OKLAHOMA EMPLOYER PERCEPTIONS OF TRADITIONAL AND NON-TRADITIONAL DELIVERY FORMATS IN EMPLOYEE SKILL DEVELOPMENT

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TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

Figure Page

CHAPTER I

INTRODUCTION

Statistics indicate that adults are increasingly attracted to educational activities. Many of the students, however, cannot attend traditional college classes and are seeking alternative study programs. According to the National Center for Education Statistics (2002) 1999 to 2000 school year study, there were "16.5 million undergraduates, 2.4 million graduates, and 300,000 first-professional students who were enrolled in courses for credit" (Sikora & Carroll, p.3). The data also reflected that nine percent of business/management students participated in distance education and 31 percent participated in an entire program taught through distance education (Sikora & Carroll, 2002).

With the economy creating a demand for skilled workers and managers, competition for employment and/or advancement is intense. Adults with on-the-job-training, but no college degree, may experienced limited opportunities when competing with newly minted college graduates. In addition, many corporations are requiring employees to have college degrees before a promotion will be granted or before receiving part of their benefits package (Cobb, 2003). Full or partial tuition reimbursement has become a valued benefit in the competitive market for employees, and serves as an incentive to encourage employees to obtain a college degree (Watral, 2003).

When the economy is strong, colleges and universities compete against employers for students. Population trends have already forced higher education entities to broaden their admissions search beyond the traditional high school student. Between 1970 and 1985, adult enrollment for ages 30-34 rose by 159 percent (National Center for Education Statistics, 1988). In 1999, the undergraduate population was 72 percent higher than in the 1970s. The women's undergraduate population rose to 56 percent, and students age 24 or older rose to 43 percent (National Center for Education Statistics, 2002). These increases have caused a growing demand for non-traditional courses and programs, which have led colleges to explore more ways to reach potential students who could not be part of a traditional 8-to-5 educational program. A logical first step was to use computers to improve upon the proverbial correspondence course. Beginning in 1992 availability of the to the general population made this a possibility.

With the advent of the world wide web, more and more students have been requesting additional classes in a non-traditional format. These new students requested expanded on-line course offerings to allow study and participation to meet the heavy time demands of working students. Students often requested the entire bachelor's and even master's programs to be offered on-line (Bottcher, 1997). The increase in the number of on-line courses and programs has led to a significant increase in the number of students taking classes and enrolling in degree and certificate-granting programs. Oklahoma colleges and universities are addressing these issues by offering courses and programs in a non-traditional delivery format (Evans, 2000).

"Business courses are in demand by adult learners wanting to improve their work skills, and that will lead to more demand for distance learning opportunities in the field"

(Okula, 1999, p. 10). Business schools are addressing this demand from adult learners by delivering courses in non-traditional educational delivery formats through night classes, fast track, video teleconferencing, cable television (TV), and on-line courses and programs.

It is important that educators not only satisfy the needs of the adult learners themselves but consider the preferences of their future employers regarding the effectiveness of that learning based on identified skills and competencies in the business and management arena. A valuable source of information pertinent to business and management employer references is the American Management Association (AMA). Their research has identified a list of managerial skills and competencies employers perceive as important and that list provides a baseline for this study. (See Chapter II, Table I, p. 12)

The Problem

The problem was that no data were available to determine employer perceptions of whether or not college students acquire managerial skills and competencies through either traditional or non-traditional educational delivery formats. Additionally, there has been no data to determine if employers would employ or promote students who had completed degrees using a non-traditional, on-line delivery method.

Purpose of the Study

The purpose of this study was two-fold: (1) to determine employer perceptions of whether or not college students acquire managerial skills and competencies as defined by

AMA through traditional or non-traditional educational delivery formats, and (2) to determine if the employer will employ or promote students who had completed degrees using non-traditional, on-line delivery format.

Objectives of the Study

The objectives of this study were, (1) to determine employer perceptions of whether or not college students acquire managerial skills and competencies as defined by AMA through the use of traditional or non-traditional educational delivery formats; (2) to determine which educational delivery method was preferred by employers; (3) to determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to hiring new employees or promoting existing employees; and (4) to determine the type of companies represented by participants in this study (aviation, oil, service, manufacturing and others).

Significance of the Study

The results of this research study were useful in three ways. First, the definition of managerial skills and competencies, as defined by AMA, will assist business educators in developing and examining course content to better prepare future business managers. Second, the results will give direction to education providers in determining which delivery format (traditional versus non-traditional) successfully imparts those required managerial skills and competencies. Finally, this research provided insights regarding

the perceptions that employers have about virtual universities and on-line course delivery methods and the quality of those graduates.

Conceptual Assumptions

For the purpose of this study, the following assumptions were identified:

1. The person to whom the survey was addressed was the same person who completed the survey;

2. The responses were honest opinions of those surveyed;

3. The business managers surveyed knew which managerial skills and competencies as defined by AMA are necessary to be a successful business manager;

4. The employers surveyed recognized the differences between what they had learned in a university versus what they actually encountered in the real business world;

5. Higher education is moving toward the virtual university model as demanded by an ever increasingly networked society.

The Definition of Terms

Adult Education: Education for the student who is over the age of 25.

Asynchronous: Communication that is not in real time. Method used to deliver digital communication one-direction at a time.

Cable TV: Courses delivered by cable medium through the television.

Cyberclass: Courses delivered by on-line format or the Internet.

Cyberlearners: People who are enrolled in cyberclasses.

Distance Learning: A learning process that uses distance, communication and some form of technology to facilitate the learning process.

Elmo: Device that captures visual images by using a video camera mounted vertically on a base. The video image is then converted to an electronic signal that can be transmitted, using a video cable, to a data projector, a video monitor, a computer, or a communications network to be received at a remote location.

Fast Track: A course of study that follows the non-traditional format and usually scheduled Friday, Saturday, and Sunday, for three consecutive weekends or one night a week, to reach the same desired contact hours as a traditional class.

Hybrid courses: Courses that incorporate different delivery methods into their curriculum. An example would be delivery methods that combined on-line and face-to-face.

Internet: The worldwide network that is a collection of smaller interconnected networks.

Net: Abbreviation for the Internet. The worldwide network that is a collection of smaller interconnected networks.

Non-traditional Class: College courses using a format other than sixteen weeks of a classroom setting.

Non-traditional Programs: College programs using a format other than sixteen weeks of classroom study to complete associates, baccalaureate, or masters degrees.

On-line Courses: Courses that are delivered via the Internet or World Wide Web.

Synchronous: Communications in real time or live. Method used to deliver digital communications, primarily used in discussion-based dialogs. The method is used in both directions at a time simultaneously.

Threaded Electronic Bulletin Board: Original article and all subsequent related replies in a newsgroup posted to an electronically messaging board.

Traditional Classroom: Instruction during one 16-week semester in a lecture format within the confines of a classroom.

Video Teleconferencing: A course delivered by two way audio and two way video delivery methods.

Virtual Universities: Colleges & universities that are delivering complete degree programs via the Internet.

Web-based: Courses that are delivered using the World Wide Web.

Weekend College: Classes taught on Saturday and Sunday.

Scope and Limitations

The population of the study consisted of 350 Oklahoma companies and municipalities. Companies and municipalities selected for the survey represented 100 or more employees.

Surveys were sent to Oklahoma business managers with the titles of Human Resource Manager, Information Technology Manager, Sales Manager, Chief Financial Officer, Vice President, Chief Executive Officer, Plant Manager, Production Manager or Operations Manager.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Background

Peter Drucker has stated

> "[that] knowledge . . . often becomes obsolete incredibly fast. The continuing professional education of adults is the No. 1 gross industry in the next 30 years, but not in the traditional form" (Daly, August, 2002, p. 139).

Wilson (1997) stated that the old paradigm of discrete educational experience is being replaced by a new paradigm of "continuous education." Higher education administrators and state legislators have promoted non-traditional learning to meet the growing demand for continuous education and increase professional productivity. Another goal of non-traditional learning has been to expand educational access to more students without huge expenditures in infrastructure, staff and faculty.

Marketing of distance-learning products have also had an impact on the growing trends toward non-traditional delivery formats. For example, promotions and marketing blitzes by hardware and software producers have increased the pressure to get on the "Net."

The National Center for Education Statistics (1999) reported that approximately 2,800 institutions were offering 8,100 different business courses through distance learning. Cotton (1997) reported that by 1997 "(w)ell over 50 percent of all higher education institutions currently engage in distance learning..." (p.1). Kascus (1997) estimated that by the year 2007 almost 50 percent of all learners enrolled in post-secondary education would take some of their courses through distance education delivery formats.

The most used distance learning delivery method is the Internet with asynchronous communication. Farleigh Dickinson University requires all students to take at least one "on-line" course annually. The University's rationale was not necessarily to save money, but to help its students to become "global scholars" (Carr, 2000).

Use of the Internet as a distance-learning tool is expected to continue to grow. In 2003 the National Center for Education Statistics has predicted that by 2012, there could be a 20 percent increase in Internet courses. According to Peter Drucker (Aug, 2002) "in five years, we will deliver most of our executive management programs 'On-line'. The Internet combines the advantages of both class and book" (Daly, p. 139).

"Considering that one of the design goals of the Internet was to facilitate worldwide collaboration" (Boettcher, 1997), the mix of educational experience and the Internet should be a natural combination. With a small amount of asynchronous interaction and collaboration, a course can be fully accessible via the Internet (Boettcher, 1997). Therefore, on-line courses have become a means of providing access to instructional programs for students who are separated by time and physical location the

faculty member. Other delivery methods provide alternatives to online delivery and offer flexibility to accommodate unique circumstances and student needs. Students generally interested in distance learning were those who had schedule conflicts or who were lifelong learners (Boettcher & Conrad, 1997).

Employer Perspectives on Delivery Methods

Although there has been considerable research related to student and educational faculty preferences regarding a variety of non-traditional delivery formats, very little has been done pertaining to employer preferences. The purpose of this study was to examine employer preferences related to a variety of delivery formats and the effect of those formats on hiring and promotion opportunities.

The American Management Association (AMA) survey of March/April 2000 (Table I), which ranked managerial skills and competencies by their importance, provided a skill baseline for examination and analysis of management effectiveness and the delivery formats used in achieving that effectiveness. Once the skills and competencies had been identified using the AMA study, the method of delivery for development of each of those skills could then be defined and analyzed by first defining commonly used terms related to non-traditional delivery methods. A subsequent review of the literature then offered background pertinent to contemporary research of student effectiveness and student and faculty perspectives related to each method.

TABLE I

AMA SURVEY MANAGERIAL SKILLS AND COMPETENCIES

	Importance to Organization	Managerial Competence	Importance Competence
CONCEPTUAL SKILLS			
Ability to use information to solve business problems	2	2	8
Identification of opportunities for innovation	9	14	5
Recognizing problem areas and implementing solutions	3	8	4
Selecting critical information from mass of data	19	24	17
Understanding of business uses of Technology	16	21	11
Understanding of organization of a business model	18	12	19
COMMUNICATION SKILLS			
Ability to transform ideas into words and action	5	5	10
Creditability among colleagues, peers, and subordinate	4	3	16
Listening and asking questions	6	13	3
Presentation skills spoken formats	21	9	25
Presentation skills and/or graphic formats	22	10	24
EFFECTIVENESS SKILLS			
Contributing to corporate mission/department objectives	7	4	14
Customer focus	1	1	12
Multitasking: working at multiple tasks in parallel	13	6	18
Negotiations skills	20	18	20
Project management	17	15	13
Reviewing operations and implementing improvements	11	17	6
Setting and maintaining performance standards			
Internal self and subordinate activities	10	7	15
External: vendors, suppliers, business partners	23	22	22
Setting priorities for attention and activity	14	20	9
Time management	12	25	2
INTERPERSONAL SKILLS			
Coaching and mentoring skills	15	26	1
Diversity skills: working with diverse people and culture	25	19	23
Networking within the organization	26	16	25
Networking outside the organization	24	23	21
Working in teams (cooperation and commitment)	8	11	7

Source: American Management Association. (2000, March/April). Managerial Skills and Competencies. Retrieved November, 2001 from http://www.amanet.org/research/pdfs/mankcomp.pdf

Table II indicates the managerial skills and competencies defined by the AMA are ranked according to their level of importance.

TABLE II

MANAGEIAL SKILLS AND COMPETENCIES
IMPORTANCE COMPETENCE

Managerial Skills and Competencies	Importance Competence Rank
Coaching and Mentoring Skills	1
Time Management	2
Listening and asking questions	3
Recognizing problem areas and implementing solutions	4
Identification of opportunities for innovation	5
Reviewing operations and implementing improvements	6
Working in teams (cooperation and commitment)	7
Ability to use information to solve business problems	8
Setting priorities for attention and activity	9
Ability to transform ideas into word and action	10
Understanding of business uses of Technology	11
Customer focus	12
Project management	13
Contributing to corporate mission/department objectives	14
Internal self and subordinate activities	15
Creditability among colleagues, peers, and subordinate	16
Selecting critical information from mass of data	17
Multitasking: working at multiple tasks in parallel	18
Understanding of organization of a business model	19
Negotiations skills	20
Networking outside the organization	21
External: vendors, suppliers, business partners	22
Diversity skills: working with diverse people and cultures	23
Presentation skills and/or graphic formats	24
Presentation skills spoken formats	25
Networking within the organization	26

Source: American Management Association. (2000, March/April). Managerial Skills and Competencies. Retrieved November, 2001 from http://www.amanet.org/research/pdfs/mankcomp.pdf

Table III indicates the managerial skills and competencies defined by the AMA are ranked according to their level of importance to the organization.

TABLE III

MANAGERIAL SKILLS AND COMPETENCIES
IMPORTANCE TO ORGANIZATIONS

Managerial Skills and Competencies	Importance to Organization Ranking
Customer focus	1
Ability to use information to solve business problems	2
Recognizing problem areas and implementing solutions	3
Creditability among colleagues, peers, and subordinate	4
Ability to transform ideas into words and action	5
Listening and asking questions	6
Contributing to corporate mission/department objectives	7
Working in teams (cooperation and commitment)	8
Identification of opportunities for innovation	9
Internal self and subordinate activities	10
Reviewing operations and implementing improvements	11
Time management	12
Multitasking: working at multiple tasks in parallel	13
Setting priorities for attention and activity	14
Coaching and mentoring skills	15
Understanding of business use of Technology	16
Project management	17
Understanding of organization of a business model	18
Selecting critical information from mass of data	19
Negotiations skills	20
Presentation skills spoken formats	21
Presentation skills and/or graphic formats	22
External: vendors, suppliers, business partners	23
Networking outside the organization	24
Diversity skills: working with diverse people and culture	25
Networking within the organization	26

Source: American Management Association. (2000, March/April). Managerial Skills and Competencies. Retrieved November, 2001 from http://www.amanet.org/research/pdfs/mankcomp.pdf

Table IV indicates the managerial skills and competencies defined by the AMA are ranked according to their importance to managers.

TABLE IV

MANAGERIAL SKILLS AND COMPETENCIES
MANAGERIAL COMPETENCE

Managerial Skills and Competencies	Importance to Managerial Ranking
Customer focus	1
Ability to use information to solve business problems	2
Creditability among colleagues, peers, and subordinate	3
Contributing to corporate mission/department objectives	4
Ability to transform ideas into words and action	5
Multitasking: working at multiple tasks in parallel	6
Internal self and subordinate activities	7
Recognizing problem areas and implementing solutions	8
Presentation skills spoken formats	9
Presentation skills and/or graphic formats	10
Working in teams (cooperation and commitment	11
Understanding of organization of a business model	12
Listening and asking questions	13
Identification of opportunities for innovation	14
Project management	15
Networking within the organization	16
Reviewing operations and implementing improvements	17
Negotiating skills	18
Diversity skills: working with diverse people and culture	19
Setting priorities for attention and activity	20
Understanding of business uses of Technology	21
External: vendors, suppliers, business partners	22
Networking outside the organization	23
Selecting critical information from mass of data	24
Time Management	25
Coaching and mentoring skills	26

Source: American Management Association. (2000, March/April). Managerial Skills and Competencies. Retrieved November, 2001 from http://www.amanet.org/research/pdfs/mankcomp.pdf

Definitions and Descriptions of Learning Methods

Non-Traditional Learning

Kim, K. (2002) defined non-traditional learners as those students who are generally age 25 or older, with a variety of background characteristics including ethnicity, socioeconomic status, and at-risk behaviors. The National Center for Education Statistics described non-traditional students as having one or more of the following characteristics: single parent with one dependent other than a spouse, full-time employee, financially independent, high school graduate, delayed enrollee in post secondary education and/or part-time student (Kojaku, Nuñez, Malizio, 1998).

