcher anticipates that a list serve will be created to address the issues that this study began to explore. Through this list serve it will be possible for the researcher to remain in contact with the expert panel and conduct a follow up Delphi study in the future to examine whether the panel members have changed their perspective of online pedagogy as technology changes and the university environment changes.

This researcher hopes to be able to explore these topics further either by being the primary researcher or working with a team. As online courses become more common, literature supporting its practices will become needed.

## FINAL THOUGHTS

This Delphi study has been a useful tool in establishing an open dialogue among business professors who teach online graduate business courses. Pedagogy is a complex topic that requires in-depth examination. Pedagogy in an online setting is even more complex because the instructor is not face-to-face with the students and the instructors are not able to read their expressions, body language, tone of voice or level of excitement or boredom. It is increasingly clear that as more courses go online that all schools that plan on teaching in a global educational environment must research, promote, and implement proper online pedagogy in their courses.

In an online environment, the constructs of professor-to-student and student-to-student do not function independently of each other. For that reason alone, designing courses that use pedagogical best practices is imperative. Best practice guidelines and dialogue among professors that focuses on pedagogy are two important factors that ensure quality teaching and learning. Creating an online graduate business course that uses pedagogical best practices will drive the success of the university.

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# APPENDIX A

# EXPERT PANEL RECRUITMENT LETTER

November 1, 2006

Dear

I would like to invite professors from your college to participate in an important study involving a panel of experts from universities around the United States who are teaching graduate business courses online.

As a former Administrative Director of International Business at the University of San Diego and a doctoral candidate at the University of San Diego and San Diego State University, I am well aware of the opportunities and challenges a professor faces when teaching in an online environment. To date, there is an abundance of information on pedagogy in a face-to-face traditional classroom, but there is a lack of information on pedagogy in an online graduate business course. This is an important topic because many Business Schools around the United States are now offering courses as well as degree programs online. Establishing best practices and maintaining some quality control is paramount in the success of the courses and programs.

For my dissertation research, I am recruiting graduate business professors from U.S. accredited universities to share and compare their experiences and beliefs regarding pedagogy and best practices in an online graduate school setting.

The study is titled, "Pedagogy in an Online Graduate Business Course: A Delphi Study". Experts who choose to participate will be asked to respond to a series of short, web-based questionnaires distributed via electronic mail about once a month for a period of approximately three months beginning the end of September 2006. After each questionnaire, participants will receive feedback on how their comments compared to other panel experts. Panel participation promises to be interesting and useful.

The purpose of a Delphi study is to bring together a panel of experts who will reach a consensus regarding a topic. Traditionally, the consensus that the panel reaches is used for forecasting future trends in a given field. Questions will be presented online using Survey Monkey, a web-based survey tool, and will consist of open-ended questions and yes/no questions that will require explanation. There will be three rounds of questions and each round will take the panelist approximately 20 minutes to complete.

Participation is anonymous and the specific comments will not be associated with an individual expert or a participating school. Near the end of the study, experts will be giving the opportunity to share their name and the university they are associated with.

Please nominate up to two professors from your college who could provide expertise on the pedagogy of teaching in an online graduate business course. To meet the criteria for panel participation, nominated experts should meet the following criteria:

Have at least two years of experience teaching a graduate business course online.
Serve as a mentor to other professors in the field of online graduate business courses in your college.

Please feel free to contact me by phone 858.270.4224 or my committee chairperson Dr. Susan Zgliczynski with any questions or concerns about this study via email at zglnski@sandiego.edu.

Sincerely,

Alicia Gallegos-Butters

# APPENDIX B

# BACKGROUND QUESTIONNAIRE

Instructions

This brief questionnaire allows the researcher to learn more about each panelist's background. You'll need only about five minutes to complete it. Please fill this questionnaire out by Friday, November 10, 2006. Once I have all responses, I will send out the first round of questions for the Delphi Study. I have also put the Informed Consent form online for you to read and submit.

Please read each question carefully and the choose the most appropriate response. Thank you.

1. On average, how many classes do you teach online each semester?
    1. One
    2. Two
    3. Three
    4. Four
    5. Five or more

2. On average, how many classes do you teach each semester?
    a. One
    b. Two
    c. Three
    d. Four
    e. Five or more (please specify)

3. In general, are the classes you teach ...
    a. completely online, with no face-to-face class meetings?
    b. online, but supplemented with one or two face-to-face meetings?

    c.  blended, where at least 50% of the class is conducted online

    d.  Other (please specify)

4.  Please list the courses that you currently, teach online, if you are not currently teaching online please list the courses you have taught in the past.

5.  a. Do you use a classroom management system i.e. Blackboard, WebCt?

        yes                    no

    1.  If so, which classroom management system do you use?

6.     For how many years have you been a professor in total?

7.     How many total, cumulative years have you been teaching online (whether blended, wholly online, or in some other configuration)?

8.     As a professor or as a graduate student have you ever taken a course, either offered by your university or another source, that focuses on teaching pedagogy?

9.     As a professor or as a graduate student have you ever taken a course, ether offered by your university or another source, that focuses on online teaching pedagogy?

10.    If so please list the courses you have attended in the last five years.

11.    Please indicate your gender.    Male            Female

12.    Please indicate your current rank.
        a.  Professor
        b.  Associate Professor
        c.  Assistant Professor
        d.  Other (please specify)

13.    Would you be willing to provide information on articles you've published or presentations you have made on the topic of online teaching?

*****Please note that this was sent out via Survey Monkey.*****

# APPENDIX C

# ROUND ONE COVER LETTER

November 1, 2006

Dear Panel Participant:

Thank you for your willingness to participate in this study with other graduate business school professors who teach online graduate courses. This expert panel is part of a Delphi study designed to explore best teaching practices in online graduate business courses.

Consent Form
Please find an attached informed consent form for the participation in this study as required by the International Review Boards at the University of San Diego and San Diego State University. Please review the information and provide your consent to the study by clicking the Consent button at the bottom of the form.

Questionnaire
Once you have completed the Consent Form, please click on the link below to begin the Round 1 questionnaire.

Once you have completed the questionnaire, please submit by Give Date. I will be sending a reminder two days before the submit date as a friendly reminder. Two weeks after the submitted panelists will receive summarized feedback on the responses of the group from Round 1 and may be asked to prioritize some of the responses and to add new ideas.

Please feel free to contact me with questions at any time at Alicia@sandiego.edu or aliciagb@san.rr.com.

Your support for this research study is highly appreciated.

Thank you,
Alicia Gallegos-Butters
Doctoral Program in Education
Educational Technology
University of San Diego
San Diego State University

**APPENDIX D**

**INFORMED CONSENT FORM**

Informed Consent Form

The Institutional Review Boards (IRB) at San Diego State University and the University of San Diego require that all study participants provide informed consent before participation in any type of research. Please review the information below and submit the form to give your consent to participate in the study as an expert on the panel described below. Thank you.

Purpose of this Study

The purpose of this Delphi study is to examine the best practices of a panel of professors who are considered experts in the teaching graduate-level business courses online. Based on the experts' opinions, experiences and continuous student feedback, suggestions for improving online instructional pedagogy will be made. Question will focus on various teaching strategies that panelists employ, why individual panelists believe they're successful educators, the barriers they encounter (both personal and institutional), etc.

This study is dissertation research in partial fulfillment of the requirements for a doctoral degree in Education with an emphasis in Educational Technology at the University of San Diego and San Diego State University.

Research Methodology and Time Frame

This study is organized around the Delphi technique. Delphi methodology involves the use of a panel of experts on the topic that is being researched. The nature of the Delphi methodology allows the panel to come to a consensus in a anonymous group communication process that is managed through the researcher. The researcher poses the initial question or questions to the participants. Once the panel responds, the researcher summarizes the responses and sends them back to the panel in a second round questionnaire. Panelists are then asked to rank their responses in order of priority and add any additional ideas to the discussion.

The process for this study will continue for two to three months, depending on the timeliness of the panel responses, until a group consensus is formed. The first online questionnaire is designed to be completed in approximately 15 minutes.

Participation in this study requires all participants to complete all rounds of questionnaires sent via email, along with a demographic form.

Anonymity and Confidentiality

Using online links to questionnaires helps to ensure participant anonymity. Only the researcher will know the name, institution, and email address of each panel participant. This information will not be made available to other participants in the study. Once completely finished panelists will be given the opportunity to share information about their institutions and courses taught. This step is strictly voluntary, however.

Benefits and Risks

A significant benefit to this study is the opportunity for participants to share their ideas about pedagogy in online graduate business courses Panelists may also find personal satisfaction from participating in this study since they will be contributing to a body of knowledge that, at the moment, is understudied.

# APPENDIX E

# ROUND ONE QUESTIONNAIRE

Online Pedagogy in a Graduate Business Administration Course: A Delphi Study

By Alicia Gallegos-Butters

**Area One - Pedagogical Resources**

The items in this section examine the pedagogical practices of online teaching.

1. What have been your experiences talking about pedagogy in online business courses, ie: teaching approaches and theories?

2. At the university level, what would it take to increase discussion of pedagogical practices amongst faculty teaching online?

3. Describe three successful instructional strategies that you use or which you're aware when you teach online?

4. What, in your opinion, are some common pedagogical principles in current practice that reduce effectiveness in online teaching?

5. What do you think is a main barrier of utilizing the recommended pedagogical practices?

> For example: lack of synchronous communication between students, lack of communication between teacher and student, class size, difficulty establishing online meeting times, etc.

6. Interactive communication in online courses is often cited as a weakness in online courses. From a pedagogical, not technical, standpoint describe how you facilitate online communication between student to student and instructor to student.

> For example: do you set up online groups, are students required to respond to classmate's work, do students work on projects together, etc.

7. Do you perceive a difference in your teaching persona when you are teaching online vs. face-to-face? If so what is the difference?

8. Does your pedagogical approach to teaching online lean more towards direct instruction or one-on-one interactions?

9. What do you visualize as the future of pedagogical approaches in online instruction in graduate business?

**Area Two - Technological Resources**

This section will examine the technological resources for teaching online in a graduate business environment.

10. Describe two ways you have used technology to successfully teach online.

11. Thinking about technological advancements, how do you think teaching online will change within the next five years?

12. Do you think business education uses more advanced technology for teaching online? Why or why not?

13. What, in your opinion, is a common mistake often made in current use of technological resources that reduces effectiveness in online teaching?

14. What would it take to increase discussion of the use of technological advances amongst faculty teaching online?

**Area Three: Expert Area**

Additional comments.

15. Through this study, the researcher hopes to add to the body of knowledge of online graduate business courses. What other questions or issues (associated with online teaching) would you like the panel to consider that will be helpful to promote best practice during Round Two?

****Please note that this was sent out via Survey Monkey.****

**APPENDIX F**

**ROUND ONE RESULTS**

Question 1 Results:

What have been your experiences talking about pedagogy in online business courses, i.e.: teaching approaches and theories?

Table 1

| Reported Items | No. | Percent |
|---|---|---|
| Informal conversations with other faculty who teach online courses | 10 | 37% |
| University offered seminars | 8 | 30% |
| Do not discuss | 5 | 19% |
| Create own pedagogy as you teach | 2 | 7% |
| 360 evaluation from students other professors who teach online | 2 | 7% |
| Total | 27 | 100% |

Question 1 Quotes:

Panelist Quote 1: Most faculty are very responsive to the discussion. However, there are some that confuse the notion of me sharing an approach means that I will run their class for them.

Panelist Quote 2: We have a 'TLTR' (teaching learning and technology roundtable?) group on campus, and they have an annual conference, but most people are unaware of it. In the business school, we are offering online courses, but there is almost NO talk about pedagogy.

Panelist Quote 3: Initiated and developed online classes. Taught online classes for 5 years. Participated in approaches/theory seminars for 5 years.

Panelist Quote 4: I don't talk about pedagogy IN the courses and rarely with students. We have bag lunches w/ other professor's once/quarter with speakers on some issue or successful implementation and a chance to ask questions, get up to date on technology changes etc. We also have a review of each course as it is being developed to make sure specific teaching elements of good online courses are present (though little formal evaluation of their effectiveness).

Panelist Quote 5: I have had several meetings with faculty colleagues and an expert in educational technology during which we discuss teaching approaches and methods for improving student participation, group and team work among students in online courses and evaluating academic work.

Panelist Quote 6: I have seen various methods from other faculty at my university for online teaching (e.g. online discussions, lectures, video, voice, etc.).

