AN INVESTIGATION INTO THE PERCEPTION OF ONLINE DEGREES EARNED AS CREDENTIALS FOR OBTAINING EMPLOYMENT IN PUBLIC ACCOUNTING FIRMS

Ву

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TABLE OF CONTENTS

		<u>page</u>
AC	CKNOWLEDGMENTS	4
LIS	ST OF TABLES	7
AB	STRACT	9
СН	HAPTER	
1	INTRODUCTION	11
	Statement of the Problem	12
	Purpose of the Study	15
	Research Questions	16
	Definition of Terms	
	Limitations of the Study	
	Significance of the Study	20
2	REVIEW OF THE LITERATURE	21
	Evolution of Online Education and Online Academic Programs	22
	Issues related to Online Education	
	Employer Perceptions of Online Education	
	Outcomes of Online vs. Traditional Classroom Based Education	30
3	DESIGN OF THE STUDY	32
	Methodology	32
	Instrument	
	The Population	
	Procedure for Data Collection	
	Data Analysis	
4	PRESENTATION AND ANALYSIS OF DATA	39
	Survey Responses	39
	Summary Conclusions	
5	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	65
	Summary	65
	Conclusions	
	Implications	
	Recommendations for Further Research	

APPENDIX

Α	SURVEY INSTRUMENT	73
В	APPROVAL OF PROTOCOL	80
С	INVITATION E-MAIL TO PARTICIPANTS	81
D	PARTICIPANT COMMENTS	82
LIS	ST OF REFERENCES	105
BI	OGRAPHICAL SKETCH	100

LIST OF TABLES

<u>Table</u>	<u>page</u>
4-1	Summary of respondents by state
4-2	Demographic information
4-3	Scenario one
4-4	Scenario two
4-5	Scenario three
4-6	Mean response by gender
4-7	Independent samples test of response by gender
4-8	Summary of response percentages
4-9	ANOVA responses if participant had taken a course online
4-10	Importance of type of educational institution
4-11	Chi-square test by gender and importance of type of educational institution 60
4-12	Importance of type of educational institution gender cross-tabulation 3 point scale
4-13	Mean response by gender of importance of type of educational institution 61
4-14	Independent samples test mean response of importance of educational institution by gender
4-15	Accounting courses can be effectively taught through the Internet to students enrolled in online courses
4-16	Independent samples test mean response by gender can accounting classes be taught online
4-17	Mean response by gender can accounting classes be taught online
4-18	Independent samples test can accounting classes be taught online
4-19	Mean response can accounting classes be taught online and taken course online
4-20	The mix of online vs. traditional courses taken would be of little importance 63

4-21	Mean response mix of online v traditional courses	63
4-22	Courses offered by online institutions compared to traditional 4 year	63
4-23	Mean response comparing online courses to 4 year and 2 year institutions	63
4-24	Mean response comparing online courses to 4 year and 2 year institutions for men and women	. 63
4-25	Mean response comparing online courses to 4 year and 2 year institutions for those that have and have not taken course online.	. 64
4-26	Courses offered by online institutions compared to traditional 2 year	64
4-27	Independent samples test	64

Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

AN INVESTIGATION INTO THE PERCEPTION OF ONLINE DEGREES EARNED AS CREDENTIALS FOR OBTAINING EMPLOYMENT IN PUBLIC ACCOUNTING FIRMS

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More than two thirds of all colleges and universities offer online courses and a majority of institutions offer full academic programs online according to a study by The Sloan Consortium on the state of online learning and the National Center for Education Statistics. The Sloan Consortium and the National Center for Education Statistics have both found that for the past several years the largest growth in higher education has been in online education. It is becoming the norm for a student to take one, some or all of their courses online or at least partially online in order to earn a college degree. The purpose of this study was to determine if degrees in accounting earned partially or entirely online were perceived as equal to those that had been obtained in the traditional classroom setting. Specifically; do certified public accountants working in public accounting firms believe there to be a significant difference in the value of a degree earned online and a degree earned in a traditional classroom setting?

An invitation to participate in an online survey was sent to certified public accountants working in public practice in the southeastern United States to assess the acceptability of online degrees earned online as credentials and preparation for employment in the field of public accounting. The participants of the study were asked

9

to indicate the level of recommendation they would give each of two potential applicants in three different scenarios. The applicant in each scenario earned the necessary degree in accounting from an accredited institution. The differentiation between applicants was the manner in which the courses necessary for the degree were completed; in a traditional classroom environment, partially online and partially in a traditional classroom environment or entirely online.

Findings reveal that certified public accountants overwhelmingly preferred the candidate that had earned the necessary degree in a traditional classroom environment and would not recommend or would recommend with reservation an applicant with a degree earned partially or entirely online.

CHAPTER 1 INTRODUCTION

One in every four college students was enrolled in an online course in the fall of 2009 compared to less than one in ten in the fall of 2002 (Allen, 2010). More than two thirds of all colleges and universities offer online courses and a majority of institutions offer full academic programs online according to a study by The Sloan Consortium on the state of online learning and the National Center for Education Statistics (Allen 2007). The Sloan Consortium and the National Center for Education Statistics have both found that for the past seven years the largest growth in higher education has been in online education. It is becoming the norm for a student to take one, some or all of their courses online or at least partially online in order to earn a college degree.