The characteristics of the non-traditional learner as described in this definition clearly demand the flexibility of non-traditional learning and a variety of delivery methods. Higher education institutions administer many types of classes for the non-traditional learner. According to Neeley, Niemi, & Ehrhard, (1998), "Today's communications technologies--including the Internet, audio-graphics, videoconferencing and computer-based training--allow institutions of higher education to reach people in a variety of environments such as businesses, colleges, hospitals, and even private homes" (p. 72). Neeley, Niemi, & Ehrhard (1998) picked up on the importance of on-line course flexibility as a major selling point. They noted that increasing enrollment and education options led to added content offerings, removed time and location constraints, and improved chances for individual learning. This flexibility of these new technologies better met the needs of non-traditional learners.

Video Teleconferencing

Parker (1983) described teleconferencing as an electronic communication between two or more people at a distance. According to Penn (1998) the elements needed for most videoconferencing sessions include: a computer system with enough RAM to access communication devices quickly; videoconferencing software such as Connectix and CU-SeeMe; a microphone, and video camera or a computer camera.

Cable TV

Cable television is very similar to video teleconferencing. According to McColumn, L. (2003) the definition of cable TV is the transporting of a traditional class to the general public by cable and television. For example, cable TV is currently being used at Oklahoma State University – Oklahoma City (OSU-OKC). Oklahoma City Cox Communication is delivering these classes to a limited viewing audience one week after the traditional classes are held. The components used in cable TV are two cameras (typically one for the professor and one for the students), a computer, workstation, microphone, and an Elmo. Typically the workstation is a three by five-foot area, which houses a computer, microphone, switches and an Elmo. At OSU-OKC the cameras are mounted on the ceiling and they also have two big screen TVs on either side of the workstation. The students at OSU-OKC are provided with microphones so that the students who are using cable TV hear their questions and responses.

Fast Track

For the purpose of this study, fast track classes are defined as traditional classes taught in a more condensed delivery method other than sixteen weeks. For example, fast track classes at Oklahoma State University (OSU) consist of 48 contact hours condensed to all day Saturday and Sunday over three weekends. At OSU-OKC 48-hour fast track classes are scheduled Friday, 6:00pm to 10:00pm; Saturday, 8:00am to 5:00pm; and Sunday, 1:00pm to 5:00pm. This schedule is the same for two-weekends consecutively and on the third weekend the class only meets on Saturday, 8:00am to 5:00pm.

Other versions of fast track at OSU-OKC included a two-week class. These classes were typically held during the day from 8:00am until 5:00pm or at night from 6:00pm until 12:00pm. These classes started in 1995 and were for police officers pursuing an Associates of Police Science degree. Since then, other variations of these fast track classes have been developed.

According to Shorney (2003) of St. Gregory's University, adult education classes there meet one night a week for eight weeks. The new campus in Tulsa will hold classes one night a week for either five to eight weeks depending on the class. These classes are scheduled to start before August 2003 (Howell, April, 2003). The students will be required to meet additional hours during the week and keep notes on what was discussed during the meeting (Shorney, 2003).

On-Line Courses

Boettcher (1997) describes an on-line course as a course that can be accessed anywhere and anytime via the Internet. An on-line course makes use of Internet

technology and related applications to deliver education at flexible times and places. On-line courses do not require any attendance or participation in location-specific sites. This technology allows students the opportunity to participate in classes from their home, their office, or from the road. "With a portable computer, I was able to study wherever I might be and could stay current with my classes while traveling" (Shorney, 2003, np.).

Research of Non-traditional Delivery Methods

The literature offers numerous examples of research pertinent to non-traditional delivery methods. These include on-line and video teleconferencing as well as other methods which often are combined in a hybrid delivery approach under a distance learning umbrella. Much of the literature analyzes the effectiveness of each method, both from an improvement in the competency of the student, as well as a student and faculty perspective of the course and methodology.

Literature Related to Video Teleconferencing

The literature provided a number of examples of success in using the video teleconferencing delivery method. According to the research of Neeley, Niemi, and Ehrhard (1998) a graduate course in human resource development was among the first courses to employ video teleconferencing at Northern Illinois University in DeKalb, Illinois. The same professor has taught this course since the spring of 1995.

The course had two purposes; to "provide an overview of theory, research and practice relating to individual development, career development, and organization change" (p. 74). The other purpose was to gain knowledge and expertise with the

equipment for use by the Human Resource students as an example in their own classrooms.

In 1995 & 1996 the Human Resource students indicated that they were 90 percent satisfied with the distance education course. However, in 1997 the students indicated that they were more satisfied than in 1995 & 1996. This result was more positive because there were fewer system problems and the instructors had more experience in teaching the course.

A subsequent study by Sherry, Fulford, and Zhang (1998) explained two approaches to student-based evaluations for their potential application to distance education. This study examined student perspectives using an interactive television system delivery method. The type of delivery that was used was microwave technology. Sixty-one of the students were at the University of Hawaii at Manoa. Twenty-three other students were enrolled in the class at remote sites. The first part of the survey indicated that interactive television education has "the potential in obtaining the students perception of the interaction climate" (p. 12).

In the second part of the study student perceptions were examined for interactive issues and their importance. Additionally, the researchers examined their instructional environment to determine if it would enhance the interactional climate for students. In the second study the method used for the evaluation process was a comparison between the distance education classroom and the traditional classroom.

In the second part of this study the population consisted of two sets of graduate education majors and two sets of undergraduates in social science. The graduate students were using two-way video and audio as their delivery method, and the undergraduate

students were using the traditional method. The researchers' survey indicated that students need formative and timely feedback from their distance education courses.

In a 2002 study by Bisciglia & Monk-Turner (2002) students were either taught through a traditional class or through an off-site televised class. These off-site classes were delivered at "community colleges, business sites, hospital sites, or learning sites" from several states, including "Virginia, North Carolina, Indiana, and Washington" (p. 41). The students could see the instructor but the instructor could not see the students. However, there was a synchronous audio feed where the students could ask questions.

The data were analyzed for student perceptions towards video teleconferencing. The off-campus students indicated that their perceptions were positive towards video teleconferencing. The study also indicated that the off-site students perceptions toward video teleconferencing were more positive when those students worked full-time. The off-site students were "more likely to be willing to take another distance class compared with the on-site students" (Bisciglia & Monk-Turner, 2002, p. 45). The off-site students were even more willing to complete other distance education classes when they had already completed at least thirty credit hours. However, the off-site students were "more critical of the grading process" compared to the on-site students (p. 47).

Literature Related to On-Line Delivery

The literature provided another type of examples for success using the on-line delivery method. The two types of examples were student perspectives and student competencies. They were used to gain insight of the on-line delivery method.

Student Perspectives of On-Line. Perdue & Valentine conducted two studies of on-line delivery formats. In the first study in 1998, 495 accountants who were members of the Georgia Society of Certified Public Accountants (CPAs) were sent a 25-item questionnaire. Three hundred twenty-two accountants responded. The purpose of the questionnaire was to explore the perceptions of accountants concerning the effectiveness of distance education as a method of continuing education. The research questions in this study addressed how CPAs judged the effectiveness of distance learning continuing education, how frequently CPAs employed the technology associated with distance education, the relationship between experience with and beliefs in the effectiveness of distance education, and to what extent the level of learning received via distance education could be explained by beliefs and personal characteristics. For the purpose of this study, distance education referred to on-line delivery.

Results of the study indicated that using the Internet was perceived as the least effective media to deliver continuing education. "Twenty-six percent of the respondents reported 0 percent use of distance education; 24 percent used distance education to complete over 50 percent of continuing professional education (CPE); and 14 percent of respondents used distance education to complete over 75 percent of their CPEs" (Perdue & Valentine, 1998, p. 36). In other words, as accountants became more familiar with technology and used it more at work, they were more willing to take distance education classes for their continuing education. Consequently, the respondents' perceived effectiveness of distance education for CPAs personally was the best predictor of which CPAs actually used distance learning;

Perdue & Valentine (1998) concluded that professional accountants needed distance education to provide them with their CPE credits. However, the CPAs needed to become involved in the designing process. Because the CPE credits are mandatory, the quality of distance education needed to be flawless.

In the second study Perdue & Valentine (2000) revisited the Georgia CPAs and asked the following research question:

> "What is the relative importance of specific deterrents to participation in Web-based CPEs by certified public accountants in Georgia" (p. 8)?

The authors gathered information about deterrents to participation in Web-based CPE. The 444 participants who returned usable surveys indicated that they had completed from zero to 300 hours of CPE during the last reporting period. The total number of CPE hours completed averaged 79.2 hours; the average self-study hours were 15.5 hours; and the Web-based courses averaged 0.2 hours. Out of 444 respondents, 98 percent indicated no use of Web-based courses during the last reporting period.

In their initial findings, Perdue & Valentine (1998) were able to isolate 13 statistically significant items that were the greatest deterrence to participation in Web-based CPE. The highest-ranking items related to concerns about the specifics of electronic education and interaction. Most of these concerns were attitudinal in nature and revealed a desire for preserving the manner in which CPAs have traditionally completed their CPE requirements. The top ten deterrents to Web-based CPE learning are listed in Table V. The deterrents are ranked according to 1 (strongly disagree) to 6 (strongly agree).

are listed in Table V. The deterrents are ranked according to 1 (strongly disagree) to 6 (strongly agree).

TABLE V

TOP TEN DETERRENTS

Item	M	SD
I prefer hearing CPE lectures in person rather than reading them on *a computer screen*	4.20	1.55
It has never occurred to me to participate in Web-based CPE courses to complete my CPE requirements.	4.03	1.80
I prefer face-to-face interaction with the *instructor* rather than electronic communication used in Web-based CPE courses.	4.01	1.59
I prefer traditional classroom instruction over Web-based CPE courses.	4.00	1.53
I prefer learning CPE lectures in person rather than hearing them through a *computer speaker*	3.93	1.58
I prefer face-to-face interaction with my *peers* rather than electronic communication used in Web-based CPE courses	3.89	1.59
I prefer using printed materials over the kind of electronic materials (e.g., computer screens, e-mails) used for Web-based CPE courses	3.86	1.51
I am concerned that I don't know how to evaluate the quality of a Web-based CPE course before enrolling in it.	3.79	1.65
I am concerned that I might have too many interruptions in my office or home to participate in Web-based CPE courses	3.79	1.73
I am concerned about submitting *personal* information over the Internet in order to participate in a Web-based CPE course	3.77	1.79

Source: Perdue, K. & Valentine, T. (1998) Beliefs of certified public accountants toward distance education: A statewide Georgia survey. *The American Journal of Distance Education.* 13 (3) 10.

The authors concluded that the reason they were not participating in Web-based CPE was not principally related to difficulty in accessing necessary resources, particularly those associated with technology. As professionals, CPAs regularly used technology in

training, might serve to enhance CPA knowledge and skills and to build their confidence in interacting with Web-based CPE.

The biggest deterrents to use of Web-based courses by the CPAs appeared to be concerns about the quality of course offerings. "Professionally, CPAs are concerned about the relevancy and accuracy of Web-based course content, their inability to obtain printed materials or course recommendations from other CPAs, and the issue of how long a Web-based course would take to complete" (Perdue & Valentine, 2000, p. 19). They were also worried about security issues when submitting personal and financial data over the Internet; about lack of focus during electronic discussions; about how to evaluate the quality of a Web-based course; and about the potential lack of immediate feedback. CPAs were also concerned about how others perceived the quality of Web-based courses that they might complete, as related to other forms of CPE classes and to acceptance by accountancy regulators.

Perdue & Valentine concluded that the resistance to change is significant. "CPAs clearly prefer face-to-face interaction with instructors and their peers over the electronically mediated communication used in Web-based courses (p. 20)." However, CPAs "perceived themselves as having both the patience and the confidence to participate in Web-based CPE" (p. 22). Consequently, the authors identified two issues that should be addressed when selecting, designing and promoting Web-based courses: quality and communication.

In another study of student perspectives related to the Internet, Spallek, Berthold, Shanley, & Attstrom (2000), selected 50 dentists at a workshop conference to validate a survey design. Thirty-one completed the survey, which was published through Temple

University's Web server. The survey questions were about demographics, computer knowledge, experiences with on-line learning material, and quality assurance.

Two hundred-eighteen responses were received. Sixty-two were dental educators; 68 were general dentists; 44 were specialists; 18 were dental students; and four were dental hygienists. One hundred-ninety respondents stated that they spent four hours per week using a computer. Ten percent of their time was spent on research, patient care, recreation, and learning. "Fifty-eight had participated in on-line courses in areas other than dentistry; and 57 had participated in on-line courses in dentistry. Twenty-five had selected both categories" (p. 53).

Their responses indicated "10 percent were 'extremely satisfied'; 75 percent were 'satisfied'; 14 percent were 'unsatisfied'; and four percent were 'extremely unsatisfied' with the quality of the on-line course" (p. 53). Respondents were dissatisfied with the course because of the quality of the instructor's knowledge or the content of the course. The respondents also indicated that there were several problems -- the content was basically scrolling text with graphics, the courses provided for limited interaction, and technical system problems were experienced. The systems seemed to have slow transmission delivery or would simply not be available.

The respondents agreed that a committee to oversee on-line educational material should be utilized in the dentistry field. They thought the committee should delivery courses that are scientifically based. The respondents had been satisfied with the content of previous on-line courses. This study recommended that a committee be established to develop curricula that are scientifically based and to examine the quality of on-line dental education courses.

Student course evaluation forms are another valuable source of student perceptions of the learning delivery process. During the 1997 Syllabus Conference, faculty members were asked what kind of evaluations their distance learners had been given relative to their on-line courses? The response was that dissatisfied students generally hate it. Other students may feel that they were doing most of the work and the instructors are just grading them without any directions or feedback. Many students want the on-line courses to be like many traditional classes with just lecture. They do not want to complete any assignments or meet the deadlines set by the instructor. Some think they can just complete the course when they want to, not when the instructor wants them to. Many students think that on-line courses are an easy way to complete a grade until they actually enroll in the course.

Satisfied students prefer on-line courses. They feel that their on-line learning experience has broadened their opportunities compared to the traditional classroom. All of the issues for adult students, i.e. childcare, illness, and flexible schedule, do not prevent them from attending a class on-line. Some students hope they never have to complete another boring lecture class again.

Vrasidas & McIsaac (1999) examined a graduate course on-line for how to deliver a course using telecommunications. The class curriculum included four discussions in the traditional classroom and four on-line discussions. During the on-line discussions the students used asynchronous discussions to post responses to the moderator's question, followed by synchronous chat to deliver the topics.

During the evaluation process students were encouraged to voice their opinions. Students indicated that during their on-line discussions, they felt it was redundant of work

that they had already completed. They felt it was just busy work. Students felt that the course research was too long for them to achieve adequate discussions on-line. In other words they were always busy working on their research paper and did not have enough time to give adequate discussions to the on-line meetings. The students felt that the learning objective was just how to use the asynchronous and synchronous discussions. However, another student felt the course should have been completely on-line. This way there would have been more interaction with the other students.

In this on-line class the students recommended that their instructor give them more individual feedback on each research paper. The students felt that they had spent quality time working on the research paper and the instructor did not even give them feedback.

Experience with chat rooms was the final factor influencing participation in the on-line discussions. Students who were new to the process were uncomfortable participating in the on-line chats. They were more comfortable with the asynchronous communication because it allowed them to take time to think and reflect on their ideas. "The importance of prior experience with computers, proficiency in using the conferencing system, participating in chats, and moderating on-line discussions, were all issues that emerged from the data" (p. 31).

Vrasidas & Mclsaac (1999) concluded, "that the structure of the course, class size, feedback, and prior experience with computer-mediated communication all influenced interaction" (p. 35). This study indicated the perspectives of students of on-line courses. This course was interesting because the written quality of interaction was the facilitator.

Gale (2000), a Vanderbilt graduate student, needed an elective to finish an interdisciplinary master's degree. She went to the Internet to find a course that interested her because her own university did not offer anything. The other students in the course were from diverse locations from North Dakota, Hawaii, Norway, and other distant places. Many of the students were trying to finish graduate degree requirements. Three of the students were teachers and one was a distance education coordinator.

The class consisted of an on-line Web conferencing system. She found that with only nine students there sometimes were 50 to 100 messages in the backlog of a few days. Gayle seemed to think that she needed to log in at least once a day to keep from processing so many messages. Toward the end of the course they were divided into three groups of three, with each group producing a portion of a report. Then all nine came together to finish one report. One obstacle that they had to overcome was twelve different time zones. The final group logged in many late hours and extra time, and accomplished the objective.