Panelist Quote 7: I used to conduct research on various forms of pedagogy for application at both the undergraduate and graduate levels. However, my current institution does not value research in pedagogy and I was in fact told by my mentor that it would hurt my changes for tenure if I continued with this line of inquiry. My university is a research I institution. While I have followed his advise, after tenure, I plan to reinitiate my research on pedagogy, as I believe it to be very important and a central component to our contribution as academics. As for talking about pedagogy, I tend to have one-on-one discussions with selected faculty who I know are interested in teaching approaches and theories. This way we can retain the 'secrecy' of these discussions. On a side note, which I believe, is important. Three years ago, I learned a university-wide teaching award. At my annual review, my department chair congratulated me and then immediately said 'you obviously must be spending too much time on teaching'. In the interest of getting tenure at my current institution, I made sure not to earn another teaching award until I had completed that milestone.

Panelist Quote 8: The Distance Learning Group at my university sponsors a lunch on graduation day each semester and invites graduating online students, online faculty and faculty interested in online teaching. There is an internal or external speaker, but above all there is a wonderful dialog among faculty and students about online teaching. Our discussions are not theoretical. They are practical. We share what works and what doesn't work. There are still faculty were are skeptical of the rigor and efficacy of online learning, so the formal gathering is a safe place to positively about online learning and to be open about its challenges.

Panelist Quote 9: Our on-line faculty meets several times each year (about 4-6 times) in a 'brown bag' luncheon setting. We have guest speakers (some of whom are from amongst our ranks) to speak about different aspects of on-line teaching. The speakers generally share what works for them...what makes their on-line classes successful or notable. (Our student feedback surveys are used for some of this insight.) Initially, we talked more about actual technique (how to get students to participate as an example). Now that many of us have experience and know how to handle these things, we tend to discuss issues: how to combat plagiarism, livening up on-line classes with animation, etc.

Panelist Quote 9: Very limited— There is no culture, and even less administrative interest to support a professional approach to this -- It is merely a convenience to students, and pedagogically lacking on every dimension, a discussion too many are loathe to provoke.

Question 2 Results:

At the university level, what would it take to increase discussion of pedagogical practices amongst faculty teaching online?

Table 2

| Reported Items | No. | Percent |
|---|---|---|
| Top down commitment hosting seminars, guest speakers, brown bag discussions | 10 | 24% |
| Change university culture where discussing pedagogy is important | 6 | 15% |
| Incentives for those who teach online | 5 | 12% |
| There needs to be discussions to change the perception of online teaching, the quality can be equal or better | 4 | 10% |
| Nothing, it is happening at our university | 4 | 10% |
| More widespread faculty participation in teaching courses online, part of the required teaching load | 3 | 7% |
| Put value on the pedagogy of teaching | 3 | 7% |
| More seminars, meetings for those who teach online to be able to share ideas and communicate | 3 | 7% |
| Subject courses to external reviews | 1 | 2% |
| Make online teaching one of the important strategic areas of future growth | 1 | 2% |
| Link to the accreditation process | 1 | 2% |
| Total | 41 | 100% |

Question 2 Quotes:

Panelist Quote 1: Better faculty rewards for doing so. The normal teaching, research, service model does not support this.

Panelist Quote 2: There needs to be a discussion that the quality of the class can be equal or better.

Panelist Quote 3: A little incentive goes a long way.

Panelist Quote 4: Online teaching has to be part of the regular load and instructor performance used for review.

Panelist Quote 5: Not much, people who teach online have developed a decent community with as much sharing of ideas as one wants.
Panelist Quote 6: We need to have meetings among faculty who teach online. We need to have workshops, seminars and mentoring for those of us who teach online.

Panelist Quote 7: Hire a director to organize it.

Panelist Quote 8: A discussion of pedagogical practices proceeds from a trust of one another. Most faculty are wary of having another faculty member observe our teaching. And we bring that wariness into online teaching as well.

Panelist Quote 9: 1. Overcoming the initial resistance to on-line teaching. Many faculty do not believe that on-line course quality is equal to face-to-face classes. 2. Forcing faculty to teach on-line.

Panelist Quote 10: Probably more widespread faculty participation in teaching courses on-line. Also, if a school or commercial hosting company (such as eCollege) formed a group for the purpose of exchanging best practices, there might be more discussion. Some of these groups exist now.

Panelist Quote 11: I believe there needs to be a strong institutional commitment from top level administration so that resources are directed to departments and individual faculty (e.g. training, release time). If administration shows a real commitment and dedicates resources this will encourage more deliberate effort and dialogue at the departmental - faculty levels.

Panelist Quote 12: For non-education faculty, a deeper focus on the value of teaching when it comes to tenure. As long as 'research comes first' (and it pretty much does even here at my 'teaching' university, then faculty will devote less time to teaching.

Panelist Quote 13: A concerted effort by the Dean and others in Administration. Also link to accreditation process.

Question 3 Results:

Describe three successful instructional strategies that you use or which you're aware when you teach online?

Table 3

| Reported Items | No. | Percent |
|---|---|---|
| Personally engaging students via email, phone calls, giving lots of feedback, round table discussions, etc. | 12 | 33% |
| Very structured materials | 10 | 28% |
| Small group discussions | 8 | 22% |
| Timely communication | 4 | 11% |
| Team presentations | 4 | 11% |
| Short deadlines to keep students from procrastinating | 4 | 11% |
| Use discussion boards for students to post responses to topics | 4 | 11% |
| Using video | 3 | 8% |
| Voice over powerpoint slides | 2 | 6% |
| Balance interactive and asynchronous activity | 2 | 6% |
| Online teams | 2 | 6% |
| Live meetings | 2 | 6% |
| Make sure course technology works | 1 | 3% |
| Taped Lectures | 1 | 3% |
| Use Subject Matter Experts (SME's) throughout the course | 1 | 3% |
| Make participation a key component to the course | 1 | 3% |
| Total | 36 | 100% |

Question 3 Quotes:

Panelist Quote 1: 1. Make sure that the course technically works. 2. Make sure that the student can find everything and stream line the navigation of the course. 3. Only add content that really adds value to the course. Disable functions that do not.

Panelist Quote 2: 1.Strong discussion room, including having the instructor go into the discussion room on a regular basis to create and nurture discussion. 2. Quick feedback--students want it yesterday. 3. Quality of lecture materials and web links

Panelist Quote 3: 1. Keep the course very structured - clear assignments and objectives. Post the entire course material before the term starts. Students really need to see what is expected, the amount of work, how it will be integrated, how the work will be evaluated (in detail), and specific dates for each deliverable. 2. Have many short-leash deadlines to keep students actively engaged (to avoid playing to our worst characteristic: procrastination) 3. Put in as much interactivity as possible.

Panelist Quote 4: Phone calls to EVERY student at least once/semester preferably in the 1st two weeks. This lets them know that you really care and them and encourages them to interact. Online introductions including background and some personal information to help people get to know each other.

Panelist Quote 5: I have used group/team work where I divide the students into teams of 3 or 4, provide them with their own discussion board that includes me so I can lend help and advice as appropriate and have them work together on an assignment. 3. I used teams and an online, interactive business simulation game to have the students test their knowledge in a competitive environment.

Panelist Quote 6: We have discussion forums where the person only sees others' responses AFTER they have committed to one type of answer. Of course, ease of file exchange. Live meetings from time to time.

Panelist Quote 7: Weekly taped lectures with detailed PowerPoint slides that link the three types of readings I typically use in online classes (weekly reading that were created in the form of a customized textbook); case studies; and academic research articles.

Panelist Quote 8: Use a self-produced video case in which students observe a client conference between an accountant and a business manager and use this information to evaluate the company's financial statements.

Panelist Quote 9: I use a system that when I ask a discussion question does not allow the student to see what other students have entered. Then when the deadline comes for entering the initial answer everyone has I open it to viewing and beginning a class wide discussion. Everyone must answer another persons item that has not been answered and either strength it or disagree with it. Then they are free to discuss whichever items they wish.

Panelist Quote 10: Making participation a key component of the class...you can't get an A without great participation.

Question 4 Results:

What, in your opinion, are some common pedagogical principles in current practice that reduce effectiveness in online teaching?

Table 4

| Reported Items | No | Percent |
|---|---|---|
| Not providing timely feedback | 6 | 17% |
| Overusing canned lectures, powerpoint, etc. | 4 | 11% |
| Putting something online and the professor disappearing | 4 | 11% |
| Teacher centered rather than student centered | 4 | 11% |
| Not varying teaching methods | 3 | 8% |
| Making students work in groups exclusively | 2 | 6% |
| Overuse of class discussion boards | 2 | 6% |
| Not encouraging collaborative learning | 1 | 3% |
| Using new technology just because it is there | 1 | 3% |
| Unhelpful computer consultants | 1 | 3% |
| Not allowing students the flexibility when they work on their school work | 1 | 3% |
| Textbook layout, students have easy access to solution manuals | 1 | 3% |
| Technology | 1 | 3% |
| Taping a course lecture and thinking it is online | 1 | 3% |
| Busy work | 1 | 3% |
| No interaction between student and teacher | 1 | 3% |
| Overusing teaching assistants | 1 | 3% |
| Adherence to the same strict deadlines as a face-to-face course | 1 | 3% |
| Total | 36 | 100% |

Question 4 Quotes:

Panelist Quote 1: A tendency to shovel in-class materials to a server and have them lie there, inert. A tendency to tape lectures and think this is 'online' (when it's no different from the old style correspondence course)

Panelist Quote 2: Common pedagogy for in-class is a teacher-centric one where the professor is 'delivering' material. I've always disagreed with this, as I believe we teach students not material. The Internet forces you to turn this right-side-up with student-centric learning.

Panelist Quote 3: 1. Simply grading papers with little or no interaction with students. 2. I have heard from some colleagues that an online class means that all interaction with students MUST take place ENTIRELY online -- that is, that students are not welcome to telephone or visit the professor in person (even if they are on campus).

Panelist Quote 4: The need to work in groups. While it is necessary for students to have group experience, there are occasional technological challenges that can reduce the effectiveness of online teaching.

Panelist Quote 5: Not providing very fast feedback.

Panelist Quote 6: 1. Simply posting power point slides. 2. Canned, audio and video lectures Poor execution of Socratic methods! Posting long articles/papers, using extensive and turgid PowerPoint
Not encouraging collaborative learning. I think this is the secret of what makes online education better than pure face to face. There are a number of experiments that confirm this and the first one was done by Roxanne Hilts and it should be required reading for any one doing online learning. It dealt with ethical scenarios in computing. Many faculty do not understand that you can exercises where the whole class collaborates and not just have small teams.

Panelist Quote 7: Online teaching effectiveness is reduced when the faculty member becomes an administrator managing content rather than a student guide and mentor. However online teaching requires so much time to create, update, and manage content that the most effective teaching interactions are hard to emphasize as well. Adult learning must be participatory and this may be a little more difficult in online classes. The instructor must find ways to interact with the class.

Panelist Quote 8: Instructors may believe the course can 'take care of itself' and, therefore, requires less attention than an on-campus course. Excessive use of teaching assistants. Instructors put their material online and then never 'show up' for class!!! Instructors think that putting text online that can be downloaded and printed in hard copy means they have created an online course.

Panelist Quote 9: The assumption that all online courses should follow the same formats, e.g. employ discussion and talking head 'lectures.' Like the classroom, teaching methods need to be appropriate to the material. There is no one correct method.

Panelist Quote 10: Assigning numerical problems from existing textbooks run the risk of students having access to solutions manuals. However, some publishers are working to correct this problem and offer randomized problems with solutions. Professors assign readings and supplement this with lecture notes and many students avoid one or the other to same time, thus sacrificing a complete understanding of the material. Without interim deadlines or weekly assignments, on-line students seem to have more difficulty planning ahead for milestones and larger projects. Students seem to need more structure in their study approach.

Panelist Quote 11: Too much direction from faculty. Faculty role has to change to facilitator.

Question 5 Results:

What do you think is a main barrier of utilizing the recommended pedagogical practices? For example: lack of synchronous communication between students, lack of communication between teacher and student, class size, difficulty establishing online meeting times, etc.

Table 5

| Reported Items | No. | Percent |
|---|---|---|
| Class size in online courses-dealing with the number of students a professor needs to communicate with | 7 | 24% |
| Communication with professor | 5 | 17% |
| Poorly designed CMS, or outdated | 5 | 17% |
| Meeting hours for students who are all over time zones and have different schedules | 3 | 10% |
| Time, online courses take time to develop | 3 | 10% |
| Cultural issue-interacting with students you have never met | 1 | 3% |
| Lack of motivation on part of students | 1 | 3% |
| Lack of uniform start dates for classes | 1 | 3% |
| Lack of accountability for professors | 1 | 3% |
| No support or incentives | 1 | 3% |
| Lack of motivation on part of professor | 1 | 3% |
| Total | 29 | 100% |

Question 5 Quotes:

Panelists Quote 1: Online takes more time, as such, faculty need more technical and labor support, and incentive dollars to put in the extra time. We provide additional incentives, in turn, we have a dedicated faculty. There is burnout, but more support helps morale.