Administrators at more than half of all institutions including public, private nonprofit, or private for-profit believed that online education is critical to the long term strategy of their institution and twenty percent of institutions with online courses introduced its first offerings in 2007 (Allen, 2008).

According to the same survey, business programs have the greatest penetration rate for fully online programs. The penetration rate is calculated as the ratio of the number of institutions offering a fully online program in that discipline to those offering that program using any delivery method. In the fall of 2007, 33% of all business programs offered fully online programs, and the greatest percentage of those fully online programs are from public institutions (Allen, 2008). For that reason it is increasingly important to understand the viewpoints of all the stakeholders involved as to the acceptability of online education. The stakeholders are not just the students

taking these courses or the faculty and institutions providing them, but also the employers of the graduates of those programs.

The purpose of this study was not to evaluate the quality or value of online education, but rather to gain a better understanding of the acceptability of degrees earned partially or entirely online or the perceived valued of those degrees. The focus of this study was on the potential employers of those graduates.

Statement of the Problem

According to the seventh annual Sloan survey on online learning by Allen and Seaman (2010), over 4.6 million students were taking at least one online course during the fall 2008 term. That was a 17% increase over the number reported the previous year, which far exceeded the 1.2% growth of the overall higher education student population. That growth rate was almost three times the number of online students in the seven years since the Sloan survey began with 1.6 million students taking at least one online course in the fall of 2002. The growth from the fall of 2002 to the fall of 2008 represented a compound annual growth rate of 19%. According to the National Center for Education Statistics the entire higher education student body during the same period had grown at an annual rate of about 1.5% (Allen, 2010). In the early growth of online education the vast majority of the students enrolling in online classes and distance degree programs were non-traditional students, today one in every four college students is taking at least one class online, distance education is becoming the norm.

More than two-thirds of all higher education institutions have some form of online course offerings and the majority of those institutions offer programs that are fully online (Allen, 2007). As many as 96% of the very largest higher-education institutions (more than 15,000 total enrollments) had online distance offerings in the Fall of 2005 (Allan &

Seaman, 2006). Many institutions have offered online course for several years, but many institutions continue to join the ranks of those going online. One in five college or universities with online course introduced their first offerings in 2007 (Allan & Seaman 2008). It has become clear that distance education especially that of online education is in a continued growth mode with no sign of slowing.

Much of the current literature on distance education and on-line learning has focused on student and faculty perceptions and satisfaction with this form of education delivery. There have been several studies looking at the similarities and differences of courses taught online as compared to those taught in a traditional classroom setting (Byrne, 2003; Merisotis, Phipps, 1999; Wyatt, 2005) and several studies examining student and faculty satisfaction with regard to teaching and learning online or through distance education (Bollinger, Doris, Wasilik, 2009; Fisher, 2003; Johnson, Aragon, Shaik, Palma-Rivas 2000; Williams 2003). Additionally, research regarding the topic of distance education as a way to help increase access to education has been studied (Green, 1999; Weigel, 2000). This research is very important and involves most of the stakeholders regarding online education, but leaves one very important stakeholder out. The stakeholder that has been largely ignored is the employer. There has been very little research with regard to employers' attitudes toward distance education and virtually no quantitative or qualitative empirical research in this area. If it is believed that online undergraduate and graduate education is quickly becoming a principle method of preparation for entering the workforce then it stands to reason that employers should be part of the research with regard to the acceptability of this mode of education.

With the current push for outcomes assessment, the ability for institutions to be able to place its graduates is ever more important. The focus of this research was in the field of accounting and entry level positions in certified public accounting firms in the southeastern United States. Adams and Defleur have done three studies with regard to employer acceptability of online degrees as credentials for employment. The first of these studies examined the acceptability of doctoral degrees earned online as credentials for obtain a faculty position in higher education (2005), the second study examined the acceptability of online degrees earned as credentials for professional employment (2006) and the third focused on employment in the health care industry (2008). All three of these studies had similar results with regard to the employer's perception of the degree earned partly online or entirely from a virtual institution, all consistently preferring the candidate from a traditional educational background.

This researcher wished to expand the previous studies done by Adams and DeFluer by using a variation of their questionnaire with a greater quantitative perspective on the results focusing on the acceptability of accounting degrees earned partially or entirely online used as credentials for gaining employment with certified public accounting firms. The participants in the study are primarily Certified Public Accountants that hold a minimum of a bachelor's degree.

A secondary issue concerning the acceptability of online or distance education has to do with the manner in which distance learning or virtual schools advertised the merits of programs, as well as traditional institutions with online programs or degrees. If employers question the value of such degrees, important ethical or policy issues could be raised. It could be interpreted as misleading to a perspective graduate if the degree

earned online or from a virtual institution were devalued simply because of the manner in which the course work was completed. A student understanding the employer's perspective with regard to the perceived value of their academic preparation could be of great importance.

Purpose of the Study

The purpose of this study was to determine if degrees in accounting earned partially or entirely online were perceived as equal to those that had been obtained in the traditional classroom setting. Specifically, do public accounting firms, or the person making the hiring decision in a public accounting firm, certified public accountants, believe that there was a significant difference in the value of a degree earned online and a degree earned in a traditional classroom setting? If a potential employer were faced with a hiring decision between two applicants and the greatest point of differentiation is the form in which the applicant obtained his or her education, what hiring decision would be made. This study focused on the acceptability of degrees earned online as credentials and preparation for employment in the field of accounting from the perspective of the employer in the south eastern United States. A second purpose of the study was to examine if personal experience with online education or online courses had an effect on the perceived value of degrees earned on line versus a degree earned in a traditional classroom setting. A third purpose of the study was to examine if the type of accounting firm, age, or gender of the participant of the study had an effect on the perceived value of degrees earned online versus a degree earned in a traditional classroom setting.