Gayle (2000) said, "that you've probably heard many of these experiences before as an on-line instructor—so had I. But having 'walked a mile' in a student's shoes, I have a new awareness and empathy for students who take on the challenge of on-line learning" (p. 53).

In a study conducted by Conrad (2002), the students had a completely different approach even though this was their first-time to enroll in an on-line course. The study surveyed 45 students for their perceptions of this course. They used open-ended questions to examine their perceptions about this first on-line course. The students

responded with "fear and anxiety" (Conrad, 2002, p. 208). Other students responded with "eagerness and excitement" (p. 208).

The students of this study indicated they wanted the first email posted before the start date for the on-line course. They also wanted to have a complete syllabi, so that they could "plan life around assignment due dates and budget their time" accordingly (Conrad, 2002, p. 211). Other students in this study indicated their perspectives for on-line courses were that they must be organized. Also, included should be "clear timelines, well-written course notes, and clear and early descriptions and establishment of group work" (p. 216).

Studies of the perspectives of on-line courses utilized surveys of students and students evaluations. Overall, student perspectives, regardless of the source, were varied and often contingent upon a variety of other factors such as student background, the student's profession, organization and clarity of material, and their comfort with the technology and software.

Student Competencies With On-Line. The increasing reliance on on-line learning has led many educators to question whether students are learning and retaining information in non-traditional classes as well as those that are in traditional classes. These concerns make imperative the study of the impact of educational format on employer preferences as well as learning and retention.

This research becomes more relevant and valued as pressure grows by university administrators to control costs and to maintain the economic viability of the institution. They believe that by offering on-line courses they can generate additional revenues while holding costs steady. Instructors find themselves in the middle. They are faced with

increasing demands from administrators to teach more students, demands from traditional students for more content choices, and demands from non-traditional students to meet at non-traditional times and places. On-line courses look like an excellent way to meet these various demands, however, there are concerns that the management and competency skills necessary to survive in a fast-changing business economy may not be as effectively learned in non-contact courses (Shorney, 2003).

A study by Schulman & Sims (1999) compared results of students enrolled in traditional classes (59 students) and those enrolled in on-line classes (40 students). The authors studied students during the fall 1997 semester who were enrolled in the following business courses: Organizational Behavior, Personal Finance, Managerial Accounting, Sociological Foundations of Education and Environmental Studies.

The authors reported that, "the pretest scores for their on-line students were 40.70, and for the traditional students were 27.64" (Schulman & Sims, 1999, p. 2). The pretest scores for the on-line students were significantly higher than the traditional students. "The posttest scores for the on-line students were 77.80 and the posttest scores for the traditional students were 77.58" (p. 2). The results indicated, "on-line students scored significantly higher" than the traditional class in the pretest, but no differences in the posttest (p. 2). The results indicated that learning on-line is equal to learning in a traditional environment. They also noted that the students self-selected themselves into the two groups, on-line versus traditional, and that the on-line group scored much higher on the pretest than the traditional group. Consequently, the authors concluded that "[t]heir results may indicate that students who select on-line courses may be better prepared for the course material than the students who select traditional courses. This

preparedness may not, however, lead to greater learning because no differences occurred between the two groups of students on their posttest scores." (p. 3) They further concluded that this ability to learn the material supports the belief that the on-line method is an effective way to learn.

Navarro & Shoemaker (2000) gave "200 students enrolled in introductory macroeconomics courses the option of taking the class in cyberspace or in the traditional classroom. One hundred fifty-one students chose the traditional format; 49 chose the cyberspace version" (p. 20-21). "Traditional learners were more likely to have already taken introductory microeconomics, and the cyberlearners were found to have slightly higher grade point averages" (p. 21).

The cyberlearners were provided class lectures on compact disk-read only memory (CD--ROM) at their first class. Weekly on-line quizzes were administered by an electronic testing center and a threaded electronic bulletin board was used for class discussions. An on-line discussion room was available for synchronous discussions and students had access to the instructor with e-mail (Navarro, & Shoemaker, 2000).

According to Navarro & Shoemaker (2000) the final exam indicated that cyberlearners performed significantly better than the traditional learners. "The results were analyzed by gender, ethnicity, or class level using a two-way analysis of variance test. In addition, no statistical differences occurred between economics majors and non-economics majors or between students in the school of social science and those in other schools, such as engineering, biological sciences, and humanities" (p. 22-23). In their study 90 percent of the cyberlearners indicated that universities should offer more on-line courses. The authors strongly suggested that cyberlearners regardless of their

characteristics, learn the same or better than traditional. The cyberlearners stated that they were completely satisfied with the course.

In another study Neuhauser (2002) researched learning styles and effectiveness between the traditional and non-traditional, on-line course. During the first meeting all of the students met in a traditional environment. However, after the initial meeting the on-line students used the asynchronous delivery method for their course. Both sections of this course had the exact same assignments. The differences between the courses were the traditional students did use e-mail for submitting only some of their assignments and the non-traditional on-line students used the on-line method for all of their assignments. Based on percentages of participants the effectiveness of course activities are shown in Table VI

TABLE VI

EFFECTIVENESS OF COURSE ACTIVITIES

	Face-to-Face			On-line		
Activity	Very Effective (%)	Effective (%)	Not Effective (%)	Very Effective (%)	Effective (%)	Not Effective (%)
Chapter Pretests	56	31	13	64	32	4
Lectures	75	25	0	86	14	0
Thoughts for the day	31	50	19	50	45	5
Discussions	88	12	0	73	27	0
Assignments	50	50	0	73	27	0
Student Presentation	32	50	18	45	45	10
Chapter reviews	56	38	6	86	14	0
Chapter posttest	50	44	6	68	32	0

Source: Neuhauser, C. (2002) Learning style and effectiveness of online and face-to-face instruction. *The American Journal of Distance Education.* 16 (2), 107.

The study indicated that students who enrolled in this on-line course were typically over the age of 22. Those students who withdraw from an on-line course are usually traditional students.

Neuhauser (2002) stated that the on-line students scored slightly higher on their grades than did the traditional students. The researcher also indicated that the on-line students found this particular course to be more effective than the traditional course. However, the traditional students found this course to be more effective than other traditional courses.

Aragon, Johnson, & Shalk (2003) studied two sections of graduate courses in instructional design for human resource management. The instructor was the same for the on-line course and the traditional course. The curriculum designs for the courses were for a typical three-hour lecture and discussions in the traditional class. For the on-line course the curriculum consisted of prerecorded asynchronous audio lectures combined with slide presentations. Handouts were available for both courses. The on-line course handouts were posted to the web and the traditional course were given handouts in-class. Each class had 19 students participating in the study. On-line students were taking this course through a completely on-line program. The students were required to develop a complete training package including the content, the material needed to assist the instructor, and the student assignments. Part of the requirement of this course was to enable other instructors to use the course package with little preparation time.

The findings of this study indicated that on-line students are likely to use watching, listening, and thinking abilities more than students in a traditional environment

(Aragon et al, 2003). They also indicated that on-line courses can be just effective as a traditional course despite the differences in learning styles.

According to Cheurprakobkit, Hale, & Olson (2002), their study surveyed twenty-six technical staff personal about students in on-line courses. Based on percentages of participants Table VII represents their findings of the Technical Staff Perceptions of Web Based Courses.

TABLE VII

TECHNICAL STAFF PERCEPTIONS
OF WEB BASED COURSES

Questions Note: Numbers indicate a percentage.	Agree & Strong Agree (%)	Neutral (%)	Disagree & Strongly Disagree (%)
Students with insufficient computer knowledge should not be allowed to enroll in on-line courses	65.4	15.4	19.2
Most students enrolled in on-line courses have basic computer knowledge skills	73.1	3.8	23.0
Most students enrolled in on-line courses have advanced computer knowledge skills	15.4	19.2	65.4

Source: Cheurprakobkit, S. Hale, D. F. & Olson, J. N. (2002) Technicians' perceptions about web-based courses: The university of Texas system experience. *The American Journal of Distance Education.* 16 (4), 245-258.

Education Faculty Perspectives Regarding On-line Learning

Faculty perspectives are critical to successful implementation of any delivery method. On-line courses are especially dependent upon faculty understanding and support for each other as well as the student in a distance learning environment.

Vice presidents of most universities rarely observe faculty during their courses. However, Dr. Agnes Armao, the Vice President of Academic Affairs at Atlantic Cape Community College in New Jersey, became a student teacher in an on-line course during the spring of 2000. She was warned during the course by Denise Coulter, a junior faculty professor, not to post lectures unless she was going to test on the material because students take on-line courses for convenience and "if they suspect that something presented within that course is superfluous -- that they can pass a test without it -- they will hit the delete key" (Coulter & Armao, 2001, p.76).

The experiences of Coulter & Armao demonstrate "how academic administrators must determine how . . . seasoned instructors can best share their valuable knowledge with those who are preparing to teach an on-line course for the first time" (p. 78). The instructors found that to avoid "watered down 'show-and-tell' forums," the faculty preparing for an on-line course needs strong administrative support and professional development (p. 78). In particular, Coulter and Armao recommended that faculty should be provided with professional development opportunities that will enable them to be provided with expertise needed based on their knowledge level. The instructor would need to be trained in the computer software that is currently being used or will be used for the delivery of the course content. Small workshops and/or mentoring opportunities with other instructors and/or trainers who have taught on-line courses should be provided.

The other instructors and/or trainers should be able to give them guidance and advice about their experience with on-line course delivery. The other instructors and/or trainers should be able to supervise them with hands-on expertise in the delivery of their on-line course. They should be able to provide successful models of on-line course delivery to the instructor with visual examples of other on-line courses.

One obstacle for administrators was the preconceived notion of faculty. Faculty members viewed the push to on-line courses as a dilution of faculty power, abuse of academic freedom, manipulation of academic integrity, or theft of faculty course materials. Many faculty members also felt that administration was cost-cutting by requiring faculty members to develop courses while maintaining full or only partially reduced course loads (Syllabus, 1997).

Educators from the latter group who attended the 1997 Syllabus conference, made the following statements about on-line courses. The students will have less of a need for the traditional university. Institutions will offer alliances with other institutions and programs that will be personalized for the students regardless of the institution. The transcript would list the institution where instruction was received. Professional course portfolios would be developed to indicate skills and competencies. Professional views about virtual universities may change as more recognized institutions develop electronic degrees (Syllabus, 1997).

During the 1997 Syllabus conference, the faculty was asked a number of questions. For example, one question asked if students received the same quality of education as traditional students through the same institution and the responses were: affirmative (Syllabus, 1997).

The National Education Association (NEA) Report in June 2000 noted the concerns voiced by distance learning faculty. A significant number said that distance learning will result in more work for the same pay and that faculty will not be fairly compensated for their course outlines and teaching methods which are viewed as intellectual property. But the number one concern of traditional faculty members facing distance education courses was that the quality of education obtainable by students would decline. Eighty percent said that quality was their concern in this new teaching environment.

Other educators have embraced the new technological innovations and have given their time and effort to on-line course development. Educators interviewed by The National Education Association noted several advantages to distance learning courses. Students who would normally not be able to complete a quality education will be able to achieve their objectives regardless of their destination. Small universities will be able to offer on-line courses for students, which will enrich the school's programs that normally would not be economically feasible to the university. Students who are not assertive in a traditional class seem to participate more in on-line course. Teachers will become more facilitators than lecturers. The students will be able to choose only the best educators when normally they would not have that option (NEA, 2000).

In 2002, Cheurprakobkit, Hale, & Olson surveyed 26 technical staff personal regarding faculty perceptions of on-line courses. In their study they found that 65 percent of the faculty involved in on-line courses were there because they were interested. They also found that 64 percent of the faculty did not have advanced computer knowledge and skills, but they had at least basic computer skills.

Because the faculty had voiced concerns about using only on-line courses, an unrecognized trend had developed using hybrid courses (Young, 2002). Administrators hope this approach will alleviate the traditional classroom shortages. At Central Florida University this approach is being used and they have "encouraged departments to work it that way" (Young, 2002, p. 3). The research indicated that students who successfully complete a hybrid course are equivalent or slightly superior to traditional instruction. These hybrid courses may help the non-traditional student achieve the best of both worlds, with on-line, and traditional delivery methods. This may even help those learners who cannot excel in the traditional environment or in completely on-line course.

Hybrid Delivery of Non-Traditional Learning

Colleges and universities are not only using online courses and video teleconferencing, but also a variety of other delivery methods to instruct non-traditional students. Some are using a hybrid approach, which is a combination of several delivery methods in a single course.

Talley (1997) indicated that Pepperdine University's Graduate School of Education and Psychology began offering a doctoral program in Educational Technology in the fall of 1995. This course used a hybrid technique using face-to face, fast track, and on-line discussions. Their program combined face-to-face sessions with on-line communication suited for the returning adult students. These sessions were held three times during a trimester, primarily on weekends. In each trimester the classes were held for one week during the week. Additional required hours would be conducted by suing

on-line discussions. The class started together with only one group (a cohort) at a time and that cohort group enrolled in the same courses for two years.

The students learned from the class how to use the Internet for research and in doing so changed their approach to doing the research. Synchronous discussions were held in newsgroups. The students felt that the responses were intriguing. When the classes were held on-line, experts in the field participated. Normally this would never happen in a face-to-face class. In this class two of those experts that participated were "Dr. Ben Shneiderman, University of Maryland, and Dr. Don Norman, Apple Computer, Inc" (p. 3).

Sonner (1999) examined the impact of having taken one or more of the business core classes in a distance-learning format on success in the capstone business course. She attempted to determine whether students who had completed part of their business studies through distance learning had as firm a grasp of fundamental business concepts as did students who had taken all of their classes in a traditional classroom. Distance learning formats in this study included television classes, correspondence courses, and self-study for College Level Examination Program (CLEP) credit.

Students enrolled in the business capstone class during a five-quarter period were surveyed regarding 12 required business courses. Specifically, they were asked when they completed a course and which method of delivery/study was used. Eighty-five students were enrolled during the study period, and the same instructor taught every section. "Sixty-five percent of the students had completed at least one distance learning class; 49 percent had completed at least one television class; 12 percent had completed at least one correspondence course; and 21 percent had received CLEP credit" (Sonner,

1998, p. 244). Of the students who completed a distance learning class, 78 percent used only one learning format; 22 percent used two learning formats; and one student or two percent used three formats.

All of the students were combined in one sample because after a pretest there were no differences among the students. Each of the students were in their final course; each had the same amount of time to complete the remainder of classes; and they each had completed the same number of classes at that institution.

The sample was divided between distance education students and traditional classroom students. Sonner used "an analysis of variance to ascertain whether there was a difference in the final course grades for the students in the two groups" (p. 245). The students who had completed at least one distance learning course had a significantly higher-grade average in the capstone than those had completed only traditional classes. Those students who had a higher-grade average in the capstone class had received more required classes through distance education delivery methods.

Sonner conducted further analysis in her study regarding how the learning format in a particular distance education would lead to better preparation of the capstone class. After examining the student's grades, the students who earned CLEP credit performed better in the capstone class than those who had received only traditional classroom methods.

According to Sonner, it appears that students who complete distance-learning courses acquire business concepts. It appears that students who complete correspondence courses or take CLEP exams perform better in this distance education course because they can work independently and are able to identify necessary components of courses.

In a 2002 study students at Michigan State were enrolled either traditional or in an on-line or hybrid version of Principles of Microeconomics. The traditional classroom had two sections of 363 students. The on-line students consisted of 89 students in two sections. The study indicated that the average for on-line students was 61.19 percent. The traditional classroom student average was 65.49 percent. The hybrid student section had an average of 64.51 percent. The on-line students indicated that their performance was significantly less than the other sections even though they had less students (Brown & Liedholm, 2002).

Implication for the Future

The growth in technology promises continued growth and expansion in the type of delivery methods available for non-traditional application. The use of the Internet and Video-Teleconferencing discussed in this study are only two of many options already available and still growing. Methods range from new and innovative virtual classroom techniques to entire virtual universities. For example, according to Carnevale (2003) Brigham Young University provides a virtual chemistry lab. This relative new concept gave the students hands-on expertise with experiments without having to have dangerous, harsh, and expensive chemicals and laboratories. It also allowed the students to try as many times as necessary to grasp the concepts or study for the examinations. This also gives the student who is not a science major the opportunity to receive lab credit. Many times students, traditional or non-traditional, cannot physically complete science lab classes due to constraints beyond their control. For instance the sports player who misses class, the mother whose child is ill, or the non-traditional student whose work schedule

conflicts with all of the lab times, are all examples of students physically unable to complete changes.