Panelists Quote 2: Lack of accountability for instructors. Classes are considered 'real' or as important as residential classes, so instructors can do whatever they like as long as it doesn't produce an uproar.

Panelists Quote 3: The main barrier in our case is the difficulty in communication with the distance students. However, I have two excellent adjuncts who are in charge of the 120 off campus students. They answer nearly all of the student's questions and only pass along questions that require my attention. For the most part, the in class students ask the questions that are on the minds of the off campus students.

Panelists Quote 4: Biggest barrier is lack of white board capability (which is there but too expensive for our university) so I can do in-class demos and build, for instance, a process map, to demonstrate and walk through the thought processes.

Panelists Quote 5: Time zones for our students who are scattered throughout the globe (synchronous communication and online meeting times become nearly impossible when students in one course are located in three or four time zones).

Panelists Quote 6: Class Size needs to be limited in order to effectively facilitate synchronous communication. What I do is to split my classes into groups of eight-ten for the synchronous communication sessions. The slow typists are at a severe disadvantage and may appear to be less involved than they actually are due to their inability to get a word in. This creates a tremendous amount of extra work for me if I am to meet with each group for 45 minutes to 1 hour at a time.   Technological problems are the other problem that my students have encountered.

Panelists Quote 7: Online teaching is very demanding - it takes time, consistency and careful planning.

Panelists Quote 8: Lack of interaction with the teacher and lack of interaction between students.   In addition, online learning requires self-motivation and some students struggle to keep up with the work.

Panelists Quote 9: Faculty need to change their workload expectations. It is more important to put a LOT of time into course design for online. Wile running, faculty need to expect to have many short interactions throughout the day, versus one long interaction every few days. 2. IT systems must be high reliability and fast.   3. As delivery technology improves (e.g. Blackboard), so will pedagogy.

Panelists Quote 10: The main barrier I see to effective pedagogy online is the same barrier I see in the traditional classroom. Lots of professors are LAZY and just do not want to put forth the effort required to be a good teacher online or offline.

Question 6 Results:

Interactive communication in online courses is often cited as a weakness in online courses. From a pedagogical, not technical, standpoint describes how you facilitate online communication between student to student and instructor to student. For example: do you set up online groups, are students required to respond to classmate's work, do students work on projects together, etc.

Table 6

| Reported Items | No. | Percent |
|---|---|---|
| Threaded Discussions | 14 | 33% |
| Online Groups | 7 | 17% |
| Chat Sessions/Synchronous topic discussion | 5 | 12% |
| Team Projects | 5 | 12% |
| Attach a grade to discussion | 4 | 10% |
| Professors participating in classroom discussions | 3 | 7% |
| Fast Response | 2 | 5% |
| Classroom interactions-introducing themselves to other students, professor making personal contact, etc. | 1 | 2% |
| Developing engagements around assignments | 1 | 2% |
| Total | 42 | 100% |

Question 6 Quotes:

Panelists Quote 1: Discussion boards are useless to really engage students. Developing engagements around assignments provides a much better platform.

Panelists Quote 2: I set up (as do my colleagues), an online discussion room. Most have a fairly high level of points (I have 30%) dedicated to discussion. This is a motivator for students. As part of the grading I communicate a grading guide = (1) number of comments count, (2) depth of comments, including bringing in reading and other learning materials, (3) responding to other responses scores better as well. I also make it a point to go into the discussion room many times...this shows my involvement. Lastly, I give more points for early/unique comments, this encourages originality.

Panelists Quote 3: First, I am online a great deal of the time and respond very quickly. So this increases the probability that students will write to me. Second I use discussion forums and team projects to promote student-student interaction. Lastly we use chats as spontaneous forums if problems or issues emerge.

Panelists Quote 4: I provide prompts at the beginning of the semester to model the types of summaries the students should do, but I allow the discussion to be primarily student to student.

Panelists Quote 5: I believe asynchronous discussions are far more desirable than synchronous ones because the student has time to think about what they are going to say and usually they write longer and more well thought out contributions.

Panelists Quote 6: Discussions are required and graded. I have been moving away from group projects in my 8-week courses as they are simply too constricted by e-mail communication in the in the available time.
I only use cases in my seminar and they have to prepare the case discussion as a group. During the discussion I select the individuals that will address the opening questions, also the students will be asked to address other students contributions. Students also have to prepare a final group project.

Panelists Quote 7: Discussion forums -- students are required to make 2 entries and respond to 2 other students   Chats - students facilitate one chat session per semester and must attend 4 others.  We schedule one session per 12 students on average and students can come to whatever ones they want throughout the semester.   Group Project -- done virtually across the miles (no students working in the same town)

Question 7 Results:

Do you perceive a difference in your teaching persona when you are teaching online vs. face-to-face? If so what is the difference?

Table 7

| Reported Items | No. | Percent |
|---|---|---|
| Yes, personality doesn't come through online | 8 | 24% |
| No difference, do same thing online as in F2F | 6 | 18% |
| No | 5 | 15% |
| Yes, not able to gage students reactions online | 3 | 9% |
| Yes, tend to focus on the topic more online | 3 | 9% |
| Yes, I have more time to think about answers to students questions while online | 3 | 9% |
| Yes, more stressed about online, it is so time consuming | 1 | 3% |
| No, but better looking online | 1 | 3% |
| Yes, feel remote from students | 1 | 3% |
| Yes, much less interactive online | 1 | 3% |
| Yes, typing everything gets difficult, and having to repeat everything to different students | 1 | 3% |
| Total | 33 | 100% |

Question 7 Quotes:

Panelists Quote 1: I have no difference...my in class is discussion based as well. The main content difference is that lectures are shorter, requiring more reading by online students to fill in the gaps they miss from being in class.

Panelists Quote 2: Yes. Much more interactive and easier flow in face to face. Much more deliberative and considered online (but that is not necessarily a good thing).

Panelists Quote 3: No difference, except I am better looking online.

Panelists Quote 4: I try to teach online and express my personality in exactly the same way that I teach on campus. I share my picture; personal stories and I reach out to my students to be as helpful and engaging as possible.

Panelists Quote 5: MAJOR differences! I have to be active in terms of specific detailed and resource rich responses - I post papers and podcasts in direct response to students - a kind of 'on demand' tuition. In the class if it doesn't happen in the room then the time lag in responding can loose the momentum of student interest. I try to infuse my personality in class and online - but online (with text based communications) it is vital to avoid ambiguity. I have to separate the audio from the visual by using podcasts to express opinions that need the power of the voice!

Panelists Quote 6: In my earlier days of teaching, when I was less confident with classroom presentation, yes. At that time, I was much more confident on-line and less so in the classroom. Now, I don't see as much of a difference. My writing style tends to be conversational and I try hard to carry that through my on-line materials and discussions. In my responses to discussions, I refer to things other students have said, I try to learn about the students' business and personal experience and bring that into the class. In on-line graduate programs you can have a number of students who are fairly advanced in their careers and responsibilities...hence, subject matter experts, authors, and well-known executives 'surface' and you can use these students to enrich the experience for everyone by, for example, requesting a 'view from the top.

Panelists Quote 7: Yes, in online all of us have more time to think and to prepare both relevant questions and answers. Also the bonding among group members for me is stronger in online classes.

Panelists Quote 8: In an on-line environment, one has to think and reply since it stays in print in front of the class. One has a chance to refer and write a good reply. The intensity of interaction is higher in on-line than in a classroom. There are no silent students.

Panelists Quote 9: As fatigue sets in, yes. And this is a function of having to type everything, and repeat everything ad nauseum. I am also far more expressive, and proceed by monitoring body language and respond in a didactic manner. All of this is severely truncated online.

Question 8 Results:

Does your pedagogical approach to teaching online lean more towards direct instruction or one-on-one interactions?

Table 8

| Reported Items | No | Percent |
|---|---|---|
| Both, provide many learning materials | 14 | 42% |
| Direct Instruction | 8 | 24% |
| One on one | 7 | 21% |
| More of a facilitator | 2 | 6% |
| Many to many, lectures are a component, online students interact with f2f students | 2 | 6% |
| Total | 33 | 100% |

Question 8 Quotes:

Panelists Quote 1: In the middle. I provide many learning materials and lectures, demonstrations, tutorials, etc. However, I also let students call me at home, one my cell or at school. I also have an MS Messenger account and I do many one on one chats. Of course, I also answer many emails.

Panelists Quote 2: Direct instruction. Our class sizes (40) don't make 1 on 1 too feasible. My feedback on assignments is the primary 1 on 1 interaction.

Panelists Quote 3: My approach is to focus on the students in front of me. The off campus will see the on campus students questions, comments, etc.

Panelists Quote 4: Both. Lectures are direct. Projects, quizzes, and threads are individual. Every assignment gets personal, detailed comments on what needs improvement.

Panelists Quote 5: I see myself as a facilitator who provides the learning opportunities for the students. I assign readings and quizzes. I assign required discussion board posts. I try to remain OUT of the discussions so I do not interfere or interrupt the student flow of conversation. Instead, I reply to a post privately if I want a student to receive certain feedback. I WILL post if something was particularly helpful or insightful and I want to highlight it to the students as a good example of what I am expecting.

Panelists Quote 6: One-on-one. I have found that posting lectures is not effective for me.

Panelists Quote 7: Many to many discussion, which is very different from what you are asking. I do believe my lectures are important and provide insights not in the readings. Usually my face-to-face three hours a week have 1.5 to 2 hours of direct lectures. Other than the questions as I am lecturing most of the important discussions are online with both the face to face and the distance students participating in the same discussion.

Panelists Quote 8: The rigor of course material design for online yielded very high quality, which I was able to then use to my advantage for my F2F courses. The success I have had with online pedagogy has led me to introduce online components to my F2F courses.

Panelists Quote 9: Both. I have learning components that are directed at the whole class and I also interact frequently one-on-one with students in discussions and in Q&A related to course material, career advice, etc.

Panelists Quote 10: Somewhere between the two, depending on the class -- both students and size-wise. Smaller classes allow for more interaction (same as FTF) and sometimes the group just doesn't 'gel' as much for that sort of thing.

Question 9 Results:

What do you visualize as the future of pedagogical approaches in online instruction in graduate business?

Table 9

| Reported Items | No. | Percent |
|---|---|---|
| Better synchronous capabilities | 7 | 21% |
| Better video capabilities | 7 | 21% |
| Technology will enable online classes to get more complex | 6 | 18% |
| Better voice capabilities | 3 | 9% |
| Interactive resources such as text book, Google, Skype, etc will be used to supplement lectures | 3 | 9% |
| F2F online communication | 2 | 6% |
| Web-based books | 2 | 6% |
| More blended approaches to teaching | 2 | 6% |
| No distinction between the f2f and online | 2 | 6% |
| More stuctured | 2 | 6% |
| More collaborative tools | 1 | 3% |
| High quality lecture products | 1 | 3% |
| White boards | 1 | 3% |
| Androgogical approach | 1 | 3% |
| Instill self discipline so that the student cannot procrastinate | 1 | 3% |
| Be more similar to internet or online games | 1 | 3% |
| More practical instruction | 1 | 3% |
| Total | 34 | 100% |

Question 9 Quotes:

Panelists Quote 1: Real-time, synchronous interaction like the newly available Intel business videoconference system. That is one cool deal. Think of a 60' plasma screen in the

instructor's office (classroom) with individual faces of each online student in a separate box on the screen. They could be anywhere in the world and still be in class.

Panelists Quote 2: I anticipate that there will be more tools developed so that I can more easily create video content and interactive modules. Right now I use Camtasia, but only at the most basic level, and I have been told that I need to learn FLASH in order to do some of the interactive things I would like to do.

Panelists Quote 3: More towards using technological advances: holograms, videos, more interaction 24/7, etc.

Panelists Quote 4: Practical distance education-doing field projects --with an on-line instructor. I know this is being done in the Medicine Schools, but I don't think this is widely used at the Graduate School of Business.

Panelists Quote 5: Will continue to develop and will change in order to accommodate the needs of the next wave of graduate students (the i-pod generation). Future online instruction approaches will be more similar to Internet or online strategic games.

Panelists Quote 6: More streaming audio and video to enhance current structure.

Panelists Quote 7: White boards, probably some synchronous capabilities via VOIP or Internet for interactions. I'd like to see research on effectiveness of methods and how to develop, e.g., threads.

Panelists Quote 8: Interactive use of resources such as Skype, google docs, video conferencing, global teams, multi media, multiple choice questions, blogs/portfolios, wikis etc

Panelists Quote 9: I shudder to think....