There is great value for the accounting student to have an understanding of how his/her educational qualifications will be received and valued by perspective employers.

It would be a great misfortunate for a student to earn an online degree only to later find out that perspective employers did not value the degree equally to one earned in a traditional classroom setting, even if that degree were earned from an otherwise traditional institution that offered both face to face and distance classes. Conversely, it would be valuable to know if more students would choose the online format if it were known that a degree earned online would not be differentiated from one earned in the traditional classroom setting. Finally, the knowledge of accounting firms hiring practices with regard to the matter in which a degree was earned would also assist faculty and institutions offering accounting graduate and undergraduate degrees via distance education or online in order to better serve its students. If employers were differentiating the perceived value of the degrees based on the manner in which the course content was delivered, then colleges and university administration and faculty would have a better understanding of how the educational decisions they make concerning content delivery are affecting all of their stakeholders, students, and employers alike.

Research Questions

The research question was twofold. First, would employers in the field of accounting prefer to hire a candidate for the position of staff accountant that received his/her degree from a college or university where they took all of their classes in a face to face classroom or lab environment over a candidate that earned their degree by taking half of his/her classes in a face to face traditional classroom environment and half of his/her classes on line. Second, would employers in the field of accounting prefer to hire a candidate for the position of staff accountant that received his/her degree by taking half of his/her classes online and half of his/her classes in a traditional classroom

environment over a candidate that took all of his/her classes on line from a virtual institution.

The following questions were asked of Certified Public Accountants in the southeastern United States. The participant was asked how likely they would be to recommend a candidate given three different scenarios involving two applicants for an entry level staff accountant position with a Certified Public Accounting firm. The participant was asked to assume that each applicant had the same basic qualifications, academic record and favorable personal and professional qualities and that both applicants had earned a degree in accounting from an accredited institution.

Scenario one: applicant A earned his/her degree in accounting from a college or university where 100% of the applicant's courses were completed via traditional classroom and lab instruction. Applicant B earned his/her degree in accounting from a college or university where 50% of the applicants courses were completed via traditional classroom and lab instructions and the other 50% of the applicants courses were taken online.

Scenario two: applicant A earned his/her degree in accounting from a college or university where 100% of the applicant's courses were completed via traditional classroom and lab instruction. Applicant B earned his/her degree in accounting from an online university where 100% of the applicant's courses were completed online.

Scenario three: applicant A earned his/her degree in accounting from a college or university where 50% of the applicants courses were completed via traditional classroom and lab instructions and the other 50% of the applicants courses were taken

online.. Applicant B earned his/her degree in accounting from an online university where 100% of the applicant's courses were completed online.

The participants of the study were also asked the following questions:

- Would the type of educational institution (traditional, traditional with online course, virtual college/university) from which the applicant obtained his or her degree be of no importance as a hiring selection criterion?
- Does the participant think that accounting classes can be effectively taught online?
- Would the mix of online vs. traditional courses taken by the applicant to complete the degree be of little importance to the accounting firm?
- Does the participant consider classes taught by a virtual institution to be inferior, equivalent or superior to those taught by a traditional two year community college?
- Does the participant consider classes taught by a virtual institution to be inferior, equivalent or superior to those taught by four year college or university?
- Do the results of the previous questions differ if the individual responding to the questions had taken an online course?
- Do the results of the previous questions differ by the type of the accounting firm (local, regional, Big Four) the participant works for?
- Do the results of the previous questions differ by the age of the individual responding to the questions?
- Do the results of the previous questions differ by the gender of the individual responding to the questions?
- Do the results of the previous questions differ by the academic background of the individual responding to the questions?

Definition of Terms

For the purpose of this study, the following definitions were used:

- ONLINE COURSE. For the purpose of this study, is a class that was offered via the internet.
- DISTANCE EDUCATION. For the purpose of this study is defined as academic courses taken in a format other than the traditional classroom setting. This can include but is not limited to remote classes, teleconferencing, television courses, one way and two way video, the Internet and CD-ROM.

- DISTANCE LEARNING. Education in which students take academic courses by accessing information and communicating with the instructor asynchronously.
- ONLINE DEGREE. Is an academic degree earned by taking all courses delivered online.
- VIRTUAL INSTITUTIONS. An academic institution offering the majority of its courses via distance education, primarily online, with no physical campus or traditional classroom setting.
- LOCAL ACCOUNTING FIRM. Is an accounting firm that provides its services in a limited geographical area like a small number of cities or towns.
- REGIONAL ACCOUNTING FIRM. Is an accounting firm that provides its services to a large number of clients on the national level, they are thought of as small versions of the Big Four.
- BIG FOUR ACCOUNTING FIRMS. are the four largest public accounting firms in the world, each having an international client base. These include PricewaterhouseCoopers, Ernst & Young, KPMG and Deloitte & Touche
- SOUTHEASTERN UNITED STATES. For the purpose of this study is limited to Florida, Georgia, Alabama, Louisiana, Mississippi, Tennessee, North Carolina, South Carolina and, Kentucky.