At the University of North Carolina at Greensboro, they are developing not only the physics lab, but also a lab tutor professor and lab mates to provide guidance with the experiments. The computer program will give not only guidance, but also provide feedback on how the student is progressing with the experiments (Carnevale, 2003).

In March of 2000, the Division of Government and Public Affairs developed a Distance Education Policy for 21st Century Learning. In their section on accreditation, they listed the following schools "who offer as a supplement or adjunct to traditional classroom: Western Governors University, Britain's Open University, National Technological University and Canada's Athabasca as their mode of teaching" (p. 13). Many of these schools are seeking or achieved accreditation from a regional accrediting organization in order to receive validation and federal funds. The above referenced schools would be what this study defined as the "virtual university."

Western Governors University (WGU) is what this study defined as the "virtual university." "WGU grants degrees completely on 'competencies'- your ability to demonstrate skills and knowledge on a series of assessments carefully selected to measure your knowledge of a field of study" (WGU, 2003, p. 1). The students are assigned a faculty member to act as their mentor. The mentor will personalize their plan of study and advise you until you graduate. All of their courses are offered on-line and you can enroll in over 1,000 courses at your own pace from 19 universities, colleges, and other institutions (Carnevale, 2003).

Another "virtual university is Britain's Open University (BOU) which was developed in 1969. Since then BOU has educated more than 2 million people. Courses are taught using a variety of the non-traditional modes. The BOU delivers these courses by using "specially produced textbook, TV and radio programs, audio and video tapes, computer software and home experiment kits" (BOU, 2003, p. 1). The BOU currently has over 200,000 students enrolled in their courses (BOU, 2003).

National Technological University (NTU) is a "virtual university" that was developed in 1984. This university was developed by the dean of engineering at Colorado State University. In 1992 NTU assumed control by the Sylvan Online Higher Education. NTU offers a catalog of over 1400 academic courses. They offer 200 courses via on-line. NTU offers 19 programs which includes a Masters of Business Administration (MBA), Computer Science, Information Systems, and Telecommunications. Currently, NTU is offering 1,318 courses in 42 academic areas of concentration. Some of the programs included are MBA, Computer Science, Information Systems, Project Management, and Telecommunications. Fifty courses are in business related subjects. Other courses include 58 in computers and 56 in telecommunication (NTU, 2003).

Canada's Athabasca (CA) is also a "virtual university" that was started in 1970 by the council of the government of Alberta, Canada. However, this particular university in Canada was specially designed for distance learning. In 2003, they awarded 369 undergraduates and 311 graduate degrees. Currently they offer over 75 courses on-line. Theses included business courses of Accounting, Business, MBA, Ecommerce, Economics, Finance, Information Systems, Master of Information Systems, and

Computing, Management, Marketing, Organizational Behavior, Small Business, and Tax (CA, 2003).

In Oklahoma (for example) there are over 700 on-line courses are being offered through the Online College of Oklahoma (OCO, 2000). OCO was developed in the spring term of 2000. The project was to be built on "existing distance-education resources to provide Oklahomans with convenient access to high-quality education courses, programs and resources offered by state colleges and universities" (OCO, 2000).

The higher education system of Oklahoma consists of two comprehensive graduate universities and eight regional universities (OK Higher Education, 2002). At the two comprehensive graduate universities, University of Oklahoma (OU) and Oklahoma State University (OSU) have incorporated many on-line courses into their programs. OU had the option of completing three masters' degrees (Master of Civil Engineering, Environmental Science, and Library and Information Studies). At OSU the opportunity of completion was ten masters and one bachelors' degree program on-line. The masters programs are: Business Administration, Electrical Engineering, Engineering and Technology Management, Telecommunications Management, Computer Science, Control Systems Engineering, Fire and Emergency Management Administration, Environmental Science/Management, Agricultural Education, and Agriculture. They offer one bachelors program which is Electrical Engineering Technology (OCO, 2003).

OU offered during the spring of 2003, 22 courses through OCO which included ten on-line courses from their independent study program. Three addition courses were offered in aviation. The aviation courses offered were two sections of Survey of Aviation Law and one section of Flightdeck Environmental Issues. Table VIII indicates the on-

line courses and their level at OU for the Spring Term through OCO. OU did not offer in the spring of 2003 any business courses on-line (OCO, 2003).

TABLE VIII

ON-LINE COURSES OFFERED AT OU

Course	Level
Special Problems	Undergraduate
Sociology	Undergraduate
Sociology of Law	Undergraduate
Humanities	Undergraduate
Natural Sciences	Undergraduate
Humanities	Undergraduate
Social Sciences	Undergraduate
Social Sciences	Undergraduate
Natural Sciences	Undergraduate
Natural Sciences	Undergraduate
Social Sciences	Undergraduate
Inter-Area	Undergraduate
Writing Online Practicum	Graduate
Special Problems AVO	Graduate
Seismic Interpretation	Graduate
Toward a Global Ethic: A Dialogue with the Worlds Religions	Graduate
Introduction to Archaeology (Out of the Past)	Undergraduate
Western Civilization II (The Western Tradition, Part 2)	Undergraduate
Peoples of the World (Faces of Culture)	Undergraduate
Ethics in America	Undergraduate
Flightdeck Environmental Issues	Undergraduate

Source: Online College of Oklahoma. (2003). Retrieved May, 2003 from http://www.okcollegeonline.org/coursesearch.asp

During the spring term at OSU through OCO offered 21 on-line courses. Table IX indicates the on-line courses and their level at OSU for the spring term through the OCO. OSU offered four business related courses, which are: Legal Environment of Business, Internet Marketing & E-Commerce, Marketing Management, and Project Management (OCO, 2003).

TABLE IX

ON-LINE COURSES AT OSU

Course	Level
Telecommunications (TCOM)	Graduate
Regulatory Issues in TCOM	Graduate
Optimization Applications	Graduate
Managing the Engineering and Technical Function	Graduate
TCOM Analysis, Planning and Design	Graduate
Instructional Technology Application in Secondary Classroom	Graduate
Contemporary Issues in Human Environmental Sciences	Undergraduate
Legal Environment of Business	Graduate
Internet Marketing & E-commerce	Graduate
Advanced Methods of Teaching Agriculture	Graduate
Project Planning and Control	Graduate
Workshop: Strategic Grantseeking	Graduate
Human Development	Graduate
Modern Topics for Teachers	Graduate
American Government	Undergraduate
Human Learning in Educational Psychology	Undergraduate
Psychological Foundation of Childhood	Undergraduate
Developmental Issues in Instruction	Graduate
Marketing Management	Graduate
Project Management	Graduate

Source: Online College of Oklahoma. (2003). Retrieved May, 2003 from http://www.okcollegeonline.org/coursesearch.asp

The eight regional universities include in Oklahoma are: East Central University (ECU), Northeastern State University (NESU), Northwestern OSU (NWOSU), Southeastern OSU (SEOSU), Southwestern OSU (SWOSU), University of Central Oklahoma (UCO), Cameron University (CU), and Rogers State University (RSU). Table X indicates the number of on-line courses and the number of on-line business courses taught at the eight regional institutions in the fall term of 2003. NWOSU will be offering some of their on-line courses from 2001 to 2010.

TABLE X

EIGHT REGIONAL UNIVERSITIES ON-LINE COURSES

Institution	How Many On-line Courses	How Many Business On-line Courses	How Many Offered OCO
ECU	12	5	4
NEOSU	19	7	20
NWOSU	10	5	0
SEOSU	32	6	0
SWOSU	0	0	0
UCO	30	0	0
CU	29	19	29
RSU	73	28	0

Source: Online College of Oklahoma. (2003). Retrieved May, 2003 from http://www.okcollegeonline.org/coursesearch.asp

Another university that has two fiscal locations and on-line college in Oklahoma is the University of Phoenix (UP). They offer both face-to-face and on-line courses.

Their face-to-face courses spend only one-third of their time in the classroom and two-thirds on-line. This university has 126 campuses in 26 states. As of February 28, 2003, over 152,000 students were enrolled through the university which included 63,000 students enrolled in their on-line college. They offer eight colleges which includes the John Sperling School of Business and Technology (JSSBT) (UP, 2003). JSSBT offers Bachelors in Administration, Business, Management, Marketing, and Information Technology. They also offer nine MBA in Organizational Management, Accounting, Global Management Health Care Management, Human Resource Management, Marketing, and Technology Management. Their School of Advanced Studies offers a Doctor of Business Administration, a Doctor of Education in Education Leadership, a Doctor of Health Administration, and a Doctor of Management in Organization Leadership. The programs that are taught at the Oklahoma City (OKC) campus are Bachelors in Business/Accounting, Administration, Business, Management, Information Technology and Management. They also offer at OKC the Masters in Organization Management, MBA, Business, Health Care Management, and Computer Information Systems. UP offers four doctoral programs that are offered only through the on-line campus. The doctoral programs are in Business Administration, Educational Leadership, Health Administration, and Organizational Leadership (UP, 2003).

As delivery methods continue to advance, the ability to evaluate their effectiveness must involve not only the student and faculty but the overall effectiveness of the method in development of student competencies and the perspectives of employers who must tap the skills of students educated or trained using one of these methodologies.

The study of employer perspectives regarding these competencies as addressed in this study is an important part of this equation.

CHAPTER III

METHODOLOGY

Introduction

Background

With the popularity of the Internet, more and more universities are offering courses in alternative delivery formats. Thousands of courses are being offered on-line, every semester (Western Governors University (WGU), Online College of Oklahoma (OCO, Britain's Open University (BOP), Canada's Athabasca (CA), National Technological University (NTU), Oklahoma University, Oklahoma State University (OSU), East Central University, Northeastern OSU, Northwestern OSU, Southeastern OSU, Southwestern OSU, University of Central Oklahoma, Cameron University, Rogers State University, 2003). Some universities have even started to develop complete bachelors and masters in "virtual universities" (WGU, BOU, CA, NTU, 2003). Are the content of these courses recognized by the business environment? If students are receiving their education using alternative delivery methods, will they be able to be promoted or change positions based on courses using any of these methods?

The Problem

The American Management Association (AMA, 2000) survey defines managerial skills and competencies in these areas: conceptual, communications, effectiveness and interpersonal skills. The problem was that no data were available to determine employer perceptions of whether or not college students acquire those skills through either traditional or non-traditional educational delivery formats. Additionally, no data were available to determine if the employer will employ or promote students who had completed degrees using a non-traditional on-line delivery method.

Purpose of the Study

The purpose of this study was two-fold: (1) to determine employer perceptions of whether or not college students acquire managerial skills and competencies as defined by AMA through traditional or non-traditional educational delivery formats, and (2) to determine if the employer will employ or promote students who had completed degrees using non-traditional, on-line delivery format.

Objectives of the Study

The objectives of this study were, (1) to determine employer perceptions of whether or not college students acquire managerial skills and competencies as defined by AMA through the use of traditional or non-traditional educational delivery formats; (2) to determine which educational delivery method was preferred by employers; (3) to determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to

hiring new employees or promoting existing employees; and (4) to determine the type of companies represented by participants in this study (aviation, oil, service, manufacturing and others).

Survey Design

The survey addressed each of the objectives and included a section for additional comments, which have been recorded in Appendix C. The Application for Review of Human Subjects Research was submitted to the Institutional Review Board (IRB) at Oklahoma State University. The application was approved with exempt status on January 09, 2003. A copy of the IRB approval form is included in Appendix A. The approved cover letter, consent form, and the survey are included in Appendix B.

A pilot test of the survey was sent to nine business managers with the titles of Human Resource Manager, Information Technology Manager, Sales Manager, Chief Financial Officer, Vice President, Chief Executive Officer, Plant Manager, Production Manager and Operations Manager. Corrections were made to the pilot survey subsequent to the pilot study questionnaire. The pilot survey indicated that participant involvement would be no longer than 15 minutes.

Population

The population surveyed was 350 Oklahoma companies and municipalities. Companies selected for the survey represented aviation, oil, service, manufacturing, and others of 100 or more employees. The survey was sent to Oklahoma companies and municipalities to gain their perspectives and opinions regarding whether or not college

students acquire the managerial skills and competencies defined by AMA through traditional or non-traditional educational delivery formats. Of specific interest to this study were the perspectives of Oklahoma employers regarding on-line learning. Additionally, the study examined the data regarding an employer's willingness to hire or promote individuals when a majority of courses were delivered in a non-traditional, on-line delivery format.

Data Collection

The surveys along with a cover letter, consent form, and self-addressed stamped envelope were sent via conventional mail from Oklahoma City to the above listed company managers. Copies of these forms are included in Appendix B. The respondent's name was on the consent form. Once it was signed and returned, it was retained in a locked and fireproof file drawer. After one year the consent forms and surveys will be destroyed.

A follow-up letter to non-respondents was necessary. Non-respondents were contacted by a telephone call to the company spokesperson who was asked for the name of the person assigned to the designated management position. A follow-up cover letter, consent form, survey, and self-addressed envelope were mailed specifically to that identified individual. Two hundred follow-up letters were mailed from Oklahoma City on March 1, 2003. A copy of the follow-up letter is provided in Appendix D.

A subsequent phone call was made to the individual addressed in the follow-up letter. The following questions were asked:

1. Have you received the survey?

2. Have you completed the survey?

3. Have you mailed the completed survey?

Several phone calls indicated the managers' names and/or addresses were incorrect. Corrections were made and follow-up letters were again sent. Some of the phone calls revealed that some managers either did not fill out surveys or had no interest in filling out this survey. Ultimately, a total of 58 surveys were completed and returned.

Data Analysis

According to Gay & Airasian (1999), "Typical descriptive studies are concerned with the assessment of attitudes, opinions, preferences, demographics, practices, and procedures.... Descriptive data are usually collected by questionnaire, interview, telephone, or observation" (p. 275). The program Microsoft Excel ® was directed to calculate the mean, median, mode, and range for the data. The study being conducted was a base-line study so the researcher did not attempt to establish any cause and effect.

Summary

The population surveyed was 350 Oklahoma companies and municipalities. The survey was sent to Oklahoma companies and municipalities to gain their perspectives and opinions regarding whether or not college students acquire managerial skills and competencies as defined by AMA through traditional or non-traditional educational delivery formats. Of specific interest to this study were the perspectives of Oklahoma companies and municipalities regarding on-line learning. Additionally, the study examined the data regarding an employer's willingness to hire or promote individuals

when a majority of courses were delivered in a non-traditional, on-line delivery format. Statistical analysis was performed using Microsoft Excel® to determine the mean, median, mode, and range of the data.

CHAPTER IV

FINDINGS OF THE STUDY

Introduction

Since more and more courses are being developed in alternative delivery formats. The employer's survey (see Appendix B), was designed to answer the four objectives of this study. The four objectives of this study were (1) to determine employer perceptions of whether or not college students acquire managerial skills and competencies as defined by AMA through the use of traditional or non-traditional educational delivery formats; (2) to determine which educational delivery method was preferred by employers; (3) to determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to hiring new employees or promoting existing employees; and (4) to determine the type of companies represented by participants in this study (aviation, oil, service, manufacturing and others). The following pages indicated the responses of those who participated in this study.

Findings Related to Survey Questions

Question One

Question one of the employer survey, "*Based on the following definitions rate, on a scale of 1 to 6, 1 being not effective, 6 being very effective, which delivery method in your opinion, is best in preparing perspective employees for employment or promotion? If the skill is not being met by any of the delivery formats, please indicate with an X.*

Definitions of delivery formats:

- *Traditional classroom delivery format (16 weeks)*
- *On-line format (Courses using the Internet)*
- *Video teleconferencing (Courses delivered by two way audio and two way video delivery format)*
- *Cable TV (Courses delivered by cable medium through the television)*
- *Fast track (Courses one night a week or during 3 consecutive weekends).*"

Question one of the survey was used to answer objective one and two of this study. Objective one was "*to determine employer perceptions as to whether or not college students acquire managerial skills and competencies as defined by AMA through the use of tradition or non-traditional education delivery formats?*" "Objective two was *to determine which educational delivery method was preferred by employers.*" The AMA survey defined four specific areas of managerial skills and competencies as conceptual, communications, effectiveness and interpersonal.