Question 10 Results:

Describe two ways you have used technology to successfully teach online.

Table 10

| Reported Items | No. | Percent |
|---|---|---|
| Links to web-based information | 6 | 14% |
| Streaming Video | 6 | 14% |
| Discussion boards | 6 | 14% |
| Business simulation games | 3 | 7% |
| Voice over ppt | 2 | 5% |
| Video with ppt | 2 | 5% |
| Podcasts | 2 | 5% |
| Video conferencing | 2 | 5% |
| Production facility for lectures | 1 | 2% |
| Implement CMS features that improve quality of class | 1 | 2% |
| Use smartboard | 1 | 2% |
| Students create individual homepages with information about them | 1 | 2% |
| Online topic slides | 1 | 2% |
| Online chat rooms | 1 | 2% |
| Webcasts | 1 | 2% |
| Interactive problems for students | 1 | 2% |
| Create MP3 files to comment on students papers | 1 | 2% |
| Multimedia tutorials | 1 | 2% |
| Spreadsheets for qualitative data | 1 | 2% |
| Bring in Subject Matter Experts | 1 | 2% |
| Audio | 1 | 2% |
| Live demonstrations of topics | 1 | 2% |
| Include an FAQ | 1 | 2% |
| Total | 44 | 100% |

Question 10 Quotes:

Panelists Quote 1: Only implement CMS features that really make the class better. Include a FAQ and a technology contingency plan.

Panelists Quote 2: Production facility for filming lectures. Links to important web-based information, including webinars.
Voice over powerpoints initially, but now morphing into split screen talking head with powerpoint (mediasite). This is a small chunk of the online week for the student.

Panelists Quote 3: We download financial information from the Internet. For example, one of the assignments requires the students to download current stock prices for use in several models. Access to current market data is very useful. We use a 'smartboard'. It allows me to draw and write on the board about any issue that comes up in class. It allows me to expand on any issue. I can save the information on the board and can make it available via email to all the students. It reduces the anxiety of note taking. I try to not use too much PowerPoint, as the students are tired of that method of communication.

Panelists Quote 4: Create MP3 files with my comments on student papers and give the file to each student.

Panelists Quote 5: I use multi media tutorials for quantitative techniques - this really works far better than any other method I have ever used to teach statistics. We ensure students work closely in teams for their on line projects already have in prior questions.

Panelists Quote 6: 1) Bring top executives from different places around the world to present and discuss a problem they are facing where students could apply what they are learning in the seminar. I called this approach our 'Mystery Guest'. 2) For simulations in specific topics. I use hot links to guide students to useful resources and information, and will at times use an e-book format for material.

Panelists Quote 7: In a videoconferencing setting the participants are organized into small groups (5-8) and each group is located in its own boardroom-style location. Technology allows me to have frequent short small-group discussions without disturbing the flow of the class (i.e., without the need to form small groups and then send groups to break-out rooms).

Panelists Quote 8: Providing students with opportunities to comment on each other's work, do updates on their own work, interact around a subject.

Panelists Quote 9: Each participant is provided a One-Touch keypad that allows a second level of interaction. One of the features on the One-Touch technology is anonymous flagging of the professor. When I am teaching, I encourage students to use this feature to send me a message if the topic is confusing: I monitor the class-level anonymous flagging and adjust my pace accordingly. In other words, I am getting real-time, objective feedback on the comprehension of the topic under discussion.

Panelists Quote 10: Automatic release of solutions after the due date 2. Quizzes that are automatically graded. Modular 'lecturettes' and online surveys to build engagement and 'choices' (ownership).

Question 11 Results:

Thinking about technological advancements, how do you think teaching online will change within the next five years? Comments.

Table 11

| Reported Items | No. | Percent |
|---|---|---|
| Technology advancement will transform CMS | 8 | 20% |
| Online video conferencing | 6 | 15% |
| More effective interactive problem solving software | 5 | 13% |
| Higher quality productions | 3 | 8% |
| Interaction with students at other universities | 2 | 5% |
| Use of blogs | 2 | 5% |
| Digital media productions by the students | 2 | 5% |
| More refinement | 2 | 5% |
| Virtual business cases | 2 | 5% |
| Podcasts | 2 | 5% |
| More webiners | 1 | 3% |
| Administration will want more bells and whistles, but will interfere with courses | 1 | 3% |
| Penetrate more globally diverse markets | 1 | 3% |
| Better university support | 1 | 3% |
| Plagiarism tools | 1 | 3% |
| Hologram technology | 1 | 3% |
| Total | 40 | 100% |

Question 11 Quotes:

Panelists Quote 1: I think it will get more complex and worse. The people who control the budgets and technology are into bells and whistles, not pedagogy. My fear is that they will impose large costs on instructors to use marginal (but sexy) technology and this will interfere with making the classes informative and entertaining.

Panelists Quote 2: Because our process allows the distance students to study at their convenience, overall the process won't change. However, my guess is that the delivery of DVDs will be replaced with direct delivery over the net. Beyond white board and synchronous A/V . Phone/iPod delivery. Move to mp3 everything rather than ppt/real audio. Maybe move more to just-in-time modules for the education model with eventual degree rather than consecutive, continuous degree-based model. Make education more game-like simulations, etc.

Panelists Quote 3: Randomization of numerical problems, integrated plagiarism tools such as turnitin.com, video instruction with simulated classroom environments.

Panelists Quote 4: I think larger file capacity via wider access to broadband will make richer media content a reasonable standard to expect. I hope hologram technology becomes widespread and affordable during my teaching career.

Panelists Quote 5: The technology will be more seamless and less obtrusive and include the range of media--used appropriately and as required.

Question 12 Results:

Do you think business education uses more advanced technology for teaching online? Why or why not?

Table 12

| Reported Items | No. | Percent |
|---|---|---|
| Yes, more is available to our department | 9 | 41% |
| No, we use the same as other departments | 7 | 32% |
| Yes, because business students use computers on a regular basis | 4 | 18% |
| No, students don't have the newest technology | 1 | 5% |
| No, medical schools have the most advanced technology | 1 | 5% |
| Total | 22 | 100% |

Question 12 Quotes:

Panelists Quote 1: Yes, because our working students are more familiar with online training, and we are playing 'catch up' faster than other areas, perhaps.

Panelists Quote 2: I'm an IT person so I deliberately TRY to use adv. technology. Most non-IT people do not. However, as long as the course is effective, I don't think this makes a difference. Tech is a means, not an end.

Panelists Quote 3: Business education does not use leading edge technology for teaching online. College can't afford the level of infrastructure required -- and students don't have access to the bandwidth and speed to take advantage of advanced technology.

Panelists Quote 4: Probably not - IT/IS and some of the humanities have great and relevant technology (e.g. theatre design in UK at University of Warwick and University of Kent).

Panelists Quote 5: It needs to and that will evolve. One can simulate companies where the starting student has lower level jobs and with each courses they take higher-level positions in the same company which keeps evolving with each semester and has a virtual history.

Panelists Quote 6: No, we use basic hardware infrastructure with software platforms available in the market, but nothing advanced.

Panelists Quote 7: Do you mean more advanced than education in other fields (e.g., law, medicine, engineering)? If so, yes. I believe this is the case for two reasons. First, most business schools have more money than their counterparts at universities and can therefore afford more technology. Second, the demand for business courses is great, allowing technology to potentially increase the reach of a business school faster than this would be the case for other academic units.

Question 13 Results:

What, in your opinion, is a common mistake often made in current use of technological resources that reduces effectiveness in online teaching?

Table 13

| Reported Items | No. | Percent |
|---|---|---|
| Focus on technology and not student | 11 | 41% |
| Not enough interactivity | 5 | 19% |
| Too much canned material | 4 | 15% |
| Needed to create materials into many different formats to serve all students needs | 3 | 11% |
| Instructors implement features they do not really understand | 2 | 7% |
| Only use one method of instruction | 2 | 7% |
| Total | 27 | 100% |

Question 13 Quotes:

Panelists Quote 1: Thinking it is an end. Technology does not teach, teachers still need to think through their material now completely thru the eyes of their students.

Panelists Quote 2: Faculty don't use enough different media. When I first posted an online video case, my African student couldn't view the video because of his slow and intermittent Internet connectivity. I needed to create a DVD and send it to him. I then also posted the file for download for students to watch when they weren't connected to the Internet as well. So in order to accommodate all of the students, I had to put the material into several forms.

Panelists Quote 3: Dependence on the technology to make it happen. You always need the instructor and a well-prepared lecture. Garbage going into the online course is still garbage.

Panelists Quote 4: Thinking that all you need to do is post your slides and papers - there needs to be active involvement by faculty. Not using the best of the technology (i.e. making it a rich 3 dimensional class).

Universities are buying packages that allow administrative capabilities and don't understand that the faculty and students need much more sophisticated communication tools to improve education.

Panelists Quote 5: Transposing existing courses and approaches from f2f into the electronic.

Question 14 Results:

What would it take to increase discussion of the use of technological advances amongst faculty teaching online?

Table 14

| Reported Items | No. | Percent |
|---|---|---|
| Faculty development where experts teach new technology, pedagogy is discussed, ideas are shared, etc. | 10 | 40% |
| Administrative support | 7 | 28% |
| Incentives | 6 | 24% |
| A standard set of best practices | 1 | 4% |
| A Distance Committee | 1 | 4% |
| Total | 25 | 100% |

Question 14 Quotes:

Panelists Quote 1: We are way beyond this issue in that most faculty are on board. However, early on the college held many open forums, created a distance committee, hired a director, etc.

Panelists Quote 2: 1. Fear. If we thought we were losing ground and students to bad technology we might adjust faster. 2. Incentives. We must know our institution values this delivery mode before we spend more time on it.

Panelists Quote 3: Perhaps a survey of what different faculty are using followed by a seminar with different faculty demonstrating their expertise.

Panelists Quote 4: Webcasts and conference calls linked to tangible output for each faculty - answer 'what's in it for me' some sort of discussion and forum for all those in the country teaching a given topic on line to compare notes and techniques they are using. You need a critical mass of like 30 people and at many universities one individual at that university only teaches a given course. Not clear what organization is set up to sponsor this.

Panelists Quote 5: It should be tied to their pay!! Like anything else you want faculty to get serious about AND the institution would have to get serious about paying for the necessary resources!

Panelists Quote 6: Again, a greater focus on the benefit to the faculty (in terms of tenure and promotion) for bothering to learn the newer techniques. Online already takes longer than FTF, adding learning new technologies every semester makes that burden even greater.

Question 15 asked panelists to voice questions or issues they would like discussed in the upcoming rounds. Below are all responses. In Round 2, I will ask you to rank the responses and I will form discussion questions around the top two requested topics and will gather the finding and post them along with my research results.


Question 15 Results:

Through this study, the researcher hopes to add to the body of knowledge of online graduate business courses. What other questions or issues (associated with online teaching) would you like the panel to consider that will be helpful to promote best practice during Round Two?


Technology Questions
What is the single most important technology for an online class?
What is the least important?
What is your saturation point for new technology and upgrades?
How do you train the students in the use of the technology when they are off site?
Information literacy and access issues. Some content is copyrighted and only available through expensive subscriptions or not at all. Some research / library materials are only available in print form still. How do faculty get students access to the materials they need?
One must consider the technology and the pedagogy issues simultaneously. How can this be done? Many times the on-line platforms such as Blackboard and WebCT often drive the educational, learning and teaching objectives.
Do students use the new technology or just print a hard copy of the material and rely on that only?


Cheating Questions
How do you consider 'cheating'? How are students graded? What types of assignments are used? How do you assure that students are not working together on exams/assignments that are not group work?
How do you assure that the student who submits work is the person who really DID the work?
Testing, and plagiarism prevention?
Security! How do I know who is really taking the course? Or the exam? What are some cost effective ways of doing this really, really well?


Pedagogy Questions
What kind of resources (including support) could facilitate online pedagogy?
Which courses/ styles of courses for which of the different pedagogical devices is best suited for online? And how do we get at the cross-functional/ unsoiled type of instruction we are SUPPOSED to be moving toward?? Lecture, case, discussion, projects Gaming/ simulations, tests, papers, presentations, discussions, problems
When people move from on-ground to on-line, how do they reconceptualize the material, projects, in-class activities, quizzes, etc? And, do they try to synch on-line and on-ground classes for the same subject? Do people create their own simulations? To what extent do people use Internet video? Internet audio, and other online resources? To what extent do they

vet, i.e., ensure pedagogical consistency, of those outside sources? And do they redo that every semester?

Where can I find 'best practices' and who to go to for consulting?

How do you communicate your expectations to the students?