Limitations of the Study

Limitations to the study include the following:

- The study will be limited to the field of accounting and accounting degrees earned either online, in a traditional classroom setting or both.
- The study will be limited to certified public accounting professionals working in public accounting firms.
- 3. The study will be limited to the southeast region of the United States.
- 4. Individual personality differences and the varying background of the participants may have an effect on the acceptability and familiarity of online education.

Significance of the Study

With the vast number of virtual institutions and traditional institutions offering online degrees and distance courses in the field of accounting, students are being given many options with regard to how they earn their degree and where and how they take their courses. Very little research has been done to determine the acceptability or perception of online education by employers and virtually no research has been done in the field of accounting. This study will be significant to students when deciding on where and how they will earn their degree. Such a study would assist students in making rational and informed choices among various types of programs they wish to consider. This study could also be significant to colleges and universities developing accounting programs entirely online or with distance education as a component. It is possible that public accounting firms not part of this research study could use this as a quide to its acceptance of candidates with, or understanding of, online degrees.

CHAPTER 2 REVIEW OF THE LITERATURE

The purpose of this study was to determine if degrees in accounting earned partially or entirely online were perceived as equal to those that had been obtained in the traditional classroom setting. Specifically, do public accounting firms, or the person making the hiring decision in a public accounting firm, certified public accountants, believe that there was a significant difference in the value of a degree earned online and a degree earned in a traditional classroom setting? If a potential employer were faced with a hiring decision between two applicants and the greatest point of differentiation is the form in which the applicant obtained his or her education, what hiring decision would be made. This study focused on the acceptability of degrees earned online as credentials and preparation for employment in the field of accounting from the perspective of the employer. A second purpose of the study was to examine if personal experience with online education or online courses had an effect on the perceived value of degrees earned online versus a degree earned in a traditional classroom setting. A third purpose of the study was to examine if the age, gender, or the type of accounting firm the participant works for had an effect on the perceived value of degrees earned online versus a degree earned in a traditional classroom setting or their acceptability as credentials for employment. The purpose of this chapter was to provide an overview of the literature relevant to this study. The following topics reviewed were as follows:

- The evolution of online education and online academic programs
- Advantages and disadvantages of online education
- Employer perceptions of online education
- Outcomes of distance vs. traditional classroom based education

Evolution of Online Education and Online Academic Programs

Distance education has been around since the early 1900s with the advent of correspondence courses. While taking many forms, it used various types of technology to deliver course material such as mail, facsimile, radio, television, satellite broadcasts, videotapes, teleconferencing, computer assisted instruction, simulation and gaming. and most recently the Internet, wireless and handheld devices (Matthews et al. 1999, Hiltz & Turoff 2005). Distance education was the university's way of meeting the needs of more students simultaneously than it had physical space to accommodate or to make education accessible and available to an almost limitless number of students wanting access or an opportunity to learn. For many years the traditional institution's response to the demand for access to education sought to grow in size by increasing the number of campuses and the size of the institution. Unlimited growth in physical size is not possible and very expensive to maintain. Distance education reaches out to students wherever they live or wish to study. Once most courses are available in digital formats as well as on campuses, geographic monopolies and barriers that have sustained thousands of different colleges and universities in the U.S. and around the world will weaken (Hiltz & Turoff, 2005). There are many variations of distance education and more recently online education, but for the purposes of the study the researcher treated the terms interchangeably and defined distance education as when most or all of course content is delivered online, typically with very little or no face-to-face meetings with the instructor.

According to the seventh annual report on the state of online learning in U.S. higher education by the Sloan Consortium during the fall of 2008 over 4.6 million students were taking at least one online course, this number translated into more than

one in every four higher education students taking at least one online course. That represented a 17% increase over the number reported the previous year and far exceeded the 1.2% growth of the overall higher education student population. The growth from 1.6 million students taking at least one course in fall of 2002 to the 4.6 million for the fall of 2008 represents a compound annual growth rate of 19%. Higher education overall only grew at an annual rate of around 1.5% during the same time period (Allen 2010).

According to data collected for the fifth annual national report by the Sloan Consortium and the Southern Regional Education Board during the 2005–2006 academic year on the state of online education the U.S. conducted in 2006, 65% of all higher education institutions had some form of online classes with the majority of those institutions, 35% of all higher education institutions, offering programs that are fully online. The 2006 study showed that 68% of schools offering graduate face-to-face courses also offered graduate courses online and 63% of schools offering undergraduate face-to-face courses also offered undergraduate courses online. The online enrollment growth rate was over ten times more than that projected by the National Center for Education Statistics for the general postsecondary student population (Allen & Seaman 2006).

Overall the majority of online enrollment is in two-year associate institution having over 54% of all online enrollments in the U.S. higher education. Public institutions have by far the largest enrollment in online courses and the fastest growth rate in the period from 2002 to 2008 (Allen 2010). For profit institutions with online offerings have increased nearly five times in the average number of students enrolled since 2002, but

public institutions still have nearly three times the average enrollment than that of the private for profit institution. In the 2004 survey, among all schools offering face-to-face business degree programs 43% also offer online business programs. The number private, nonprofit institutions with online business programs is relatively low at 27% but 63% of Public institutions and 81% of private for profit colleges offered business programs online (Allen 2006).