Conceptual Skills

The first area of the managerial skills and competencies defined by the AMA was conceptual skills. There were 58 responses to these questions. Table XI is the number of respondents that indicated which delivery format for the traditional and non-traditional is

the best delivery method for each of those skills and whether or not these skills were being met. As indicated in Table XI traditional delivery method had the highest percentage in the conceptual skills of the best delivery method for those skills. Table XI also indicated that all of the conceptual skills are being met.

TABLE XI

CONCEPTUAL SKILLS

CONCEPTUAL SKILLS	Traditional Classroom (%)	On-line Format (%)	Video Tele-conferencing (%)	Cable TV (%)	Fast Track (%)	Not being met (%)
Ability to use information to solve business problems	32.55	18.28	17.88	11.34	19.73	0.25
Identification of opportunities for innovation	28.06	19.42	18.71	12.81	20.00	1.01
Recognizing problem areas and implementing solutions	30.56	17.05	18.42	12.01	21.28	0.68
Selecting critical information from mass of data	30.13	20.40	17.20	13.60	18.27	0.40
Understanding of business uses of Technology	26.41	22.04	18.94	14.12	18.48	0.00
Understanding of organization of a business model	30.57	18.41	18.29	13.12	19.25	0.36

Communications Skills

The second area of the managerial skills and competencies defined by the AMA was communications skills. There were 58 responses to these questions. Table XII is the number of respondents that indicated which delivery format for the traditional and non-

traditional is the best delivery method and whether or not these skills were being met. As indicated in Table XII traditional delivery method was the highest in the communications skills of the best delivery method for these skills. Table XII also indicated that all of the communication skills are being met.

TABLE XII

COMMUNICATION SKILLS

COMMUNICATIONS SKILLS	Traditional Classroom (%)	On-line Format (%)	Video Tele-conferencing (%)	Cable TV (%)	Fast Track (%)	Not being met (%)
Ability to transform ideas into words and action	33.21	15.91	18.56	10.60	21.59	0.13
Creditability among colleagues, peers, and subordinates	37.05	13.84	16.82	9.52	22.02	0.09
Listening and asking questions	36.01	12.77	17.66	9.10	24.05	0.41
Presentation skills: spoken formats	37.60	10.88	17.36	8.40	25.76	0.00
Presentation skills: and/or graphic formats	32.82	17.25	17.25	9.52	23.17	0.00

Effectiveness Skills

The third area of the managerial skills and competencies defined by the AMA was effectiveness skills. There were 58 responses to these questions. Table XIII is the number of respondents that indicated which delivery format for the traditional and non-traditional is the best delivery method and whether or not these skills were being met. As

indicated in Table XIII traditional delivery method was the highest in the effectiveness skills of the best delivery method for these skills. Table XIII also indicated that all of the effectiveness skills are being met.

TABLE XIII

EFFECTIVENESS SKILLS

EFFECTIVENESS SKILLS	Traditional Classroom (%)	On-line Format (%)	Video Tele-conferencing (%)	Cable TV (%)	Fast Track (%)	Not being met (%)
Contributing to corporate mission/department objectives	30.68	17.70	16.67	10.77	22.86	1.33
Customer focus	30.33	16.57	17.31	11.69	23.08	1.04
Multitasking: working at multiple tasks in parallel	26.40	20.93	17.33	11.60	23.20	0.53
Negotiation skills	34.50	13.74	17.41	9.58	23.48	1.28
Project management	32.50	16.91	16.76	10.59	22.21	1.03
Reviewing operations and implementing improvements	29.66	19.24	16.89	11.60	21.59	1.33
Internal: self and subordinate activities	30.11	18.04	16.91	10.31	23.83	0.81
External: vendors, suppliers, business partners	29.06	17.95	17.78	11.62	22.05	1.54
Setting priorities for attention and activity	29.60	18.01	17.13	12.59	22.42	0.25
Time management	26.82	19.92	18.52	13.03	21.20	0.51

Interpersonal Skills

The third area of the managerial skills and competencies defined by the AMA was interpersonal skills. There were 58 responses to these questions. Table XIV is the number of respondents that indicated which delivery format for the traditional and non-traditional is the best delivery method and whether or not these skills were being met. As indicated in Table XIV traditional delivery method was the highest in the interpersonal skills of the best delivery method for these skills. Table XIV also indicated that all of the interpersonal skills are being met.

TABLE XIV

INTERPERSONAL SKILLS

INTERPERSONAL SKILLS	Traditional Classroom (%)	On-line Format (%)	Video Tele-conferencing (%)	Cable TV (%)	Fast Track (%)	Not being met (%)
Coaching and mentoring skills	34.55	14.78	18.11	9.80	20.76	1.99
Diversity skills: working with diverse people and culture	34.12	13.95	17.66	10.09	23.29	0.89
Networking within the organization	31.15	16.45	17.41	10.22	23.32	1.44
Networking outside the organization	28.71	18.20	17.20	9.855	24.54	1.50
Working in teams (cooperation and commitment)	36.23	12.95	15.43	8.68	26.45	0.28

Question Two

Question two of the survey was how many on-line courses are acceptable in an employment applicant's transcript? Question two was used to answer objective three *which was to determine employer perceptions of on-line course delivery*. There were 57 responses to this question. Based on the mean of the responding population (Xi), ten people or 18 percent responded by checking none; 15 checked 1 to 2 or 25 percent; eight checked 3 to 4 or 14 percent; nine checked 5 to 6 or 16 percent; one checked 7 to 8 or 2 percent; and 14 checked over nine or 25 percent. A notable occurrence was that the respondents indicated that over nine was just as acceptable as 1 to 2. Responses to *Question Two, How Many On-line Courses Acceptable* are illustrated in Figure 1.

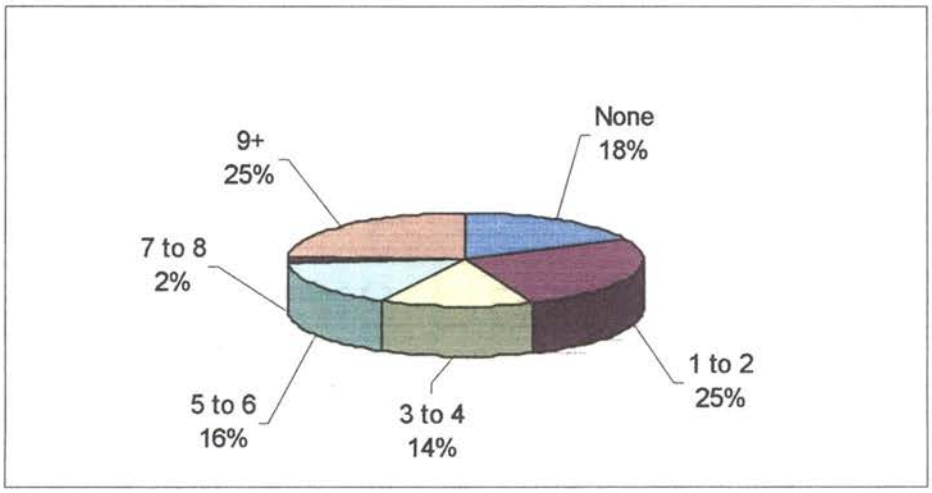

Figure 1 – How Many On-line Courses Acceptable

Question Three

Question three of the survey was *do you want universities to offer more classes in an on-line delivery format?* This question was used to determine whether or not business educators should offer more classes in an on-line delivery method. There were 54 responses to this question. Based on the mean of the responding population (Xi), eight people or 14.81 percent responded by checking strongly agree; 21 checked agree or 38.89 percent; 22 checked disagree or 40.74 percent; and three checked strongly disagree or 5.56 percent. The respondents indicated that a slightly higher number disagree with universities offering more classes on-line. Responses to *Question Three, More On-line Courses Offered,* are illustrated in Figure 2.

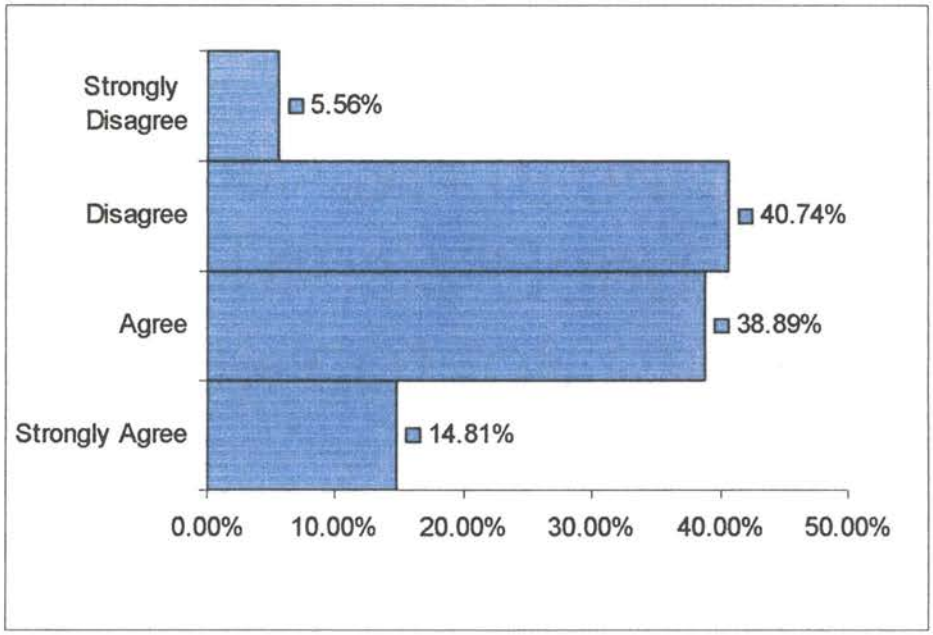

Figure 2 - More On-line Courses Offered

Question Four

Question four of the survey was would perspective employees who have completed a Bachelor's degree from a "Virtual University are just as qualified as those completing a Bachelor's degree from a traditional university." This question answers the first part of objective three, which was "*to determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to hiring new employees or promoting existing employee.*" There were 55 responses to this question. Based on the mean of the responding population (Xi), two people or 3.64 percent responded by checking strongly agree; eight checked agree or 14.55 percent; 35 checked disagree or 63.64 percent; and ten checked strongly disagree or 18.18 percent. The respondents strongly disagree with the statement that "*perspective employees who have completed a Bachelor's degree from a "Virtual University are just as qualified as those completing a Bachelor's degree from a traditional university.*" Responses to *Question Four, Bachelors Degree from "Virtual University"* are illustrated in Figure 3.

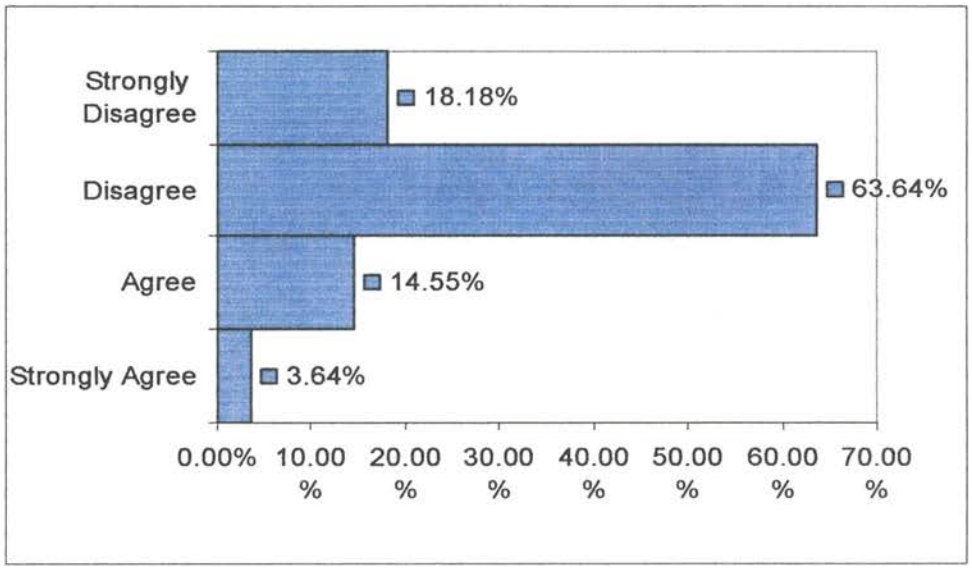

Figure 3 – Bachelors Degree from "Virtual University"

Question Five

Question five of the survey was *employees who have completed a Bachelor's degree from a "Virtual University are just as promotable as those completing a Bachelor's degree from a traditional university."* This question answers the objective three which was "*to determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to hiring new employees or promoting existing employee."* There were 54 responses to this question. Based on the mean of the responding population (Xi), five people or 9.26 percent responded by checking strongly agree, seventeen checked agree or 31.48 percent, twenty-five checked disagree or 46.30 percent, and seven checked strongly disagree or 12.96 percent. The respondents indicated that they disagree that employees

who have completed a Bachelor's degree from a "Virtual University are just as promotable as those completing a Bachelor's degree from a traditional university. Responses to *Question Five, Bachelor's Degrees from Virtual University Promotable* are illustrated *in* Figure 4.

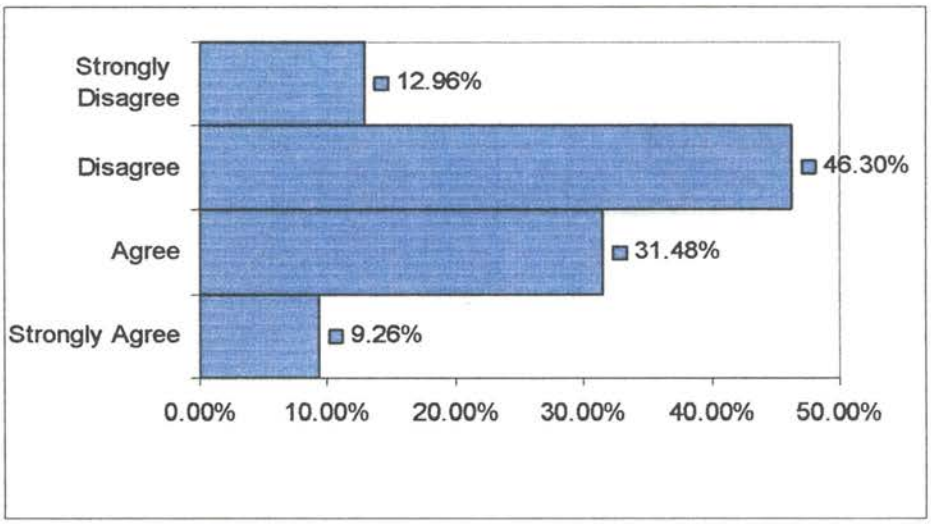

Figure 4 – Bachelor's Degree from "Virtual University" Promotable

Question Six

Question Six of the survey was, *"Would you promote an employee who has just completed a Master's degree from a "Virtual University?"* This question on the survey answers objective three which was "*to determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher*

educational institutions in relationship to hiring new employees or promoting existing employee." There were 55 responses to this question. Based on the mean of the responding population (Xi), four people or 7.27 percent responded by checking strongly agree; sixteen checked agree or 29.09 percent; twenty-seven checked disagree or 49.09 percent; and eight checked strongly disagree or 14.55 percent. The respondents indicated that they disagree with promoting an employee who had just completed a Master's degree fro a "Virtual University." Responses to *Question Six, Master's Degrees from "Virtual University" Promotable* are illustrated in Figure 5.

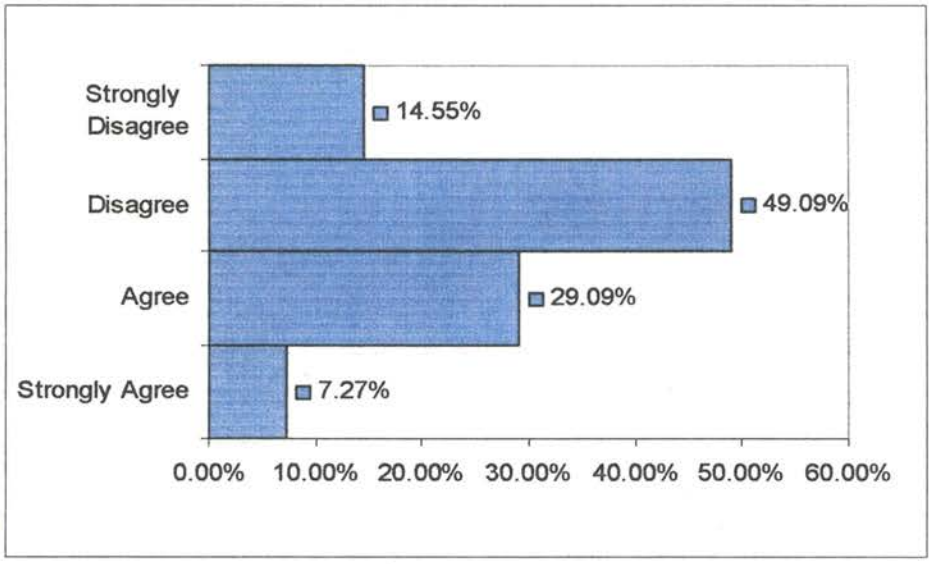

Figure 5 - Master's Degree from "Virtual University" Promotable

Question Seven

Question seven of the survey was *"Which of the following delivery formats would you recommend employees to participate in order to continue their education?* There were 119 responses to this question, since the respondents could answer more than one delivery method. Based on the mean of the responding population (Xi), twenty-two people or 18.49 percent responded by checking on-line; 17 checked video teleconferencing or 14.29 percent; four checked cable TV or 3.29 percent; 45 checked traditional classroom or 37.82 percent 30 checked fast track or 25.21 percent; and one checked none or 0.84 percent. The respondents indicated that traditional method was still the best method for employee to continue their education, followed by the fast track method. Responses to *Question Seven, Employees Delivery Formats* are illustrated in Figure 6.