Have they used any 'creative techniques' in online teaching?

How do we best simulate the dynamic interaction that adds to a person's education that we have in the classroom? Many of the students have great ideas, but at different times, so students can learn a great deal through each other, as well in those instances in which a student asks a question and it is answered for all. This gives the 'bashful' student who will not ask an opportunity to learn. Plus, the student asking the question may ask it in a way that in an of itself as a different way of looking at a situation, may add to a person's education.

Are face-to-face meetings necessary? What value do they add? How do you use face-to-face meetings?

Can other professors identify resources they have used and like?

How are other universities being compensated (not necessarily in money terms) for developing teaching materials?

Where do you obtain best business practices on-line? What specific resources?

What are some incentive systems that promote best practices?

Do you use any methodology that enhances the effectiveness of case discussion when teaching on-line?

How do you monitor and maintaining quality in the classes?

General

What can you not do now that they would like to be able to do?

How do you deal with students who are inappropriate in their online communications with other students or with faculty?

How do you deal with students who become very concerned that something is wrong when it's really just a small glitch?? This is something I deal with -- and I find that by being FLEXIBLE it helps -- but the students forget that the faculty is HUMAN and that we have the opportunity to be realistic.

What metrics are in place today and need to be in place tomorrow to effectively measure online course content delivery and learning? How do we know where we are headed with this medium and how do we plan to get there?

What are the student perceptions of course content and delivery?

How do you developing a sense of community for students

**APPENDIX F**

**ROUND TWO COVER LETTER**

Dear Expert Panel,

The purpose of the Round Two questionnaire is to begin to narrow the panel's ideas in regard to:

- pedagogical practices in online graduate business courses
- best practices regarding the technical aspect of online teaching
- issues the panel would like to see discussed in Round 3.

This questionnaire should take approximately 20 minutes to complete. Please note that you do not need to answer every question. You should choose to contribute to that aspect of the issue to which you feel best able. Please submit your completed questionnaire no later than January 31, 2007. I will be sending a message two days before the submit date as a friendly reminder. About two weeks after the submit date, you and the other panelists will receive summarized feedback on the responses from Round 2. Please feel free to contact me with questions at any time at alicia@sandiego.edu or aliciagb@san.rr.com.

Once again your support for this research study is highly appreciated.

Thank you,
Alicia Gallegos-Butters
Doctoral Program in Education
Educational Technology
University of San Diego
San Diego State University

# APPENDIX G

# ROUND TWO QUESTIONNAIRE

Instructions: The purpose of the Round Two questionnaire is to begin to narrow the panel's ideas regarding pedagogical practices in online graduate business courses, best practices regarding the technical aspect of online teaching, and issues the panel would like to see discussed in Round 3.

Question #1

During the Round One questionnaire, 37% of the panel members stated that they had informal conversations with their colleagues to discuss pedagogy for their online graduate business courses, 19% stated that they did not discuss pedagogy with their colleagues. Based upon Q #1 results and the results from Q #2 which gave suggestions on how to increase the online pedagogy conversations within a School of Businesses, rank the following.

a. On a scale of 1 (not at all essential) to 5 (very essential) please rate how essential you believe the following factors are to the increase of online pedagogy in a School of Business environment.

| | | | | | |
|---|---|---|---|---|---|
| Top down commitment hosting seminars, guest speakers, brown bag discussions | 1 | 2 | 3 | 4 | 5 |
| Change university culture where discussing pedagogy is important | 1 | 2 | 3 | 4 | 5 |
| Incentives for those who teach online | 1 | 2 | 3 | 4 | 5 |
| There needs to be discussions to change the perception of online teaching, the quality can be equal or better | 1 | 2 | 3 | 4 | 5 |
| Nothing, it is happening at our university | 1 | 2 | 3 | 4 | 5 |

b. What might break the barrier in Schools of Business where no discussions takes place?

Questions #2

In reference to Q#3 and Q#11, from the Round One Questionnaire, relating to successful instructional strategies in online teaching and the future of technology, do you feel instructional strategies will change and/or improve as technology advances, if so, please give specifics?

Question #3
Below are the top 4 responses to the question regarding common pedagogical principles that reduce effectiveness in online teaching.

| Not providing timely feedback | 6 | 17% |
|---|---|---|
| Overusing canned lectures, powerpoint, etc. | 4 | 11% |
| Putting something online and the professor disappearing | 4 | 11% |
| Teacher centered rather than student centered | 4 | 11% |

Please select two of the principles and explain how you eliminate them from your online class. For example: Timely feedback, when providing feedback to my students I always follow at xx hour rule. I find that is effective because ....

Question #4

Twenty-one panelists out of 33 who responded stated that they felt there was a difference between their online personas compared to their face-to-face persona. How important is your online persona? Please explain why it is important or why it isn't important.

Question #5

How can a School of Business measure and monitor how well they are doing teaching online graduate business courses? What would be some success indicators?

Question #6

As a professor, how much time is spent teaching an online classes per week? Is this more or less than a face-to-face course?

Questions #7

Class size was listed as the top barrier to teaching online courses, communication with the professor and poorly designed CMS systems followed closely. One could argue that those factors go hand in hand. Giving specifics,

1. What would be an ideal class size for graduate business courses online?
    a. If the class sizes were smaller, would your pedagogical approach to teaching online still lean towards direct instruction, one on one, many to many or all of the above?
2. Please elaborate on what communication with the professor means to you in an online environment. What is the time frame you feel is appropriate for answering correspondence? Do you participate in a group discussion electronically with the students, etc.?
3. Name two improvements you would like to see made to improve the CMS system that you are using. What would be the benefit of the improvement to you as a teacher or to the student?

Question #8:
Please select the top 2 topics you would like to see discussed in Round 3.

Technology Questions
- What is the single most important technology for an online class?

- What is the least important?
- What is your saturation point for new technology and upgrades?
- How do you train the students in the use of the technology when they are off site?
- Information literacy and access issues. Some content is copyrighted and only available through expensive subscriptions or not at all. Some research / library materials are only available in print form still. How do faculty get students access to the materials they need?
- One must consider the technology and the pedagogy issues simultaneously. How can this be done? Many times the on-line platforms such as Blackboard and WebCT often drive the educational, learning and teaching objectives.
- Do students use the new technology or just print a hard copy of the material and rely on that only?

Cheating Questions

- What do you consider 'cheating'? How are students graded? What types of assignments are used? How do you assure that students are not working together on exams/assignments that are not group work?
- How do you assure that the student who submits work is the person who really DID the work?
- Testing, and plagiarism prevention?
- Security! How do I know who is really taking the course? Or the exam? What are some cost effective ways of doing this really, really well?

Pedagogy Questions

- What kind of resources (including support) could facilitate online pedagogy?
- Which courses/ styles of courses for which of the different pedagogical devices is best suited for online? And how do we get at the cross-functional/ unsoiled type of instruction we are SUPPOSED to be moving toward?? Lecture, case, discussion, projects Gaming/ simulations, tests, papers, presentations, discussions, problems
- When people move from on-ground to on-line, how do they reconceptualize the material, projects, in-class activities, quizzes, etc? And, do they try to synch on-line

and on-ground classes for the same subject? Do people create their own simulations? To what extent do people use Internet video? Internet audio, and other online resources? To what extent do they vet, i.e., ensure pedagogical consistency, of those outside sources? And do they redo that every semester?

- Where can I find 'best practices' and who to go to for consulting?
- How do you communicate your expectations to the students?
- Have they used any 'creative techniques' in online teaching?
- How do we best simulate the dynamic interaction that adds to a person's education that we have in the classroom? Many of the students have great ideas, but at different times, so students can learn a great deal through each other, as well in those instances in which a student asks a question and it is answered for all. This gives the 'bashful' student who will not ask an opportunity to learn. Plus, the student asking the question may ask it in a way that in an of itself as a different way of looking at a situation, may add to a person's education.
- Are face-to-face meetings necessary? What value do they add? How do you use face-to-face meetings?
- Can other professors identify resources they have used and like?
- How are other universities being compensated (not necessarily in money terms) for developing teaching materials?
- Where do you obtain best business practices on-line? What specific resources?
- What are some incentive systems that promote best practices?
- Do you use any methodology that enhances the effectiveness of case discussion when teaching on-line?
- How do you monitor and maintaining quality in the classes?

General

- What can you not do now that they would like to be able to do?
- How do you deal with students who are inappropriate in their online communications with other students or with faculty?
- How do you deal with students who become very concerned that something is wrong when it's really just a small glitch?? This is something I deal with -- and I find that by

being FLEXIBLE it helps -- but the students forget that the faculty is HUMAN and that we have the opportunity to be realistic.

- What metrics are in place today and need to be in place tomorrow to effectively measure online course content delivery and learning? How do we know where we are headed with this medium and how do we plan to get there?
- What are the student perceptions of course content and delivery?
- How do you developing a sense of community for students?

*****Please note that this was sent out via Survey Monkey.*****

# APPENDIX H

# ROUND TWO RESULTS

Dear Panelist,

Below is a summary of the Round 2 results. I included the most common responses as well as a summary of the panelist quotes.

As mentioned, Question 1 of the survey had some technical issues, therefore I have omitted the results and will address the question in Round 3.

Again thank you for your participation. Round 3 will be emailed to you within a week.

Alicia Gallegos-Butters

Round 2 Results

Question 2 Results

What might break the barrier in Schools of Business where no discussions takes place?

Table 2

| Reported Item | No | Percent |
|---|---|---|
| Top Down Commitment | 12 | 35% |
| Study Research on Online Pedagogy | 5 | 15% |
| Faculty Incentives | 5 | 15% |
| Student Pull | 5 | 15% |
| Faculty Pull | 3 | 9% |
| Declining Enrollment in F2F | 2 | 6% |
| Follow the lead of Prestigious Schools | 1 | 3% |
| n=30 | | |

Question 2 Quotes

Panelist Quote: I believe that culture and top-down commitment are the two critical items here. If faculty know the dean supports pedagogical discussion -- even encourages it -- then they will be more likely to engage in it. Cultural change ʼbecause it is so radical -- takes time.

Panelist Quote: Careful analysis of on-line teaching effectiveness. Most faculty hold opinions not based on careful review of the research. Case study on success of other schools.

Panelist Quote: Student demand for on line courses. Connecting students to campus when they are away doing an internship, studying abroad or for the summer. Student pull. This is not an admin-push but a student-pull situation. They demand it and will increase in the demand.

Panelist Quote: Some formal teaming of faculty teaching online.

Panelist Quote: Deans ought to build online into their strategic plans as a percentage of revenue or credit hour goals. Then let department chairs and program chairs figure out how to meet the goals. And that should start the discussions.

Panelist Quote: Being rather cynical, I suspect the most effective means of breaking the barrier is for traditional classrooms to suffer a decline in enrollment, with recognition that online pedagogy is increasing. We also need to show that online pedagogy does not result in dilution of academic performance or understanding of a subject.

Question 3 Results


In reference to Q#3 and Q#11, from the Round One Questionnaire, relating to successful instructional strategies in online teaching and the future of technology, do you feel instructional strategies will change and/or improve as technology advances, if so, please give specifics?


Table 3

| Reported Item | No. | Percent |
|---|---|---|
| Improvement of Audio/Visual | 13 | 38% |
| User Friendly | 7 | 21% |
| PodCasting | 3 | 9% |
| Better course Mgt Software | 3 | 9% |
| More Seamless | 2 | 6% |
| Students will be more in charge of their own learning | 2 | 6% |
| Creative | 1 | 3% |
| Will not change pedagogy | 1 | 3% |
| Technology will be more reliable | 1 | 3% |
| It will enhance personal interaction | 1 | 3% |
| iPhones will be used more | 1 | 3% |
| n=30 | | |


Question 3 Quotes


Panelist Quote: Yes change and maybe improve. Technology, per se, does nothing, it is how it is used. Therefore, change in inevitable. I believe in 3-5 years the most innovative online programs will be porting work to cell phone (iphones) and any other portable media available. Printed books will all but disappear (hurray the book company gouging will also go away) to be replaced with online tutorials, readings, cases, etc. And, students will continue to become more in charge of their own learning.

Panelist Quote: Yes, although I lack the crystal ball for future forecasts. Employing hindsight, the quiz and exam feature in course management software has improved markedly in recent years. Unfortunately, some of the features that would make online education more accessible, like the replication feature, are no longer common.

Panelist Quote: I believe it is a given that instructional strategies will change because the mandate will be there. Users (students, hiring corporations) are out front of academia when it comes to using technology today. It is only natural that the expectation for technological usage and understanding will be the driving force for schools to come of age. Either that or they will need to find another revenue source as students and corporations move to offerings that suite their needs and wants.