Although most of the growth in online enrollments in the past came from institutions beginning to offer online courses, Allan's most recent study (2010) indicated that virtually all institutions that desired to offer online courses and programs were already doing so, the current growth has come from the schools that are larger and in a better position to scale up their online offerings. The current growth rate was projected to continue for at least another year (Allan & Seaman 2010). The key to continued growth of online education is the ability to address concerns that educators, administrators, students and employers have about the ability of this type of education delivery system to prepare students to meet the challenges of the real world (Drago & Peltier, 2005).

Issues related to Online Education

There has been a dramatic increase in the number of accounting courses offered online, many of the available online accounting courses are offered as part of traditional accounting programs. There are also entire accounting degree programs at both the graduate and undergraduate levels offered online by both traditional universities such as the University of Maryland and nontraditional universities such as the University of Phoenix (Salimi, 2007). The research in online accounting education is primarily limited to issues of effectiveness and satisfaction for both students and faculty. The findings

appear to support other research indicating that there is no significant difference in the performance of students enrolled in online courses versus those students taking the same class in a traditional classroom setting (Gagne & Morgan, 2001, Salimi, 2007) the overall satisfaction of those students enrolled online was lower than those students enrolled in traditional classes primarily due to the appearance of limited access to the instructor (Gagne & Morgan, 2001, Salimi, 2007, Vamosi, Pierce & Slotkin, 2004).

There are many advantages to distance education. The most significant benefit is the way that the former constraint of time and space has been removed by networking capabilities. Online courses may help disabled and geographically isolated students, as well as students with busy schedules obtain quality higher education (Lei & Gupta 2010). This is a benefit for both the instructor and student alike. Instructors do not have to be on campus or in a classroom or office to teach or be available, students do not have to live or work in the same geographic area as the location of the school. Access to learning via distance education opens up the number of academic programs available to a student. Students can access their courses at anytime and anywhere a computer is available. Distance education also allows those students that have lives with full time work and families to advance academically on a more flexible schedule than what is offered at a traditional college or university bounded by fixed class days and times. Online courses allow institutions and faculty to offer more classes at peak demand times of the day and week, thus maximizing the scanty available resources by increasing flexibility in class scheduling (Lei & Gupta 2010). Another major advantage of online education is student anonymity. Students who are shy in fact-to-face classes become more assertive in an online class. Students are to take more time to think

about and edit comments before they are posted to the instructor and to the entire class (Brownson, 2005).

In spite of the apparent advantages and merits of technology for distance education many of the distance teaching institutions lack the appropriate infrastructure needed to utilize the full potential of this technology (Guri-Rosenblit, 2005). The entry cost to quality distance education can be substantial. Distance education is a capital intensive business (Hall, 1996). Investments in computers, virtual libraries, central servers and data networks, ongoing technical support, program development cost, and marketing can discourage institutions from pursing distance education (Matthews 1999). In the rush to preserve market share or to be an early entrant into the online education goldmine, online education and programs have no doubt been offered with questionable quality (Drago & Peltier, 2005). The Sloan study raised several issues concerning the barriers to widespread adoption of online learning. The greatest concern cited by academic leaders with over 80% saying it was important or very important was "Students need more discipline to succeed in online courses" followed by the lack of acceptance by faculty. Student retention was a continuing issue of concern as well as acceptance by potential employers (Allen, 2007).

Some of the most frequently perceived weaknesses of online education is the lack of social interaction with peers and instructors, loss of real-time pedagogical exchange or unsuitable teaching style for some instructors to be effective online as well as a lack of adequate training for faculty, high dropout rates for online programs, and a perceptions that the quality and rigor of online courses are substandard (Adams, 2009, Drago & Peltler, 2005, Foster, 2006, Glover, 2005, Salimi, 2007, Wagner, 2006).

Employer Perceptions of Online Education

Hiring managers have mixed opinions of online degrees and of online education in general (Vogt 2001). Valt.com, a New York City based employment research web site, conducted a survey in 2000 of 239 human resource professionals and recruiters. Of those surveyed 26% said an online bachelor's degree was as credible as a traditional bachelor's degree while about 61% said an online bachelor's degree was not as credible but still acceptable. The remaining 13% said online bachelor's degrees were not credible or acceptable. Similarly 37% considered online graduate degrees as credible as traditional graduate degrees, 54% said they were not as credible but still acceptable and 9% said graduate degrees were not credible or acceptable. The same study showed that 77% of respondents believed that an online degree earned at an accredited institution like Duke or Stanford was more credible than one learned at an Internet-only institution (Obringer, 2006).

More than half of the respondents to a Wall Street Journal survey of corporate recruiters conducted in 2005 said they viewed online degree graduates either somewhat differently or very differently than on-campus graduates. Interviews with corporate recruiters confirmed the study's conclusion. Most participants stated that they either don't hire online graduates or just don't get resumes from online graduates. The biggest difference they cited was the lack of personal interaction and networking that is so central the MBA experience (Wagner 2006).