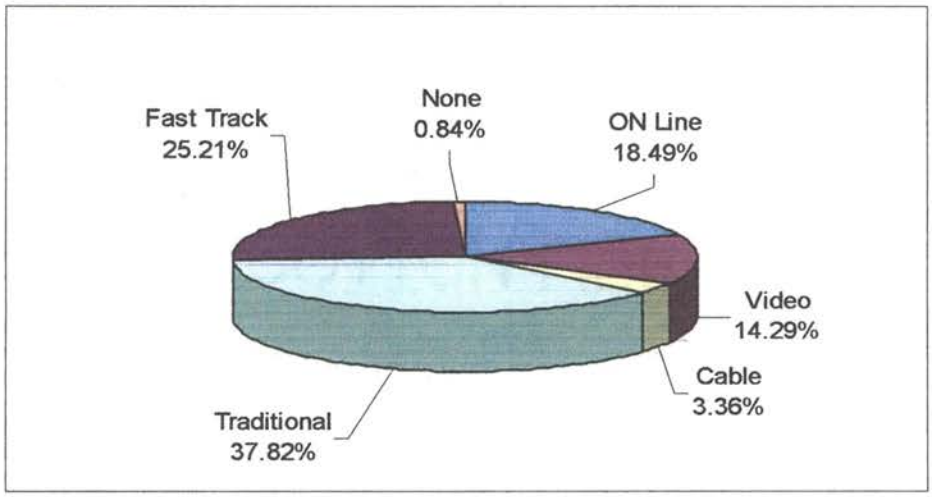

Figure 6 - Employees Delivery Formats.

Question Eight

Question eight of the survey was *"Would you suggest that your employees continue their education in an on-line delivery format?* This question on the survey answers objective three which was "*to determine employer perception of on course delivery methods compared to the traditional higher education institutions in relationship to hiring new employees or promoting existing employee*." There were 53 responses to this question. Based on the mean of the responding population (Xi), four people or 7.55 percent responded by checking strongly agree; 25 checked agree or 47.17 percent; 29 checked disagree or 54.72 percent; and four checked strongly disagree or 7.55 percent. Respondents indicated that a slightly higher percentage rate that employees should not continue their education using the on-line delivery method. Responses to *Question Eight, Employees Continuing Education Using "On-line" Delivery Format* are illustrated in Figure 7.

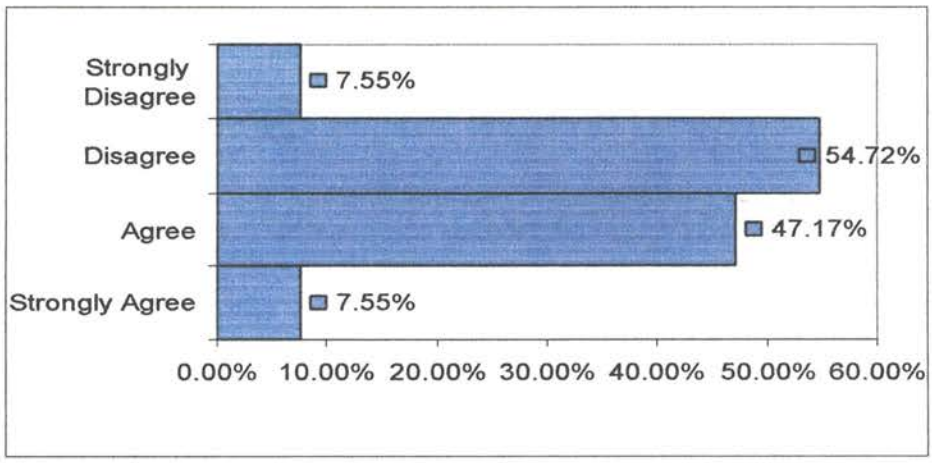

Figure 7 - Employees' Continuing Education Using "On-line" Delivery Format.

Question Nine

Question Nine of the survey was *"Which of the following delivery formats have you personally participated in?"* There were 158 responses to this question, since the respondents could choose more than one delivery method. Based on the mean of the responding population (Xi), 29 people or 18.35 percent responded by checking on-line, 31 checked video teleconferencing or 19.62 percent, ten checked cable TV or 6.33 percent, 44 checked traditional classroom or 34.18 percent, 32 checked fast track or 20.25 percent, and two checked none or 1.27 percent. Respondents indicated that the majority of their courses were delivered traditionally. Responses to *Question Nine*, *How Many Delivery Formats Respondents Participated* are illustrated in Figure 8.

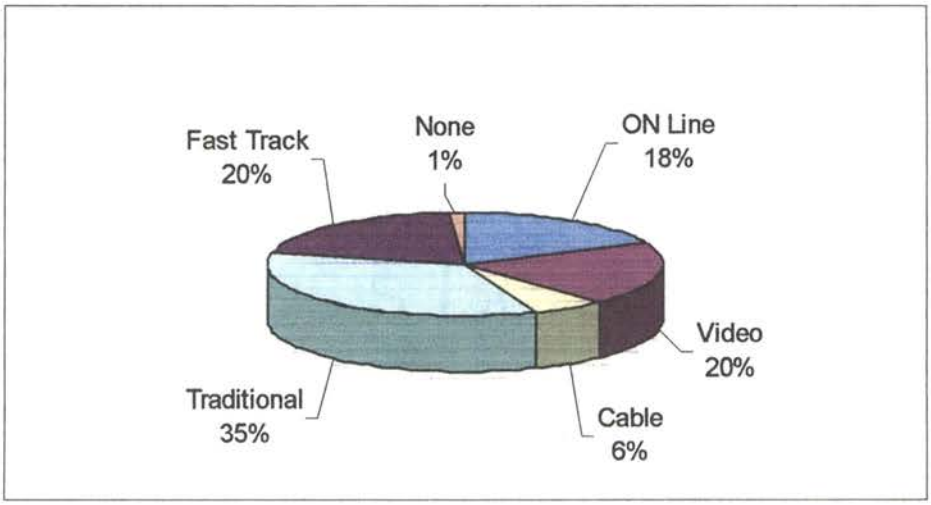

Figure 8 - How Many Delivery Formats
Respondents Participated

Question Ten

Question ten of this survey was *"How many on-line courses have you participated in?* This question on the survey was used for more of a demographical question. There were 55 responses to this question. Based on the mean of the responding population (Xi), 24 people or 43.64 percent responded by checking none; 14 checked 1 to 2 or 25.45 percent; 11 checked 3 to 4 or 20 percent; one checked 5 to 6 or 1.82 percent; zero checked 7 to 8 or 0.00 percent; and five checked over nine or 9.09 percent. The respondents indicated that the majority had not participated in any on-line courses. Responses to *Question Ten, On-line Courses Participated* are illustrated in Figure 9.

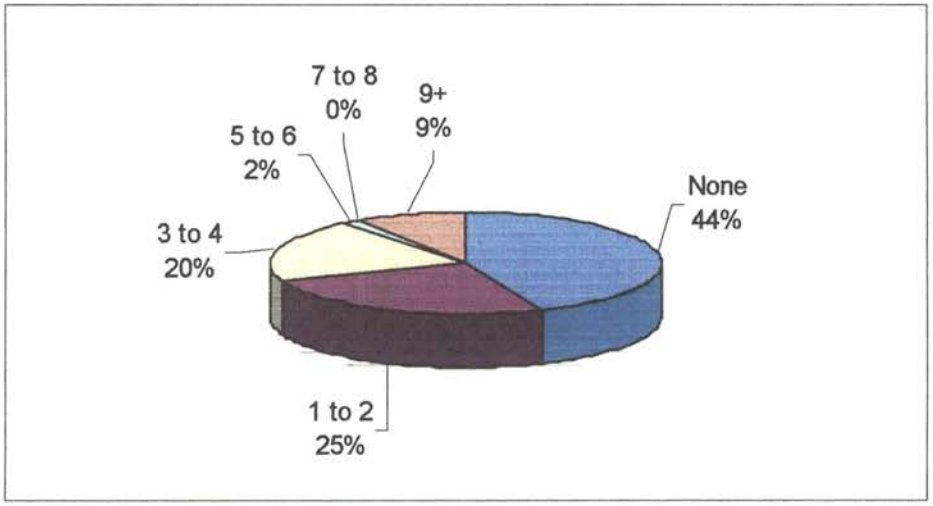

Figure 9 – On-line Courses Participated

Question Eleven

Question eleven on the survey was *"Which represents your level of education?"* This question on the survey was used for more of a demographic question. There were 53 responses to this question. Based on the mean of the responding population (Xi), zero people or 0.00 percent responded by checking high school; six checked some college or 11.32 percent; 19 checked bachelors or 35.85 percent; six checked some graduate or 11.32 percent; 19 checked masters or 35.85 percent; and three checked doctorate or 5.66 percent. A notable occurrence was indicated that 72 percent of the respondents had a bachelors or masters degree. Responses to *Question Eleven, Level of Education* are illustrated in Figure 10.

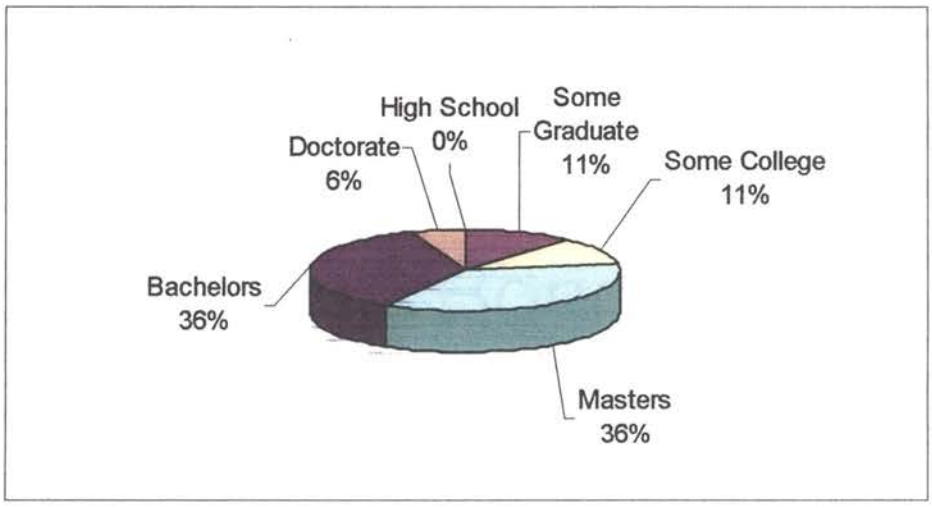

Figure 10 - Level of Education

Question Twelve

Question twelve on the survey was to "Indicate the size of your organization." This question on the survey was used to indicate that the companies participating had at least 100 employees. There were 55 responses to this question. Based on the mean of the responding population (Xi), ten people or 18.18 percent responded by checking 101 – 249 employees; eight checked 250 - 499 employees or 14.55 percent; and 37 checked >500 or 67.27 percent. Responses to *Question Thirteen, Size of the Organizations* are illustrated in Figure 11.

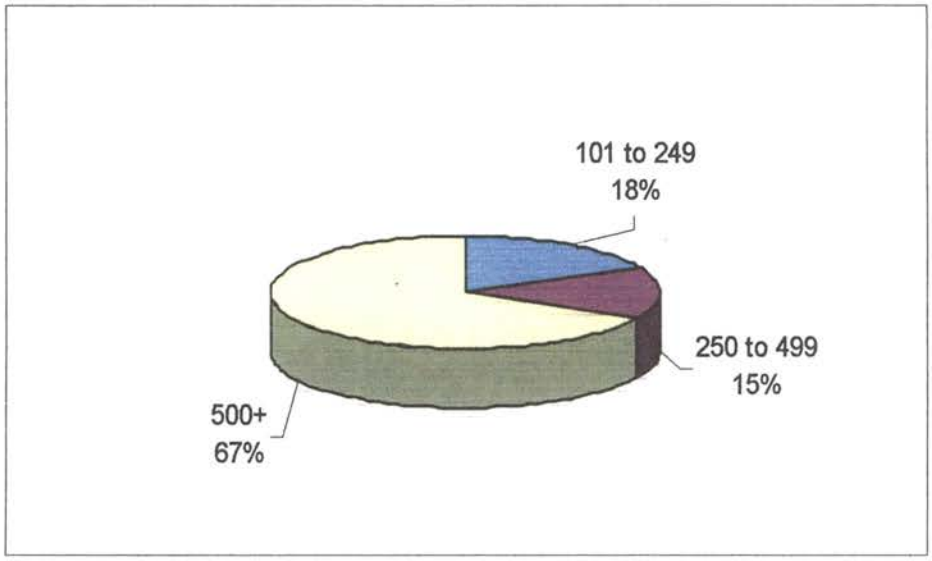

Figure 11 - Size of the Organizations

Question Thirteen

Question thirteen of the survey was *"Which of the following industries does your organization participate in?"* This question on the survey was used to answer objective four which was "*to determine the type of companies represented by participants in this stydy (aviation, oil, service, manufacturing and others).*" There were 55 responses to this question. Based on the mean of the responding population (Xi), ten people or 7.27 percent responded by checking aviation; six checked or 10.91 percent service; 19 or 34.55 percent checked manufacturing; five or 9.09 percent checked oil industry; and 21 or 38.18 percent checked other organizations. Responses to *Question Thirteen, Industries that Participated* are illustrated in Figure 12.

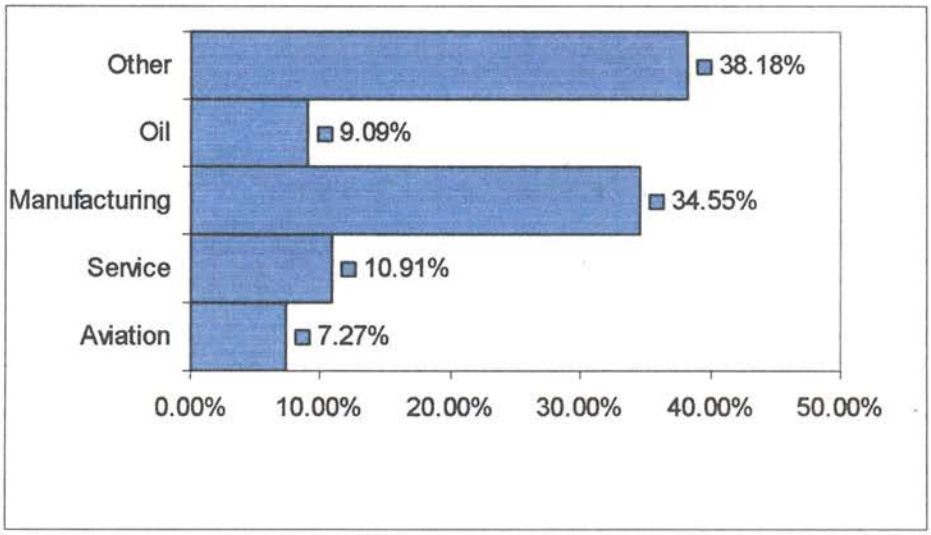

Figure 12 - Industries that Participated.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The American Management Association (AMA) survey defined managerial skills and competencies with four specific areas as conceptual, communications, effectiveness and interpersonal. Oklahoma employers were surveyed to gain their perspectives and opinions regarding whether or not college students acquire managerial skills and competencies through traditional or non-traditional educational delivery forms. Of specific interest to this study were the perspectives of Oklahoma companies regarding the on-line learning.