Panelist Quote: Yes. More videos and real-time with multi-point videoconferencing with wireless connections. As online students have access to higher bandwidth and more audio and video technology, the online classes can take advantage of more synchronous interaction and/or more visual features.

Panelist Quote: Not necessarily. I observe the classic 'chicken-and-egg' phenomenon here: do changes in technology drive instructional strategy or do changes in instructional strategy guide the direction for technological advances?

Panelist Quote: Technology will become more seamless and user-friendly and break down less frequently. I am not sure that STRATEGIES will change as technology advances, however because faculty have to actually USE the technologies. One fear is that faculty will begin a 'core dump of technology into the class w/o regard to what really works.

Panelist Quote: Yes they will improve as technology advances but it will probably have less to do with the technology or the technological system as much as it does with the social system. The role of the instructor will become less of the traditional 'sage on the stage' or expert at the front of a tiered lecture hall to a conductor and facilitator of (temporary) learning communities. Online courses will continue to place even greater emphasis on peer-to-peer learning. So the place to look for online instructional improvements may be the knowledge management literature (and not in the area of bytes, bauds, transmission speeds, and many-to-many videoconferencing).

Question 4 Results

Please select two of the principles and explain how you eliminate them from your online class. For example: Timely feedback, when providing feedback to my students I always follow an xx hour rule. I find that is effective because ....

Table 4

| Reported Item | No. | Percent |
|---|---|---|
| Timely feedback | 26 | 76% |
| Not Disappearing | 14 | 41% |
| Updating Lectures | 12 | 35% |
| Student Centered | 9 | 26% |
| Checking class site | 2 | 6% |
| Easy to Grade Assignments | 2 | 6% |
| Nightly chats | 1 | 3% |
| Not Static, but Dynamic | 1 | 3% |
| n=33 | | |

Question 4 Quotes

Panelist Quote: Timely Feedback: I logon to an Instant Messenger program nearly every day during typical business hours, and engage students in chats 1-2 nights each week. I manage two Q&A discussion forums as well -- one for general course questions and one specific to the current assignment. I offer students a chance to have their work 'reviewed' w/o a grade if they turn it in early enough. This is effective b/c it keeps them on task better AND makes them feel as if there is someone there who is checking on them. Our college uses a 24 hour email rule -- faculty AND students are expected to respond to emails within 24 school-day hours. Faculty are expected to handle the majority of their own email (e.g. not have a grad asst do it). I keep the class chats and discussion forums student-centered by tossing out questions for discussion, playing devil's advocate to spark healthy debate and pretty much staying out of the fray -- letting these items go where they may and stepping in only to clarify or rein in overly enthusiastic participants.

Panelist Quote: Overusing canned lectures. I update lectures each term with new material and provide links to new resources. Teacher centered - My students are required to choose topics/units and submit a PowerPoint presentation on recent articles, which are placed in the unit so that they participate in the classroom.

Panelist Quote: Putting something online and the professor disappearing. The use of chat sessions can get around this. Not providing timely feedback. Can be a part of student

evaluations, 'Did the professor provide you with timely feedback on assignments, quizzes, discussions, and so forth?

Panelist Quote: Teacher centered rather that student centered, now the student must actively participate in discussion rooms, read different books/articles and then answer to on-line quizzes, many exercises. Putting something online and professor disappearing, in our classes we always have tutors available in case the professor is not there. Also, we make appointments.

Panelist Quote: I favor several short assignments over one long assignment; this generally allows me to return assignments within 24 hours. When I first started teaching I was told that almost everyone had an attention span of no more that 20 minutes. I do my oven 'talking head' power points and hold them to 20 minutes or less and favor stories and examples that illustrate the modules concepts.

Panelist Quote: To avoid overusing canned lectures, I rerecord introductions each semester making a segment specific to the particular class, and I refine the lecture material for a better match with assessment, improve its quality, add graphics, and make the material more compact. To avoid not providing timely feedback, I have a graduate assistant create solution templates for assignments (which are individualized -- each student has a different company), so that grading can take place more efficiently. I have also tightened up deadlines and allow an interval of time to submit corrections.

Question 5 Results

Twenty-one panelists out of 33 who responded stated that they felt there was a difference between their online personas compared to their face-to-face persona. How important is your online persona? Please explain why it is important or why it isn't important.

Table 5

| Reported Item | No | Percent |
| --- | --- | --- |
| Approachable | 10 | 29% |
| Accessible | 8 | 24% |
| Same | 7 | 21% |
| Clear and Direct | 6 | 18% |
| Harder to Read Students | 5 | 15% |
| More Stiff | 2 | 6% |
| Harder to Establish a rapport | 2 | 6% |
| One to One | 1 | 3% |
| Flexibility | 1 | 3% |
| Sensitive to Students Needs | 1 | 3% |
| n=33 | | |

Question 5 Quotes

Panelist Quote: Mine is the same to the extent that it is possible to be the same. Since my FTF persona is important, I feel the online one is, too. I think some persona (i.e. something other than a stone-faced lecture class) is critical to make students feel engaged.

Panelist Quote: In the classroom I am adept in reading the comprehension and boredom levels and can initiate activities to shift the environment on a real-time basis. Online it is much harder to assess and relies on student initiative. I am also trying to find of a means to interject my enthusiasm online.

Panelist Quote: I think any persona is important--it is a big part of the communication. For on-line, I am much more flexible with everything, and it shows in my writing (correspondence) with students. I am much more 'rigid' (less flexible) in the classroom environment, and it shows.

Panelist Quote: I think online you have to be clear and direct. Consistency is even more important. Students also appreciate a little bit of your personality so they feel connected with you as well as the course.

Panelist Quote: The only difference for me is that since 99% of my online personality is in writing, I am much less likely to use colloquial phrases, vernacular, and (I am embarrassed to say) the occasional profanity. I think people should try to be consistent.

Panelist Quote: My online persona is probably the same as my face-to-face persona. Many of my students study with me both online and on campus. They tell me that the experience is closely aligned -- and I try to make this happen. I want the students to know that I care about them, I'm there for them, I can be helpful and encouraging -- but they have to complete the work and they might have to ask for help. This is how I run all my classes -online and on campus.

Panelist Quote: As students have never met the instructor, they are unsure as to how to interpret statements, rules, tone, etc. Therefore, I try to be extremely literal in all of my correspondence and try to make sure that any comments are not ambiguous. I also find that in general, on-line students need much more positive reinforcement. They have no frame of reference and tend to catastrophist about the loss of a few points. They are unsure about their final grade outcome and have fewer opportunities for reassurance when they are not part of an on campus community.

Panelist Quote: I share more personal information in the form of an introduction and in responses to their introductions that I do in a class to compensate for the distance separating us online. I want to communicate caring and encourage students to communicate with me because I can't see them to intuit whether they understand or not.

Panelist Quote: In my case it is not important I believe, since I have the same kind of behaviors and attitudes in both situations, however, I have to recognize than in an online session I have to be more sensitive to know what my students are feeling or thinking...

Question 6 Results

How can a School of Business measure and monitor how well they are doing teaching online graduate business courses? What would be some success indicators?

Table 6

| Reported Item | No | Percent |
|---|---|---|
| Evaluations | 23 | 68% |
| Student Work | 7 | 21% |
| Comparative Analysis | 4 | 12% |
| Quality of Students | 4 | 12% |
| Learning Objectives | 3 | 9% |
| Peer Review | 3 | 9% |
| Testimonials from Students | 2 | 6% |
| Student Achievements | 2 | 6% |
| Student Relationship to School | 2 | 6% |
| Enrollment | 1 | 3% |
| Faculty Willingness to teach online | 1 | 3% |
| Faculty Willingness to teach new online courses | 1 | 3% |
| Service Standards | 1 | 3% |
| Retention Rates | 1 | 3% |
| n=33 | | |

Question 6 Quotes

Panelist Quote: Enrollment, commentary by students on evaluations, assessment of the online courses by faculty teaching online.

Panelist Quote: It really isn't very different from face-to-face classes. Assessment of learning, rather than teaching. Identifying learning objectives for the class, accurately defining these objectives and measuring the extent to which these objectives were met.    We tend to over-evaluate teachers and under-evaluate learning in any class environment.

Panelist Quote: Student evaluations for online courses as compared to classroom. Comparative surveys between the two groups several years after graduation.

Panelist Quote: 1. Survey the students 2. Review completion rates 3. Review attrition rates 4. Compare course evaluations 5. Benchmark against results from other institutions.

Panelist Quote: We measure the level of participation and several times during the course have formal and informal students satisfaction assessments. Our assessments are based on surveys and personal interviews. We also measure the number of new students referred by our online alumni and the promotions and salary increased during the next twelve months of finishing the program.

Panelist Quote: We did a detailed study that measured students' perceptions of the course on 50-60 items. We selected those that best predicted course satisfaction and created a measurement index. We also ask for written feedback. Importantly, we have someone go into the instructor's discussion room to see if they are interacting if they get low scores.

Panelist Quote: Student evaluations and course/program feedback Quality of the students' work BusinessWeek et al rankings.

Question 7 Results

As a professor, how much time is spent teaching an online class per week? Is this more or less than a face-to-face course?

Table 7

| Reported Item | No | Percent |
|---|---|---|
| More | 23 | 68% |
| 10 to 14 | 11 | 32% |
| Same | 5 | 15% |
| 15-19 Hours | 4 | 12% |
| Less than F2F | 2 | 6% |
| 1 full day | 1 | 3% |
| 20 + Hours | 1 | 3% |
| 1 to 9 hours | 1 | 3% |
| n=33 | | |

Question 7 Quotes

Panelist Quote: My on-camera time is identical to in-class time for courses of similar credit hour weight. Time required to answer emails and correspond with students outside of class is also the same (i.e., about 10-15 hours per week).

Panelist Quote: On line courses require a lot more time--I think 150% to 200% (double) the amount of time spent directly teaching a face-to-face course. For a 3-hour course, I think I spend about 12-15 hours per week directly in instruction on-line. Often more in the early times. Just ask my wrists and my eyes....

Panelist Quote: More time is spent in the online environment, however the amount decreases as the number of semesters taught in the program increases. There is a learning curve.

Panelist Quote: Providing the perception that my course is open 24/7 requires constant attention -- more so than an on-campus course. This generally arises due to the geographic and time disperse nature of the students. Students will attend the video lectures, read the assignments, and respond at a time convenient to them. With the majority of graduate students employed and facing daily job responsibilities (meetings, travel, etc.), the flexibility of the course is paramount to the student. The online nature of the course also dictates, to some degree, an in-step, current linking to the subject matter (breaking headlines, etc.).

Panelist Quote: teaching - less time once the course has been created; however, assessment and communication w/ students takes much more time

Question 8 Results

What would be an ideal class size for graduate business courses online? Why would you consider that an ideal class size for courses online?

Table 7

| Reported Item | No | Percent |
|---|---|---|
| 10-19 students | 12 | 35% |
| 20-29 students | 11 | 32% |
| 30-39 students | 3 | 9% |
| Doesn't matter | 2 | 6% |
| 50 + students | 1 | 3% |
| n=31 | | |

Question 8 Quotes

Panelist Quote: I would think that no more than 30 would work well.

Panelist Quote: 20: It provides a critical mass for student interaction and exchanging student ideas, but is not too big to reduce instructor-student personal interaction.

Panelist Quote: 15, enough for good interaction, small enough for personal attention.

Panelist Quote: A class of twenty-two would be ideal. Big enough to have diversity of experience, which makes for good threaded discussions, but small enough so everyone could be in one group. Big enough to entitle me to one grading assistant, but small enough so that that assistant could do a good job. In my courses every student writes a 750 word footnoted essay every week. Small enough so that I don't have to completely ruin my eyes staring at the screen for hours and hours to answer all the emails and respond to all the discussion threads.... At this size, all the students feel as if they are Noticed; they are WITH the professor as it gets larger, they get whinier because since there is no face-to-face, the ONLY feeling of inclusion they get is when the professor is responding to them individually....which is less when there are more students.

Panelist Quote: That doesn't bother us since for every 50 or so students we have facilitators/tutors that take care of them. Their staff is selected with specific characteristics, depending on the course. We as professors intervene only when the tutors can't help them. Presently I am teaching 2 online courses with more than 200 students each with no problem.

Question 9 Results

If your class sizes were smaller, would your pedagogical approach to teaching online still lean towards direct instruction, one on one, many to many or all of the above? Please explain why it would stay the same or change.