There have been a few studies conducted on the acceptability of online degrees earned as credentials for obtaining employment. One such study published in 2005 involved hiring committee chairpersons looking to fill a faculty position (Adams & DeFleur, 2005), another study published in 2006 involved hiring executives in response

to job advertisements posted in newspapers of eight major metropolitan areas of the United States (Adams & DeFleur, 2006), and a third study published in 2007 was sent to health care administrators in response to job advertisements for open positions in the health care industry throughout the United States (Adams, DeFleur & Heald, 2007). In addition to the studies for obtaining employment a couple of studies have focused on higher education and admissions to graduate and professional education. DeFleur and Adams conducted a study on the acceptability of online bachelor's degrees as criterion for admissions to graduate school in 2004 and in 2009 Adams surveyed Medical school admissions administrators to assess the acceptability of applicants' qualifications that included degrees earned partially online for admissions to medical school. All five studies had similar results. The two studies focusing on graduate education revealed an overwhelming preference for the candidate that had a traditional classroom education. In the three studies pertaining to obtaining employment conducted by Adams and DeFleur there was a clear preference for the applicant that had earned a degree in a traditional classroom setting.

In each of the three studies pertaining to obtaining employment the respondents were given three candidates to choose from in order to make hiring recommendations. The first candidate had earned a degree exclusively online from a virtual school, the second did a combination of traditional and online course work and the third did all courses in a traditional classroom setting. When given the three candidates with all other factors relating to qualifications being equal the respondents overwhelmingly preferred the candidate with the traditional degree. In the study conducted with academic search committee members who screened applicants for faculty

appointments, only one respondent was willing to recommend an applicant with a degree earned totally online for a position within their institution (Adams & DeFleur, 2005). In the survey of hiring executives located through newspaper ads for employment in eight metropolitan areas throughout the United Sates only 4% of employers indicated they would be willing to hire an applicant with a degree earned entirely online (Adams & DeFleur, 2006). The results of the study in 2004 conducted by DeFleur and Adams of deans and program directors for admissions to graduate programs found that only 7% of administrators in public institutions an approximately 11% in private institutions would be willing to consider admissions for applicants with online degrees. The study of medical school administrators considering applicants to recommend for admissions to medical school clearly indicated that a traditional-residential degree was more acceptable than a degree earned partially online (Adams, 2009).

Chaney (2002) found that employers' negative perceptions of distance learning seemed to be based on correspondence schools of the past and generally that skepticism surrounding online programs stemmed from a lack of familiarity with current distance learning programs. The human resource personnel that participated in the study could not see how obstacles of taking exams and assuring integrity could be overcome by online programs. The one participant in the study that had experience with present day distance learning was pleased with the coursework. From the research for online education to gain acceptance with employers the employers need to become more familiar with the online academic programs and gain a better understanding of the methods used to overcome basic academic administrative

problems. Overall preference expressed by the participants of the study was for a quality program of study.

Outcomes of Online vs. Traditional Classroom Based Education

There have been several research studies concerning the effectiveness of online education as compared to traditional education. In a review of the research on the effectiveness of distance learning in higher education conducted by Phipps and Merisotis (1999) they found that proponents of distances education contended that the findings prove that distance learning is "as good as" traditional education if conducted properly. As the authors continued their review of the research, they found that most of the literature could not be considered "original research dedicated to explaining or predicting phenomena related to distance learning" (Phipps, 1999). Original research could be grouped into a few areas including student outcomes, student attitudes and student satisfaction.

Gagne and Shepherd (2001) conducted a study involving two sections of a graduate level introductory accounting course whereby one section of the course was taught in the traditional classroom setting and the other was delivered via Web-based format where there was no face to face interaction between the instructor and the students and all course material was delivered online. Communication between the student and the instructor in the online course was predominantly via e-mail. The two sections were taught by the same instructor with the same syllabus, text, assignments and examinations. The performance of the students in the distance course was similar to the performance of the students in the traditional course. Student evaluations of the two courses were also similar with the only variation being the level of satisfaction with instructor availability being lower in the online course.

Russell's (1999) no significant difference phenomenon refers to a series of studies that show when course materials and teaching methodology were held constant, there were no significant differences between student outcomes in a distance delivery course as compared to a face to face course. The body of literature dates back to 1928 involving correspondence courses to the present day with online distance education. Student outcomes in distance courses were neither worse nor better that those in face to face courses.

CHAPTER 3 DESIGN OF THE STUDY

Methodology

The focus of this study was not to compare traditional versus online degree programs but rather to study the acceptability of those degrees earned partially or entirely online by prospective employers, specifically certified public accountants, which would potentially hire a candidate for the entry level position of staff accountant.

The purpose of this study was to determine if undergraduate or graduate degrees in accounting earned partly or entirely on line were accepted as equal to those degrees obtained in the traditional classroom setting. Specifically, do professionals in the field of accounting in the southeastern United States believe there is a significant difference in the perceived quality of a degree earned partly or entirely online to that of a degree earned in a traditional academic setting? Are public accounting firms in the southeastern United States willing to hire candidates that have obtained their graduate or undergraduate degree via distance education? This study focused on the acceptability of online degrees as credentials and preparation for employment in the field of accounting from the perspective of CPAs working in public accounting firms in the southeastern United States. The researcher surveyed certified public accountants in nine southeastern states including Florida, Georgia, Alabama, Mississippi, Louisiana, South Carolina, North Carolina, Tennessee and, Kentucky concerning their perceptions of online degrees and their willingness to hire candidates that had obtained a degree partially or entirely online as compared to those candidates that had obtained a degree in a traditional classroom setting.