This research study was designed to address the following objectives:

1. To determine employer perceptions as to whether or not college students acquire managerial skills and competencies as defined by AMA through the use of traditional or non-traditional educational delivery formats.
2. To determine which educational delivery method was preferred by employers
3. To determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to hiring new employees or promoting existing employees.

4. To determine the type of companies represented by participants in this study (aviation, oil, service, manufacturing and others).

This study was accomplished by sending a survey to 350 Oklahoma companies and municipalities. The results of the survey findings were used to formulate the following conclusions.

Conclusions

The review of the literature indicated that more and more traditional and "virtual universities" are developing on-line courses. Also, the review of the literature indicated that students seem to learn the managerial skills and competencies through on-line delivery formats. However, Oklahoma employers indicated that taking on-line courses are alright, but they do not want you to acquire a bachelors or masters from a "virtual universities. A notable occurrence is that the review of literature indicated that there are substantial numbers of students enrolled in "virtual universities." However, this study indicated that 44 percent of the respondents had not participated in an on-line delivery format.

Objectives

Objective one was "*To determine employer perceptions as to whether or not college students acquire managerial skills and competencies as defined by AMA through the use of traditional or non-traditional educational delivery formats?*"

Response to this objective was resoundingly positive for academia, in that 99.25 percent of all respondents indicated that the AMA skill sets were being met by both the

traditional and non-traditional formats. Less than one percent of the respondents felt that the AMA skill sets were not being met at all. The overwhelming positive response skewed the data to the point that no other analysis of this question was required at this time. This objective was determined by formulating the answers of the respondents to question one of the employers survey. The results of *Objective One – AMA Managerial Skills and Competencies Being Met* are illustrated in Figure 13.

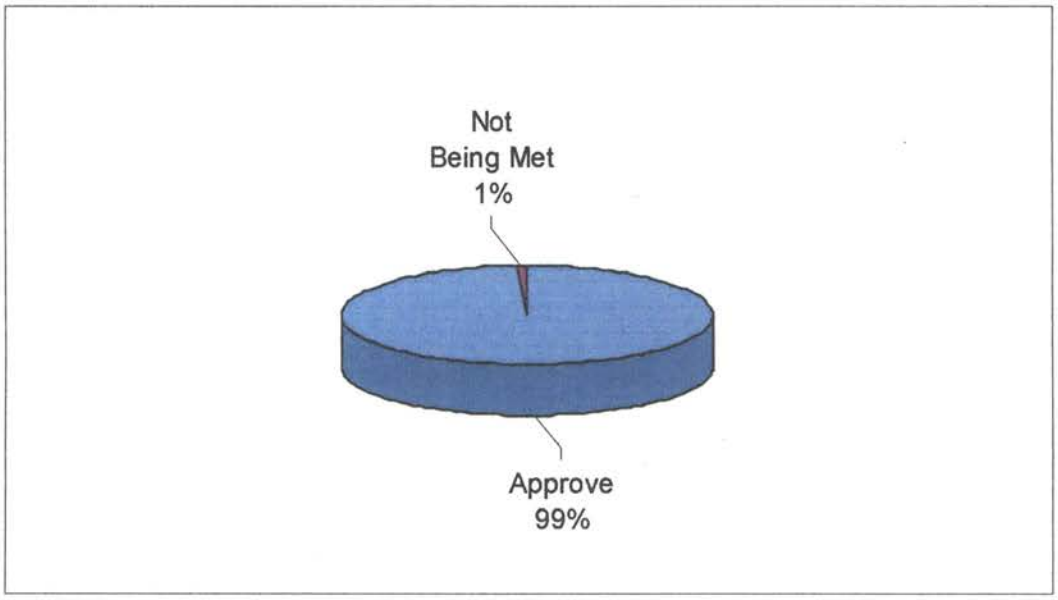

Figure 13 - Objective One - AMA Managerial Skills and Competencies Being Met

Objective two was "*To determine which educational delivery method was preferred by employers*"? - There were a total of 223 combined responses to this question, 31 percent or 72 respondents indicated that the traditional classroom is the best

format for delivery of the AMA skill sets to the student. Surprisingly, 23 percent or 50 respondents indicated that the fast tack delivery method was preferred. Behind these two methods were video teleconferencing at18 percent, on-line at 17 percent and cable TV at 11 percent.

It would appear from these results that classroom interaction is still perceived as a very important component to the learning experience. Both traditional and fast track classes incorporate interpersonal interaction into the learning process. Those two methods ranked significantly higher than other delivery formats, which require little or no interpersonal interaction. The results of this survey were indicated by question one of the employers survey. The results of *Objective Two Which Delivery Methods Would be the Best for Teaching those Skills* are illustrated in Figure 14.

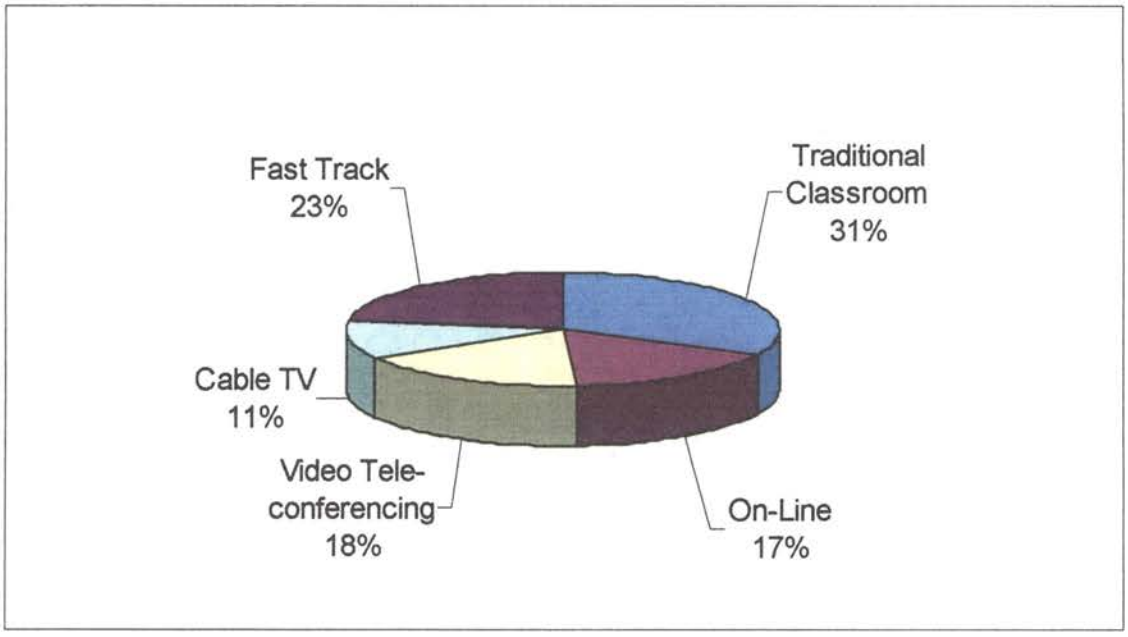

Figure 14 - Objective Two - Which Delivery Methods Would be the Best for Teaching those Skills?

Objective three was "*To determine employer perceptions of virtual universities and on-line course delivery methods compared to the traditional higher educational institutions in relationship to hiring new employees or promoting existing employees?*" Objective Three was answered in two parts, 3A and 3B. Of the total combined 164 responses to Objective 3A, 87 or 53 percent disagreed, and 25, or 15 percent, strongly disagreed for a combined negative response of 68 percent of the population who disapproved of virtual universities as the preferred delivery format. If this is the norm, then the future outlook for virtual universities may be dim. Employers seem to think that these organizations are more "paper mill" than actual places of higher learning. A traditional "brick and mortar" institution is still looked upon as the legitimate learning environment. The results of *Objective Three-A Employer Perceptions of Virtual Universities* are illustrated in Figure 15.

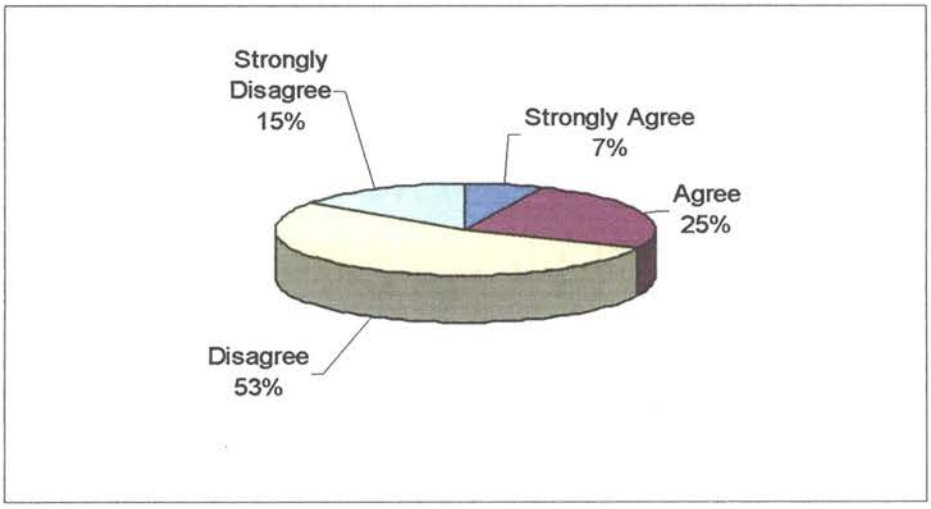

Figure 15 –Objective-Three-A Employer Perceptions of Virtual Universities

The second half of objective three was the "*perceptions of on-line courses*", is much more balanced. Of the total 277 responses, a full 35 percent (ninety-nine responses) still preferred the traditional classroom to on-line delivery formats. While 25 percent, or 62 respondents, preferred the fast track classroom to the on-line delivery method. On-line was preferred by only 19 percent, or 50 respondents. Video teleconferencing at 18 percent and cable TV at five percent comprised the rest of the population. The results of *Objective Three A Employer Perceptions of On-line Delivery* are illustrated in Figure 16.

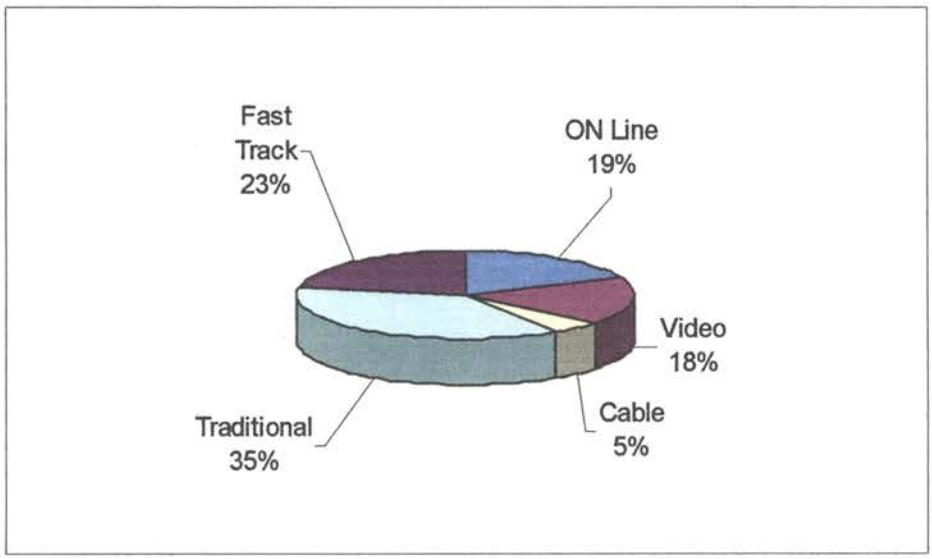

Figure 16 -Objective Three-B Employer Perceptions of On-line Delivery

The responses to the demographic *Question Ten regarding participation in on-line courses*, indicated 44 percent had "never" participated in on-line learning. When compared to the results of question ten of the Employer Survey, it would appear that on-line delivery formats are simply an alternative to traditional classroom or fast track formats and are still not ingrained in the norm. The results of *Question Ten - How Many On-line Courses Have You Had* are illustrated in Figure 17.

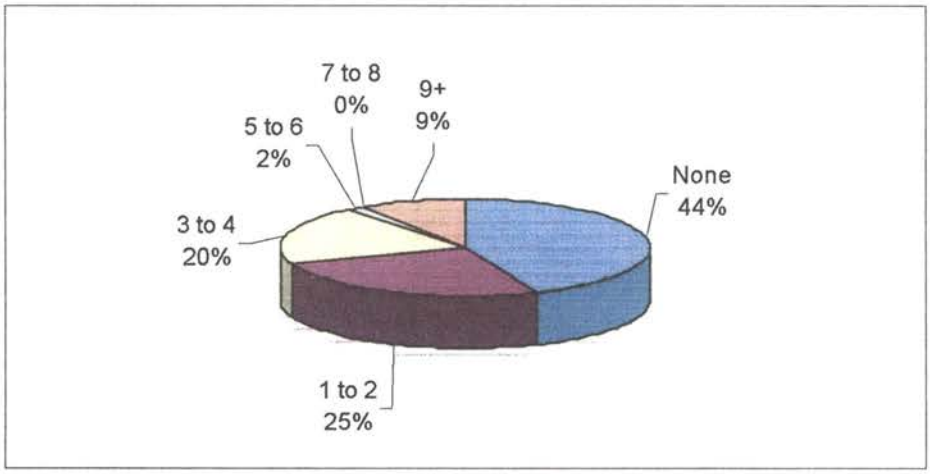

Figure 17 - Question Ten - How Many On-line Courses Have You Had?

Objectives four was "*to determine the type of companies represented by participants in this study (aviation, oil industries, service organizations, manufacturing and other organizations).*" It revealed 34.55 percent of the respondents came from manufacturing; 10.91 percent from service industries, 9.09 percent from the oil

industries, 7.27 percent from aviation, and a majority, 38.18 percent, or 21, respondents from other organizations. Other organizations are representative of utilities, municipal and the federal governments. Of the 350 companies surveyed, 21 other firms represented 133 organizations while the manufacturing response represented 121 organizations for a combined total of 72 percent of the population.

This indicates that governing bodies and manufacturing are the more aggressive consumers of higher educational facilities, with government out-pacing manufacturing by a mere 3 to 4 percent. This objective was the result of question thirteen of the employers survey. The results of *Objective Four - Determine the Type of Companies Represented by Participants in this Study (Aviation, Oil, Service, Manufacturing and Other Organizations)* are illustrated in Figure 18.

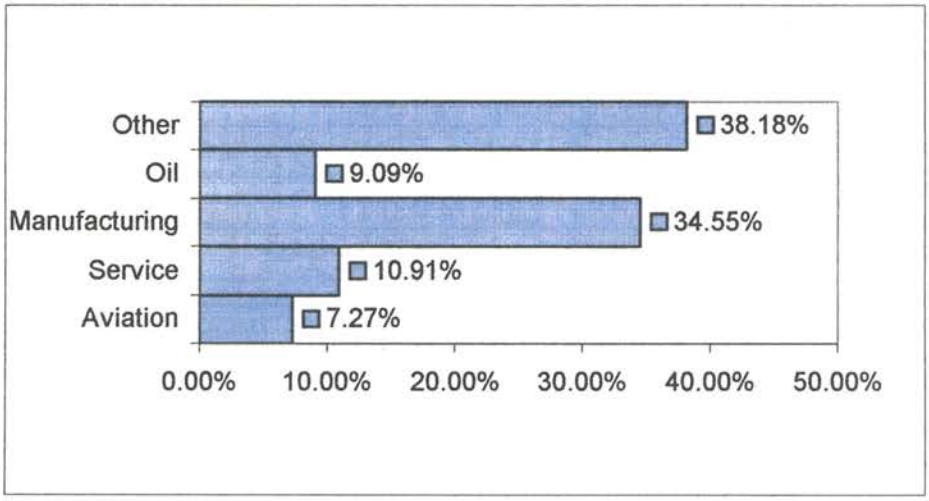

Figure 18 - Objective Four - Determine the Type of Companies Represented by Participants in this Study (Aviation, Oil, Service, Manufacturing and Other Companies).

Recommendations

Objective one was "*To determine employer perceptions as to whether or not college students acquire managerial skills and competencies as defined by AMA through the use of traditional or non-traditional educational delivery formats*". Based on the research statistics provided by the survey 99 percent of the respondents felt that the AMA managerial skills and competencies were being met through traditional or non-traditional delivery formats by colleges and universities. It is recommended that colleges and universities examine their managerial skills and competencies listed on the survey and to determine if their classes meet those skills sets.