Table 8

| Reported Item | No | Percent |
|---|---|---|
| The same | 13 | 38% |
| One on One | 7 | 21% |
| Mix of instruction | 4 | 12% |
| Direct instruction | 2 | 6% |
| Many to many | 2 | 6% |
| Wouldn't want smaller | 2 | 6% |
| Self Directed Study | 1 | 3% |
| Combine approach | 1 | 3% |
| n=29 | | |

Question 9 Results

Panelist Quote: Mine would stay the same even if the class were larger -- I strongly believe in group work, high interaction and directed learning, so I'd just kill myself trying to work it all in to a class of 60 -- having a class of 10 would make it easier, that's for sure!

Panelist Quote: I would spend more time one to one, while retaining the student-to-student interaction. It is these personal interactions that are most essential in any class.

Panelist Quote: I think that it is always a mix because students learn in different ways. You need to offer experiences in each way so that students can all learn.

Panelist Quote: I think I could be more successful with many to many, and with negotiation simulations, if I had small online classes. but the administration prefers large ones...brings in more money for less salary....

Panelist Quote: We limit our online, interactive courses to 20 students. This is manageable I believe. At this number I can utilize one on one, discussion boards and even teamwork. I have taught online with more then 20 students and found I could not manage the course as well because there was just too much information (emails, posts, questions, etc) flowing from student to faculty.

Panelist Quote: In my case it will remain the same since at present my class size is 30 or less and because of that I actually use that mix of approaches during my online session: one to one, one to many and many to many.

# APPENDIX I

# ROUND THREE QUESTIONNAIRE

Dear Expert Panel,

The purpose of the Round Three questionnaire is to finalize the panel's ideas in regard to:

- pedagogical practices in online graduate business courses
- best practices regarding the technical aspect of online teaching
- and to discuss issues generated from the panel.

This questionnaire should take approximately 20 minutes to complete. Please note that you do not need to answer every question. You should choose to contribute to that aspect of the issue to which you feel best able. Please submit your completed questionnaire no later than March 16, 2007. I will be sending a message two days before the submit date as a friendly reminder. About two weeks after the submit date, you and the other panelists will receive summarized feedback on the responses from Round 3. Please feel free to contact me with questions at any time at alicia@sandiego.edu or aliciagb@san.rr.com.

Once again your support for this research study is highly appreciated.

Thank you,

Alicia Gallegos-Butters

Doctoral Program in Education

Educational Technology

University of San Diego

San Diego State University

1.     Breaking the Barrier

These questions pertain to breaking the barrier if your university does not discuss online pedagogy.

      a.  Panel participants were asked what might break the barrier in Schools of Business where no discussion on online pedagogy takes place, 35% of the panel participants stated a commitment from the top would make a difference.

Please explain what that commitment would look like, or if this is already occurring at your university, please explain what it looks like.

    b.  Faculty incentives were also cited as method that might break down the barrier in Schools of Business where no discussion on online pedagogy takes place. If your school is offering faculty incentive to teach online courses, what are those incentives? If your university is not currently offering invectives, what incentives do you feel would motivate your faculty to teach online courses?

2.     The Future of Online Technology

    a.  38% of the panel participants felt that in the future technology would improve by offering more advanced audio/visual solutions. If you are using audio and visual in your online courses, including live video of your classes, please explain, how and when you are using it, and why you feel it is successful pedagogy.

    b.  Explain how it could be improved, and how would you use the improvements in your online courses?

3.     Online Persona

    a.  To better inform our practice, please describe how you build rapport with your online students.

Student Work

4.     Overwhelmingly, panelist felt that evaluations were the best way to measure and monitor how well they are doing in online courses, student work was also cited as a tool to monitor a school of business success, please give some examples of the type of work you assign to your students that produced the best student work from your online graduate business students.

preparatory Training

Dear Expert Panel,

The purpose of the Round Three questionnaire is to finalize the panel's ideas in regard to:

- pedagogical practices in online graduate business courses
- best practices regarding the technical aspect of online teaching
- and to discuss issues generated from the panel.

This questionnaire should take approximately 20 minutes to complete. Please note that you do not need to answer every question. You should choose to contribute to that aspect of the issue to which you feel best able. Please submit your completed questionnaire no later than March 16, 2007. I will be sending a message two days before the submit date as a friendly reminder. About two weeks after the submit date, you and the other panelists will receive summarized feedback on the responses from Round 3. Please feel free to contact me with questions at any time at alicia@sandiego.edu or aliciagb@san.rr.com.

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Doctoral Program in Education

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1. Breaking the Barrier

These questions pertain to breaking the barrier if your university does not discuss online pedagogy.

    a. Panel participants were asked what might break the barrier in Schools of Business where no discussion on online pedagogy takes place, 35% of the panel participants stated a commitment from the top would make a difference.

# APPENDIX J

# ROUND THREE RESULTS

Dear Panelist,

Below is a summary of the Round 3 results. I included the most common responses as well as a summary of the panelist quotes.

I will make the final dissertation available for you to download mid-June.

Again thank you for your participation.

Alicia Gallegos-Butters

Round 3 Results

Question 1 Results

What might break the barrier in Schools of Business where no discussions takes place? Panel participants were asked what might break the barrier in Schools of Business where no discussion on online pedagogy takes place, 35% of the panel participants stated a commitment from the top would make a difference. Please explain what that commitment would look like, or if this is already occurring at your university, please explain what it looks like.

Table 1

| Reported Items | No. | Percent |
|---|---|---|
| Central office on campus to help with online courses | 13 | 42% |
| Dean states as a priority | 12 | 39% |
| It is promoted by the university | 7 | 23% |
| Compensation | 5 | 16% |
| Treat it as regular class, not overload | 3 | 10% |
| Pushed by alumni, business community, etc | 1 | 3% |
| Increased Enrollment | 1 | 3% |
| n=31 | | |

Question 1 Quotes

Panelist Quote: Dean is committed. Often mentions online MBA. Gives online MBA director full authority as regular MBA chair.

Panelist Quote: Generally, academia does not move in any breakthrough direction unless dragged there kicking and screaming. With universities running behind the 'new ideas in business' train it's safe to state that major business developments in the past decade happened not through academic research but in the actual business world),there would need to be consequences for the business schools choosing not to commit to an online pedagogy. Alumni Withholding gifts, potential employers looking elsewhere for candidates, parents/potential students choosing to look at other schools-each would present an incentive for the business school to review its commitment to online course offerings.

Panelist Quote: At my College of Business there are four associate deans with equal standing: Associate Dean of Graduate Studies, Associate Dean of Undergraduate Studies, Associate Dean of Distance Education, and Associate Dean of Research. Thus, distance education has a voice at the top of the administration of the college and is a peer to the Associate Dean of Graduate Studies who has the primary responsibilities for scheduling and recruiting etc. NOTE: We only offer online classes to graduate business students.

Panelist Quote: Our dean has created a new department focused on online teaching to train our faculty through seminars, workshops, and best practices meetings as well as brown bags seminar on the topic. The initiative has been launched just 6 months ago and the only result we have which we consider it positive is a workshop where 18 full time faculty participated. Also during our general faculty meetings that we hold twice a year, our dean always address the importance of improving our online teaching capabilities due to our growing trend in the volume of online teaching in different graduate programa.As a result the number of adjunt faculty recruited for online education and discussing online pedagogy is three times last year.

Panelist Quote: Deans ought to build online into their strategic plans as a percentage of revenue or credit hour goals. Then let department chairs and program chairs figure out how to meet the goals. And that should start the discussions.

Panelist Quote: A fundamental question is whether the leadership teaches online. It is difficult to understand the nuances if you have not 'walked in those moccasins'. To the extent that we do have support it is because one of our 3 Deans is in charge of the online program and teaches online. He conducts the lunch and learn we have every term and presents the awards for the online teaching program.

Question 2 Results

Faculty incentives were also cited as method that might break down the barrier in Schools of Business where no discussion on online pedagogy takes place. If your school is offering faculty incentive to teach online courses, what are those incentives? If your university is not currently offering invectives, what incentives do you feel would motivate your faculty to teach online courses?

Table 2

| Reported Items | No. | Percent |
|---|---|---|
| Money to teach, paid to Develop new course | 26 | 81% |
| Graduate Assistant | 5 | 16% |
| Training | 3 | 9% |
| No incentives | 3 | 9% |
| Release Time | 2 | 6% |
| Reduce Teaching Load | 1 | 3% |
| A laptop | 1 | 3% |
| n=32 | | |

Question 2 Quotes

Panelist Quote: My school offers the following: $5,000 for course development; $2,000 each time the course is offered; $200/student royalty. Do the math. For a first time offering course with an attendance of 60 students, that is a payout of $19,000 for what is generally a six to ten week course. Even when the course is offered a second time, attendance of 40 students produces a $10,000 payday.

Panelist Quote: We get $4500 to develop a course, but then we have to maintain it for free. We also have to let others use it, though we retain copyright of the actual lecture notes, etc....we expressly agree that others at Marist may use all the stuff we put up. Then we get $2000 for teaching the course, in addition to regular salary. If the number of students goes over 50, we get $2500 :) big deal    We get one assistant after the class goes over 22 students, and another after it goes over 44 students....and so on

Panelist Quote: When distance education began, the incentives were: a laptop and the economic incentive was that the preparation of the course, which was done a semester previous to the actual teaching of the course, was being counted as a regular course.

Panelist Quote: There are currently no special incentives (we are paid the same as if we are teaching in a classroom). Incentives might be to treat online courses and on campus courses

the same in terms of faculty load and/or recognition (monetary and/or non-monetary awards) for demonstrating innovation in pedagogy.

Panelist Quote: Make it seem to be a significant initative. Lip service, and the rest of the 'puffery' must be replace with real investment of people and dollars for structural improvements, workshops, etc. Invest summer dollars here IN ADDITION TO research. If research is worth money, what is this worth? Usually, nothing.

Question 3 Results

Thirty-eight percent of the panel participants felt that in the future technology would improve by offering more advanced audio/visual solutions. If you are using audio and visual in your online courses, including live video of your classes, please explain, how and when you are using it, and why you feel it is successful pedagogy.

Table 3

| Reported Item | No. | Percent |
|---|---|---|
| Don't Use | 8 | 27% |
| With Powerpoint | 6 | 27% |
| Intro to course and Units | 4 | 18% |
| 100% Broadcast | 2 | 9% |
| Use to alleviate isolation | 2 | 9% |
| Review sessions | 2 | 9% |
| Courses are video taped | 2 | 9% |
| Use ti asynchronously | 2 | 9% |
| Use to show videos | 2 | 9% |
| Audio Feedback for papers | 1 | 5% |
| Audio visual for students from different parts of the world | 1 | 5% |
| Guest lectures | 1 | 5% |
| n=30 | | |

Question 3 Quotes

Panelist Quote: How else do you attract and hold the attention of an MTV generation student? Each of my bi-weekly lectures is supported by a voice-over Powerpoint lecture, assigned chapter readings, Blackboard discussion board topic, and streaming video that captures the lecture principles. The variety of weekly offerings themselves keep students occupied and interested as we attack the focused lecture from a number of different points.

Panelist Quote: Video is used to introduce the course as well as to introduce each new unit of material. Audio is used to explain case examples. Video of classroom presentations is not used. The courses are text based, but audio and video help alleviate potential feelings of isolation.

Panelist Quote: Our courses are videotaped - then DVDs are expressed to the students. We don't currently use direct audio/video. We have students in many different time zones, so direct airing of the course is problematic.

Panelist Quote: Not currently using it

Question 4 Results

Explain how it could be improved, and how would you use the improvements in your online
courses?

Table 4

| Reported Items | No. | Percent |
|---|---|---|
| Ease of Use | 7 | 23% |
| All students connected at the same time | 5 | 17% |
| Access for the professors to use the on campus facilities | 4 | 13% |
| Support Students of different bandwidth | 4 | 13% |
| Real time views | 3 | 10% |
| Larger screens | 2 | 7% |
| Build audio/video into PC like the Mac | 2 | 7% |
| Mimic Classroom settings | 1 | 3% |
| Mack the technology more accessible | 1 | 3% |
| More Money | 1 | 3% |
| n=30 | | |

Question 4 Quotes

Panelist Quote: Virtual classrooms will allow everyone to attend class regardless of their
physical location on the globe. The technology is quickly improving to offer this option.
The hurdle will be to mimick the classroom on your PC where everyone can see and hear
everyone else.

Panelist Quote: Audio/visual technology requires so much bandwidth that my foreign
students who are participating from outside the USA sometimes have difficulty with the
streaming content. This is an infrastructure problem at their end, but also a technology
problem in that such huge files are required. I would use audiovisual technology more if I
knew it was equally accessible to every student.

Panelist Quote: The issue here is the environment, either synchronous or asynchronous. In
the former, I believe both audio and visual technology may be effective. In an asynchronous
environment I am not convinced that visual technology would be effective. It's too much of a
one-way communication tool.