Instrument

To answer the research questions the researcher used a modified version of a survey instrument previously used in several studies by Adams and DeFleur (2004, 2005, 2006, 2007, 2009). The instrument has previously been used to study the acceptability of online degrees earned as a credential for obtaining employment, the acceptability of a doctoral degree earned online as a credential for obtaining a faculty position, the acceptability of online degrees as criteria for admissions to graduate programs, the acceptability of credentials earned online for obtaining employment in the health care professions and most recently to study the acceptability of online course as criteria for admissions to medical school. In each of these studies the participants, often referred to as the gatekeepers (Adams, 2009), were asked to select among two candidates whereby one candidate earned some or all of their credits toward their degree online and the other candidate completed all of their coursework in a traditional classroom setting. In each of these studies the candidate that had earned a degree in a traditional classroom setting was preferred.

The researcher piloted the survey to confirm that the questions were clear, concise, and understandable. The pilot study was conducted with accounting faculty that were certified public accountants as well as other business school faculty members. The panel made no further suggestions for improving the instrument. A copy of the survey instrument and description of the study was submitted to the University of Florida Institutional Review Board for Research with Human Subjects. After receiving approval from the Board (Appendix C), the researcher began data collection.

The survey used in the study (Appendix B) described three scenarios, in each scenario there were two applicants. Each applicant had earned a degree in accounting

from an accredited institution, each had achieved a high level of academic excellence, each had excellent work history during college and good recommendations from prior employers and faculty members and each had favorable personal and professional qualities. After an initial interview neither applicant stood out as the clear choice. In each of the three independent scenarios the participant was asked to compare two applicants and signify how likely they would be to recommend each of the applicants for the job. Possible responses were on a 5 point scale ranging from "strongly recommend" to "would not recommend".

Scenario one: applicant A earned his/her degree in accounting from a college or university where 100% of the applicant's courses were completed via traditional classroom and lab instruction. Applicant B earned his/her degree in accounting from a college or university where 50% of the applicants courses were completed via traditional classroom and lab instructions and the other 50% of the applicants courses were taken online.

Scenario two: applicant A earned his/her degree in accounting from a college or university where 100% of the applicant's courses were completed via traditional classroom and lab instruction. Applicant B earned his/her degree in accounting from an online university where 100% of the applicant's courses were completed online.

Scenario three: applicant A earned his/her degree in accounting from a college or university where 50% of the applicants courses were completed via traditional classroom and lab instructions and the other 50% of the applicants courses were taken online. Applicant B earned his/her degree in accounting from an online university where 100% of the applicant's courses were completed online.

Each of the participants of the study was asked to complete a series of questions to help explain his or her recommendations. The first three questions were posed with answer choices on a five point scale ranging from "agree" to "disagree" with "undecided" as the midpoint. The questions were also followed by a blank space inviting the participant to add any additional comments to further explain answer selections. The first question asked if the type of educational institution (traditional, traditional with online courses, virtual or online) from which the applicant obtained his or her degree would be of importance as a hiring selection criterion. The second question asked if the participant felt that accounting courses could be taught effectively online. The third questions asked if the mix of online versus traditional courses taken by the applicant towards the completion of his or her degree would be of importance to their firm or organization.

The participants were also asked if they considered courses offered by known online institutions to be superior, equivalent, or inferior to courses offered by two-year community colleges and if they considered courses offered by known online institutions to be superior, equivalent, or inferior to courses offered by traditional four year college or universities. Both of those questions were followed by a blank space for additional comments to further explain answer selection.

The final portion of the study included a number of questions to capture demographic and background information including a question asking if the participant had ever taken an online course. These data were utilized to examine if any relationship existed between the perceived acceptability of online course and demographic factors. Participants were asked if their organization reimbursed

employees for any portion of educational expenses. If their organization did reimbursed employees for educational expenses, did they reimburse for courses taken online. Finally the participants were asked if they had any further comments that would help the researcher understand their opinions concerning the effectiveness of accounting degrees and accounting courses offered by traditional institutions in a traditional classroom setting as compared to those offered online or by traditional or virtual institutions.

The Population

The population for this study consisted of certified public accountants working in public accounting firms in the southeastern region of the United States. The states included in this study were Florida, Georgia, Tennessee, South Carolina, North Carolina, Alabama, Kentucky, Mississippi, and Louisiana. A list of certified public accountants was obtained from an e-mail list provider for certified public accountants in the 50 United States, the District of Colombia, and Puerto Rico. The list provided included certified public accountants in both public and private practice. The study was limited to those in public practice and also limited to the nine identified states. An initial e-mail explaining the study and requesting participation was sent to all of the certified public accountants included in the list from the nine states in the study. This population consisted of 5,529 certified public accountants. Of the original e-mails sent out 1,951, 35.3% were returned as undeliverable and/or rejected e-mails and an additional 11 responded that they were not certified public accountants. A second reminder request for participation was sent out to the remaining 3,567 contacts included in the list a couple of weeks after the initial e-mail was sent. The second e-mail resulted in an additional 718 or 20% of the e-mails being returned as undeliverable and/or rejected

and an additional 25 responded that they were not certified public accountants and therefore were not suited to participate in the study. After reducing the original population of 5,529 by the total confirmed rejected e-mails and the respondents that replied that they were not certified public accountants the researcher was left with 2,824 usable e-mail contacts in the population.

Procedure for Data Collection

This study was conducted via e-mail and the survey instrument was located on Survey Monkey™, a web-based survey company that can be found at http://www.surveymoneky.com.