Objective two was "*To determine which educational delivery method was preferred by employers.*" The research statistics indicated that 31 percent of the respondents felt that traditional classroom was the best format for delivering the AMA managerial skills and competencies. However, 23 percent preferred fast track delivery method. It is recommended that institutions of higher education should concentrate on more traditional classes or the fast track approach. Although further research is needed, the finding of this study indicated that institutions should focus with interpersonal involvement and utilize courses in cable TV or on-line delivery format to address specific audiences needs.

Objective three was "*To determine employer perceptions of virtual universities and on-line delivery methods compared to the traditional higher education institutions in relationship to hiring new employees or promoting existing employee.*" Part A of the objective was based on the statistical research that 68 percent of the population disapproved of virtual universities. Although additional research of a larger population is

recommended, this study indicates that colleges and universities that offer bachelors and masters degree programs on-line are not preferred by business managers. It is therefore recommended that careful consideration of these finding be given before utilizing these delivery methods.

Part B of the above objective was based on the statistical research that 35 percent still preferred the traditional classroom to on-line delivery formats. In the additional comment sections several respondents recommended that on-line courses be developed only for general education requirements. Based on these comments (shown in Appendix C), it is recommended that colleges and universities consider developing on-line courses for general education requirements and not for core and specialized business programs of study.

Recommendations for Future Research

This research was confined to Oklahoma organizations and a rather small population. One recommendation for future research would be that this identical study be sent to additional business managers who are members of AMA or similar national organizations.

In addition, another survey might limit the participants to Human Resource Managers rather than all of those surveyed for this study. There are two Oklahoma Chapters of Human Resource Managers who could be surveyed at their annual state conventions or at the national convention.

This survey obtained perspectives of employers regarding on-line delivery formats. Students opinions using the AMA managerial skills and competencies have not

yet been surveyed. A similar survey for students utilizing many of the same questions from this survey could gain more insight to student perspectives. It is recommended that this study be conducted at a later date when more students have completed on-line courses.

The review of the literature revealed very little research comparing fast track or cable TV classes to the traditional delivery method of coursework. Therefore, a comparison of fast track or cable TV studies would be recommended for a better understanding of alternative delivery methods.

Objective Four determined the type of organizations represented by participants in this study (aviation, oil industries, service organizations, manufacturing and other organizations). It is recommended that the same survey be administrated to military personnel to determine if there is any difference in their perceptions of on-line courses.

This study examined perception of business managers and did not address student perceptions or retention of learning by students. Further research is recommended to examine whether or not students that complete on-line courses retain the material presented in the course.

Because the response rate was so low, other research could be examined using a qualitative study. Instead of asking all of the questions in this study, the researcher could conduct interviewers of course participants using more specific open-ended questions regarding on-line course delivery methods.

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APPENDIXES

APPENDIX A

IRB APPROVAL FORM

Oklahoma State University
Institutional Review Board

Protocol Expires: 1/8/2004

Date: Thursday, January 09, 2003 IRB Application No ED0352

Proposal Title: THE PERCEPTIONS OF EMPLOYERS REGARDING THE EFFECTIVENESS OF TRADITIONAL AND NONTRADITIONAL DELIVERY FORMATS IN DEVELOPMENT OF EMPLOYEE SKILLS

Principal Investigator(s):

Connie Farthing
7304 Lancelot Place
Stillwater, OK 74075

Mary Kutz
319 Willard
Stillwater, OK 74078

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 415 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,

Carol Olson

Carol Olson, Chair
Institutional Review Board

APPENDIX B

APPROVED COVER LETTER, CONSENT FORM AND SURVEY INSTRUMENT

Date

Title Position
Company
Address
City, OK. Zip code

Dear (professional title),

I am Connie Farthing, a doctoral candidate in the College of Education, Applied Educational Studies, at Oklahoma State University and an educator. You have been randomly chosen to participate in this research study based on your experience and success with employees of one of the largest organizations in Oklahoma. Your perspective and opinions could help me and other educators formulate curricula and the best delivery methods used in preparing students for the 21st century. Please take 15 minutes of your valuable time to complete the enclosed survey and consent form and return in the self-addressed stamped envelope.

The purpose of this research study is two-fold: (1) to determine if employer perceptions of whether or not college students are acquiring managerial skills and competencies as defined by the American Management Association (AMA) survey (2000) through traditional or nontraditional educational delivery formats. And (2) determine if employers will employ or promote students who have completed degrees from nontraditional on-line delivery formats.

The results of this study will be useful in three ways. First, if managerial skills and competencies as defined by the AMA will assist business educators in developing and examining course content to prepare tomorrow's business managers. Second, the results will give direction to education providers in determining which educational delivery format (traditional versus nontraditional) successfully imparts those defined skills. And finally this research will provide insight to the perceptions that employers have about virtual universities and on-line course delivery methods and that quality of those graduates.

Thank you for taking a few minutes of your valuable time to participate in this study. Also, thank you for your help with this research.

Sincerely,

Connie S. Farthing
Doctoral Candidate
Oklahoma State University
Dept. Chair/MIS
St. Gregory's University

CONSENT FORM

I,_____, hereby authorize or direct Connie S. Farthing, a doctoral candidate in the College of Education, Applied Educational Studies, at Oklahoma State University to administer the following survey on The Perceptions of Employers Regarding the Effectiveness of Traditional and Nontraditional Delivery Formats in Development of Employee Skills.

The purpose of this research study is two-fold: (1) to determine employer perceptions of whether or not college students are acquiring managerial skills and competencies as defined by AMA through traditional or nontraditional educational delivery formats. And (2) determine if the employer will employ or promote students who have completed degrees using nontraditional on-line delivery format. The pilot survey indicated that participant involvement would be no longer than 15 minutes.

Descriptions of the procedures for this study are 1000 business managers in Oklahoma who will be randomly selected for this study. The companies chosen for the sample population will be from aviation, oil industries, service organizations, manufacturing, and other categories. The companies included in this sample population are employers of at least 100 employees.

The following titles are used in this study: Human Resource Manager, Sales Manager, Chief Financial Officer, Vice President, Chief Executive Officer, Plant Manager, Production Manager and Operations Manager. The survey will be sent via conventional mail. The survey indicated that participates involvement will be no longer than 15 minutes.

The initial contact with the respondent will be by title only, once the consent form is signed and returned, it will be retained in a file. Names of companies, titles, and/or individual's names will be kept in the researcher's database on her personal computer for research studies only.

If any question, including Question #11 on the survey, is too personal the respondent may omit a response on that item.

The results of this research study will be useful in three ways. First, the definition of managerial skills and competencies as defined by AMA survey will assist business educators in developing and examining course content to prepare tomorrow's business managers. Second, the results will give direction to education providers in determining which educational delivery format (traditional or nontraditional) successfully imparts those required managerial skills and competencies. And finally this research will provide insight into the perceptions that employers have about virtual universities and on-line course delivery methods and the quality of those graduates

For any additional information about this study you may contact Connie Farthing at (405) 728-6709 or Dr. Mary Kutz at (405) 744-9892. For the rights of research subjects you may also contact Sharon Bacher, IRB Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number; (405) 744-5700

I understand that participation is voluntary and I am free to withdraw my consent and end my participation in this project at any time after I notify the project director.

I may contact Connie Farthing at (405) 728-6709 or Dr. Mary Kutz at (405) 744-9892. I may additionally contact Sharon Bacher, IRB Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, OK 74078, telephone number: (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: _____ Time: _____ (a.m./p.m.)

_____

Name (typed) Signature

I certify that I have personally explained all elements of this form to the subject before requesting the subject to sign it.

Signed: _____

Project director or authorized representative

Employer Survey

1. Based on the following definitions rate, on a scale of 1 to 6, 1 ***being not effective***, 6 ***being very effective***, which delivery method in your opinion, is best in preparing perspective employees for employment or promotion? If the skill is not being met by any of the delivery formats, please indicate with an X.
   Definitions of delivery formats:
   - Traditional classroom delivery format (16 weeks)
   - On-line Format (Courses using the Internet)
   - Video Teleconferencing (Courses delivered by two way audio and two way video delivery format)
   - Cable TV (Courses delivered by cable medium through the television)
   - FastTrack (Courses one night a week or during 3 consecutive weekends).

	Traditional Classroom	On-line Format	Video Tele-conferencing	Cable TV	Fast Track	Not being met
CONCEPTUAL SKILLS						
Ability to use information to solve business problems						
Identification of opportunities for innovation						
Recognizing problem areas and implementing solutions						
Selecting critical information from mass of data						
Understanding of business uses of Technology						
Understanding of organization of a business model						
COMMUNICATION SKILLS						
Ability to transform ideas into words and action						
Creditability among colleagues, peers, and subordinates						
Listening and asking questions						
Presentation skills: spoken formats						
Presentation skills: and/or graphic formats						
EFFECTIVENESS SKILLS						
Contributing to corporate mission/department objectives						
Customer focus						
Multitasking: working at multiple tasks in parallel						
Negotiation skills						
Project management						
Reviewing operations and implementing improvements						
Internal: self and subordinate activities						
External: vendors, suppliers, business partners						
Setting priorities for attention and activity						
Time management						
INTERPERSONAL SKILLS						
Coaching and mentoring skills						
Diversity skills: working with diverse people and culture						
Networking within the organization						
Networking outside the organization						
Working in teams (cooperation and commitment)						

Adapted from: American Management Association. (2000, March/April). Managerial skills and Competence. Retrieved November, 2001 from http://www.amanet.org/research/pdfs/mankcomp.pdf.

Employer Survey

2. How many On-line courses are acceptable in an employment applicant's transcript?
   ☐ None ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9 or more

3. Universities should offer more classes in an On-line delivery format.
   ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

4. Perspective employees who have completed a Bachelor's degree from a "Virtual University" are just as qualified as those completing a Bachelor's degree from a traditional university.
   ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

5. Employees who have completed a Bachelor's degree from a "Virtual University" are just as promoteable as an employee completing a Bachelor's degree from a traditional university.
   ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

6. Employees who have completed a Master's degree from a "Virtual University" are just as promoteable as an employee completing a Master's degree from a traditional university.
   ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

7. Which of the following delivery formats would you recommend employees to participate in order to continue their education?
   ☐ On-line Format ☐ Cable TV ☐ FastTrack
   ☐ Video Teleconferencing ☐ Traditional classroom ☐ None

8. Employees seeking to continue their education should use an On-line delivery format.
   ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

9. Which of the following delivery formats have you personally participated in?
   ☐ On-line Format ☐ Cable TV ☐ FastTrack
   ☐ Video Teleconferencing ☐ Traditional classroom ☐ None

10. How many On-line courses have you participated in?
    ☐ None ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9 or more

11. Which represents your level of education:
    ☐ High school ☐ Some college ☐ Bachelor's degree
    ☐ Some graduate ☐ Masters degree ☐ Doctorate

12. Indicate the size of your organization:
    ☐ <100 employees ☐ 101 - 249 employees
    ☐ 250 - 499 employees ☐ >500 employees

13. Which of the following industries does your organization participate in?
    ☐ Aviation ☐ Manufacturing ☐ Oil Industry
    ☐ Service ☐ Other_____

14. Additional Comments:
    _____
    _____
    _____
    _____
    _____
    _____

APPENDIX C

WRITTEN RESPONSES ON THE SURVEYS

Question Fourteen –

Additional Comments: -

- "When students use too much on-line classes, they lose the interpersonal skills needed."
- "On-line courses are valuable in the refining need skills, but participation is too valuable in education to omit."
- "As with any learning experience the method and context (challenge) of the material has a big impact in how effective "delivery" is. I like those who can learn in a diverse manner, flexibility & adaptability to learn & keep growing gives leaders & managers."
- "I have two masters degree and am very frustrated with the quality of instructions and level of interest of classroom experience. All the classroom data in hinder interaction among the class master! Learning from each other is much easier on-line."
- " I have found money & motivation are not the barriers to continuing education. I finished my bachelor's on-line & will complete my Master's on-line this fall.
- "The personal relationships & interaction are most important in learning".
- "My opinion is that an important part of a university education is the active experience of 10years Face-to-Face. It provides communication and the solicitation that are necessary in the business world. Anytime you are an importance in the interface between instruction (students and between students and peers learning is learned."
- "Format is less important than content."

- "I feel very strongly that interaction with people, in teams, is essential for success in today's Business Environment. On-line, video are the greatest today for continuing education or military technical skills training but do not provide essential team training environment."
- "On-line courses are excellent for "introductory class and "soft' general classes. They are not effective for behavioral instruction or hands-on training."
- "I believe that on-line Formats can be very effective in technical an well as the traditional training areas (project mgnt /multi-tasking) but feel strongly that traditional classroom should wake up at least 50% of the degreed program."
- "I value the discipline and effort required for traditional classroom training. On-line training is fine for non-core classes and for some core classes. A virtual degree would make one more thoroughly investigate an applicants personality and people skills. "
- "I must admit that I personally, do not comprehend material as well on-line as in a classroom setting. I fell that interesting among students & course leader brings a lot to the table."
- "Without human interaction how is someone who needs to interact with other people (face-to-face) going to be able to handle stress when they are use to dealing with people on-line? On-line training is good for people who want a government job on a data processor."
- "In the healthcare, most supervisors and managers are promoted from clinical positions and do not have formal education as business or management. In house,

use are considering some "blended" training that combines classroom & on-line training."

- "Feeling the quality of a individuals education is based more on what the individual puts into it than the delivery format. Having said that classes that involve interaction between professors and other students will often better opportunity to develop people skills such as mentoring, negotiation, sales & etc."
- "Any form of continuing education is faster than none. We accept any of the degrees in promotion from within. New hires have a much better chance with traditional degree."
- "Employer's needs are best met when students participate in practicum type activities where they are expected to and participate in real work activities."

APPENDIX D

APPROVED FOLLOW-UP

COVER LETTER

Date

Name
Title Position
Company
Address
City, OK. Zip code

Dear (Name),

Several weeks ago I sent you a survey to complete. You were chosen to participate in this research study based on your experience and success with employees of one of the largest organizations in Oklahoma. Your perspectives and opinions could help me and other educators formulate curricula and the best delivery methods used in preparing business students for the 21st century. Please take 15 minutes of your valuable time to complete this survey and consent form and return in the self-addressed stamped envelope.

Thank you for taking a few minutes of your valuable time to participate in this research study and for your help.

Sincerely,

Connie S. Farthing
Doctoral Candidate
Oklahoma State University
Dept. Chair/MIS
St. Gregory's University

VITA 2

Connie Sue Farthing

Candidate for the Degree of

Doctor of Education

Thesis: OKLAHOMA EMPLOYER PRERCEPTIONS OF TRADITIONAL AND NON-TRADITIONAL DELIVERY FORMATS IN EMPLOYEE SKILL DEVELOPMENT

Major Field: Applied Educational Studies

Biographical:

Personal Data: Born in Shawnee, Oklahoma, on May 29, 1953, the daughter of Jack and Jacqueline J. Dodson, married to David C. Farthing, on April 7, 1973, one daughter Angela, and two grandchildren, Brooklinn and Braden.

Education: Graduated from Putnam City High School, Oklahoma City, Oklahoma, May 1971; received Bachelor of Business Administration in Business Real Estate from University of Central Oklahoma, Edmond, Oklahoma in May 1992, received Master of Education in Education from University of Central Oklahoma, Edmond, Oklahoma in May 1996; completed requirements for the Doctor of Education degree with a major in Applied Educational Studies, Oklahoma State University, Stillwater, Oklahoma in May, 2003.

Experience: Worked at Hertz Corporation, Oklahoma City, Oklahoma, from 1/73 to 12/77, duties included were data entry and computer tape to disk operator; Accountant and Computer Consultant at Engineered Products in Oklahoma City, Oklahoma, from 8/81 to 9/86; Accountant and Office Manager at Real Estate Control in Oklahoma City, Oklahoma, from 1/87 to 3/89; Accountant Assistant and Computer Consultant at Trammell Crow Companies in Oklahoma City, Oklahoma, from 10/89 to 8/93; Computer Teacher for 1st grade through 8th grade at St. Eugene in Oklahoma City, Oklahoma, from 8/93 to 5/95; Adjunct Instructor and Business Division Computer Lab Manager at Oklahoma State University –

Oklahoma City, from 8/94 to 8/98; Adjunct Instructor at University of Central Oklahoma from 8/97 to 5/01, and currently Department Chair in Management Information Science of Business Science, at St. Gregory's University, in Shawnee, Oklahoma.

Affiliations: Member of St. Charles Borromeo Catholic Church.