Panelist Quote: Could be improved by having ALL the site places (campuses)that are watching our course being connected AT THE SAME TIME. What I am saying is that, when we are teaching and during the on-line session, we only have ONE campus connected in a videoconference with us. Technology could be introduced by having multi-campus videoconferences at the same time.

Panelist Quote: I would enjoy being able to interact directly with the distance students. It would be nice to be able to have audio capability of direct discussion while the class is in progress.

Question 5 Results


To better inform our practice, please describe how you build rapport with your online students.


Table 5

| Reported Items | No. | Percent |
|---|---|---|
| Go through profile to get to know, use personal touches that obtain from that | 9 | 28% |
| Staying in touch | 7 | 22% |
| Email quick responses | 7 | 22% |
| Student Homepage | 5 | 16% |
| Use of audio/video to introduce | 4 | 13% |
| Face to Face for first meeting | 2 | 6% |
| Daily course updates | 2 | 6% |
| Use own voice, not academic | 2 | 6% |
| Teams | 1 | 3% |
| Try not to get to know my students | 1 | 3% |
| Phone appointments | 1 | 3% |
| My grad students teach course | 1 | 3% |
| Threaded discussions1 | 1 | 3% |
| n=32 | | |


Question 5 Quotes


Panelist Quote: The university today is a business, regardless of what faculty and administration officials would have you believe. And you run a business for its customers; in this case students, parents, future employers. A business needs to be there for its customers when its customers call. I monitor my onine course throughout the day when I am on campus (7:45 a.m. through 3:00 p.m.) and on weekends. Within the first week of class, students know I am online and will respond immediately to e-mail and phone requests. I send daily course updates that apply to the course principles (relevant news items, etc.) and work to keep the students constantly engaged. Students learn to use the convenience factor to their advantage (i.e., responding to a discussion board posting at 2:30 a.m. when the student just came off work and wants to shift their focus). My online course success comes

from creating an environment in which students believe I am there for them any time they call.

Panelist Quote: I have an introduction threaded discussion in the first unit and provide my own introduction and comment on those areas in which I have something in common with students.   I record introductions to each unit each week that are current recordings and can respond to events in their actual class.  (Most of the other audio recordings are preserved from the original course development or periodic updates thereafter.)   I respond to student emails, and adjust deadlines etc. as needed.  (My students are working professionals and the program is committed to being convenient and flexible.)   I post relevant emails and answers in a growing FAQ system so that all students benefit from one student's questions.

Panelist Quote: 1. An informal introduction (audio file) at the beginning of the term.  2. Individual feedback on threaded discussions.  3. Sharing personal beliefs with individual students relevant to their feedback and comments.  4. I try to write feedback in my own 'voice', rather than in a stilted, academic manner.  I write in the first person and encourage the students to answer in a similar manner.

Panelist Quote: 1.  All students create a 'student homepage' with their photo and a paragraph about themselves.  2.  I create a similar page.  3.  I use email to communicate with them personally and respond to personal items whenever possible (e.g. If a student informs me of a family medical emergency, birth of a new child, a vacation they are going on, starting a new job... etc.) then I ask them about these things in a timely manner.  4.  I let the students know (via text boxes on the course homepage) exactly what I'm thinking about certain things... (e.g. holiday wishes, when to expect the current papers to be graded, applause for the good work they are all doing regarding discussion posts, etc.).

Panelist Quote: All communication channels are used - - email, phone, instant messaging, and class discussion.  This is the most important part of the course.  We have found that the most responsive instructors have the highest evaluations.

Question 6 Results

Overwhelmingly, panelist felt that evaluations were the best way to measure and monitor how well they are doing in online courses, student work was also cited as a tool to monitor a school of business success, please give some examples of the type of work you assign to your students that produced the best student work from your online graduate business students.

Table 6

| Reported Items | No. | Percent |
|---|---|---|
| Compare online to f2f | 8 | 27% |
| Objectives are measured | 7 | 23% |
| Student Work | 6 | 20% |
| Student feedback | 3 | 10% |
| Should not be different | 2 | 7% |
| Independent entity to do final evaluation | 2 | 7% |
| Pre/Post test | 2 | 7% |
| Course completion data | 2 | 7% |
| Demand for program | 1 | 3% |
| n=30 | | |

Question 6 Quotes

Panelist Quote: We set out the 5-6 things we need students to learn each term and then compare the goal with the results. We also compare online student performance with in-class MBA performance. This is done more informally.

Panelist Quote: I do not believe that any measurement of the success of on-line courses should differ from traditional classroom courses.

Panelist Quote: 1. Goal: Online students understand accounting concepts (my field) at the same level of on ground students. Measurement: 5 assessment questions are present in each of the three exams and are common across online and on ground classes. These questions are extracted from the exam for separate analysis and cover the fundamental concepts: accrual, estimation, accounting method impact, valuation, historical cost etc. 2. Goal: Students report using material from this course in their current work setting (if working). Measurement: I ask the students a 10 point essay question in the final exam to tell me one way in which they are using something they learned in their current job position, anticipate using it in a future job position, or in their personal life.

Panelist Quote: Student learning is the key goal. It's important to establish specific learning objectives of the course, tell the students how they will be measured and then develop a

system to assess student progress for each learning goal. Ideally, there should also be a feedback mechanism so that the instructor can then intervene to improve student learning. I believe these goals should be specific to the course.

Panelist Quote: Standardized tests for online and face to face sections can show up successes and failures (as long as the tests address relevant aspects of the learning).

Question 7 Results

As a professor in an online business environment, what kinds of specific skills, formal training, and experiences do you believe might help other professors who teach online business courses be more effective in their online classrooms?

Table 7

| Reported Items | No. | Percent |
|---|---|---|
| Know tech platform | 18 | 58% |
| Train with the DE specialists on your campus | 9 | 29% |
| Work with other faculty | 7 | 23% |
| Be a good reader of people | 4 | 13% |
| Be prepared to live the course | 2 | 6% |
| Develop course to meet objectives | 1 | 3% |
| Be a show person | 1 | 3% |
| n=31 | | |

Question 7 Quotes

Panelist Quote: 1. You need to know/understand your tech platform even if you are not an expert. 2. You need good time management skills. 3. You need to be somewhat more understanding of student difficulties due to their schedules. Enforce small penalties but remain sympathetic to problems. 4. Structure and preparation---you can't wing it and leave stuff for the last second.

Panelist Quote: First, become proficient and comfortable in your school's technology offerings (Blackboard, Podcasts, Windows Office Suite tools, etc.). Next, develop your course to meet its intended objectives in the online environment. You cannot simply take a campus course and through it online. Query your students for their expectations from both you and the course. Clearly state what the course will and will not deliver and the timeframe in which the course objectives will be delivered and met. Be prepared to live the course 24/7 from the first day you begin development through and including the posting of final grades. If you are not committed to doing what it takes to deliver a successful course offering, then find another porfessor who is excited, creative, energized, and challenged to do this type of work.

Panelist Quote: 1. 'Guest' status in other successful online classes. 2. Every semester the College of Business has a luncheon with a faculty development speaker that gets current and

prospective online faculty AND STUDENTS(!) together to network and share and learn. 3. One on one training with a distance education specialist can be scheduled whenever one is ready to use a new tool or make a change in one's course. 4. An online 'course' is available to all faculty with help material on using the courseware etc. so that many questions can be answered without having to get in touch with the distance education specialist.

Panelist Quote: 1. Training in the system is a necessity. We have tried using tech specialists to help faculty with on-line courses, but have found that this allows for faculty to remain distant from the course and the material. 2. Programs that describe the on-line learning process. How do students learn in an on-line environment? What seems to work, what hasn't been as effective? 3. Definitely a sharing of experiences with other faculty who are teaching on-line courses. This is perhaps the most influential-faculty (most) will listen to their colleagues more so than to 'learning experts' or tech support staff.

Panelist Quote: 1. Online communication skills are essential. Training, meetings, discussions and faculty development seminars should be conducted on the topic of successful online communication. 2. Training and support to better utilize the software (platform) you must use to teach the course. Formal training should be available and ongoing support is essential to help online faculty improve skills. 3. Faculty who teach online might benefit from participating as a student in an online course so they can experience what the student experiences.

Question 8 Results

Fifty percent of the panel requested that the topic of student work be part of the final round. Please give examples of how you address the issue of assuring that the student who submits work is the person who really DID the work?

Table 8

| Reported Items | No. | Percent |
|---|---|---|
| Develop Trust | 6 | 20% |
| Turnitin.com | 5 | 17% |
| Exams that cannot be answered unless done assignments | 3 | 10% |
| Case method | 3 | 10% |
| There is no way | 3 | 10% |
| Assign too much work for anyone else to want to do | 3 | 10% |
| Proctors | 3 | 10% |
| Personal assignments | 2 | 7% |
| No different from F2F | 2 | 7% |
| Team Work | 2 | 7% |
| Randomized timed tests | 1 | 3% |
| Citation policy | 1 | 3% |
| No testing online | 1 | 3% |
| Short Assignments | 1 | 3% |
| n=30 | | |

Question 8 Quotes

Panelist Quote: My assignments are personal since the class lends itself to it. For example--- Your entrepreneurial resume---asks students to rewrite their resumes as if they were applying for a job with a new business start-up. And the final project business plan is too idiosyncratic to be copied from somewhere else. Also it is a team project so 5 students would need to conspire. I do not test online.

Panelist Quote: This challenge is no different for an on-line course than in a traditional classroom-based course.

Panelist Quote: In my case I use the case method approach and when my students submit a work individually or in group, they will be asked questions (randomly) that requires a good understanding of the job content in order to answer it...

Panelist Quote: I trust that my students are doing their own work. But, honest, it's almost impossible to know for sure... even in the classroom as well. I become familiar with a student's writing style and when testing face-to-face it's obviously their work. But online and in written papers completed outside the classroom -- it's nearly impossible to tell. I do sometimes use turnitin.com to assess for plagiarism -- but you still cannot tell who really wrote the paper.

Question 9 Results


Forty-three percent of the panel requested that a questions asking how individual professors best simulate online the dynamic interaction that adds to a student's education that he or she has in the face-to-face classroom? To better inform our practice, please give specific detailing how you do this in your online courses.

Table 9

| Reported Item | No | Percent |
|---|---|---|
| Chat | 6 | 21% |
| Discussion Groups | 6 | 21% |
| Real Time Talk | 4 | 14% |
| Teamwork | 3 | 10% |
| Immediate Feedback | 3 | 10% |
| Case Method Approach | 1 | 3% |
| Prepared Questions | 1 | 3% |
| n=29 | | |


Question 9 Quotes


Panelist Quote: It's not yet there. Until technology allows everyone online to see and hear everyone else, we are left with audio-only interaction. The next best offering is a real-time system like Centra; then teleconferencing; then live chat rooms; then discussion boards; then e-mail.

Panelist Quote: 1. I devote time to each student and every comment that is made. For me, online teaching takes more time (but it is time well spent) than face to face instruction. 2. I require student-to-student interaction throughout the entire term. 3. I encourage students to state their opinions in their postings, in addition to what they know. Students seem to be able or are more willing to do this on-line than in a classroom.

# ABSTRACT OF THE DISSERTATION

Pedagogy in Online Graduate Business Learning Environments

by

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Many higher education institutions have decided to offer graduate business online courses and full degree online programs. Offering a quality education for graduate business students online is of concern to business school professors, administrators, and students. Instructors are concerned with the content, delivery method, and level of student achievement. Instructional design support for the online instructors is often lacking in the online curriculum and pedagogy, leaving the faculty with a great deal of freedom to create their own course content, structure, and delivery without any formal distance education training. For this reason, it is imperative for universities to establish online best practices guidelines. This study examined the pedagogical beliefs and best practices of professors who are considered experts in the field of teaching in online graduate business programs.

The panel was composed of thirty-six business professors from various AACSB accredited universities who have taught online graduate business courses. The Delphi method was employed to examine the study's research questions given that the subjects were geographically dispersed across three countries. Iterative questioning allowed professors to give meaningful input on pedagogical best practices for online teaching; the anonymity afforded by the method enabled leaders to freely express their perspectives. Data collected indicated that professors who teach online need support from a central location on their campus so that they can master the technology provided to them by the university, and more importantly, learn the pedagogical principles of teaching online. There was a clear consensus that incentives to professors and a top-down commitment would encourage faculty to discuss online pedagogy with their colleagues, but also design, develop and implement more online graduate business courses. Professors identified what they believed to be the ideal number of students for an online graduate business course, and set forth guidelines for building rapport with students and for electronic mail correspondence with students. Findings also included the most ineffective pedagogical principles that professors employ when teaching online.