An e-mail invitation to participate was sent to 5,529 certified public accountants. Of the 5529 initial e-mails that were sent out 1,951 were rejected as undeliverable and 11 responded that they were not certified public accountants, therefore not suited to participate in the study. A second reminder e-mail invitation was sent to the remaining 3,567 e-mail addresses to increase the chance of an acceptable response rate. An additional 718 were rejected as undeliverable after the second request e-mail was sent and an additional 25 responded that they were not certified public accountants. There remained a total of 2,824 e-mail addresses that were possibly good contacts as the population. Due to the fact that over 35% of the initial e-mails were rejected as undeliverable and an additional 20% of the second e-mailing was rejected the researcher is not confident that an accurate number of participants that were successfully contacted could be determined.

The e-mail invitation included a hyperlink to the study that was located on SurveyMonkey.com. The e-mail letter also contained the complete web address that could be copied into a web browser in order to reach the survey. A contact address,

phone number and e-mail address was provided to those interested in the research results.

Data Analysis

Various statistical techniques will be used to examine data in the study including descriptive statistics such as means, standard deviations and measures of central tendency. Pearson product moment correlation, independent t-test and ANOVA will also be used to examine the data.

The write in comments were compiled from each of the questions that allowed for additional comments to further explain answers. A content analysis was used to examine the comments for keyword frequencies, common phases and related keywords. Data from that analysis were used to create categories and identify recurrent themes that appeared throughout the comments.

CHAPTER 4 PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to determine if degrees in accounting earned partially or entirely online were perceived as equal to those that have been obtained in the traditional classroom setting. Specifically, do public accounting firms, or the person making the hiring decision in a public accounting firm, certified public accountants, believe that there is a significant difference in the value of a degree earned online and a degree earned in a traditional classroom setting? If a potential employer were faced with a hiring decision between two applicants and the greatest point of differentiation is the form in which the applicant obtained his or her education, what hiring decision would be made. This study focused on the acceptability of degrees earned online as credentials and preparation for employment in the field of accounting from the perspective of the employer. A second purpose of the study was to examine if personal experience with online education or online courses had an effect on the perceived value of degrees earned online versus a degree earned in a traditional classroom setting. A third purpose of the study was to examine whether any relationship existed between the perceived acceptability of degrees earned online versus a degree earned in a traditional classroom setting and the, age, gender, or type and size of accounting firm the participant worked.

Survey Responses

An e-mail requesting participation in the study was sent to 5,529 Certified Public Accountants working in public practice or for a public accounting firm in nine states from the south eastern United States. Those states included Florida, Georgia, Tennessee, South Carolina, North Carolina, Alabama, Kentucky, Mississippi, and Louisiana.

Included in the e-mail was a direct hyperlink to the study located on Survey Monkey™, a web-based survey company that can be found at http://www.surveymonkey.com. Of the 5,529 initial e-mail invitations to participate 1,951 or approximately 35.3% were rejected or undeliverable, another 11 responded that they were not certified public accountants and therefore not suited for the study. The initial e-mail resulted in 135 responses. Afterward, a second e-mail request was sent to the 3,567 remaining e-mail addresses as a reminder to effectuate additional responses. An additional 718 or approximately 20.1% of the second e-mail messages were rejected or undeliverable and another 25 responded that they were not certified public accountants and therefore not suited for the study. The follow-up e-mail resulted in an additional 120 responses being received for a total of 255 responses. There remained a total of 2,824 e-mail addresses that were possibly good contacts in the population. Due to the fact that over 35% of the initial e-mails were rejected as undeliverable and an additional 20% of the second e-mailing was rejected the researcher is not confident that an accurate number of participants that were successfully contacted could be determined.

Having received 255 responses out of a possible 2,824 e-mail contacts resulted in approximately a nine percent return rate. Although this is not a high return rate, the return rates were similar throughout the nine states included in the study. The demographics of the respondents did indicate that the sample included men and women, respondents from small, midsize, and large accounting firms, respondents ranging in age from below 25 to over 55, from every state surveyed and both those with prior experience with online education and those without. The sample was diverse and representative. One of the questions in the survey asked the respondents to indicate

the state in which they worked. Out of the 255 respondents 205 answered the question allowing the researcher to determine an approximate return rate by state. The known responses ranged from a low of 3.3% to a high of 10.5% with an average of 7.1% known response rate, the results by state are listed in Table 4-1.

The researcher believed that the actual return rate could potentially have been higher due to the fact that there was a 20% (n=718) rejection rate of the second emailing. After sending out the first e-mail, the rejection rate of those e-mail addresses or the percent of those e-mails that were undeliverable was 35.3% (n=1,951). All of the rejected e-mail addresses were removed from the e-mail listing before the second reminder e-mail was sent. The second e-mailing was believed to have included only possible participants that had deliverable e-mail addresses. A 20% rejection or undeliverable rate for the second e-mailing could potentially mean that there was an unknown software or hardware problem during the delivery of the e-mails inviting the participants to participate therefore limiting the actual number of potential participants in the study. New technology to prevent spam may have also potentially blocked the email messages as well. There has been research to indicate that the "response rates to e-mail surveys have significantly decreased" (Sheehan, 2001). Kim Sheehan (2001) conducted a review on e-mail survey response rates and found that the increase in surveying in the US along with the increase in unsolicited e-mail to internet users and the ill will that it may generate among potential respondents could be explanations of the lower response rates (p. 10). The study also indicated that the large volume of received unsolicited e-mail has "caused individuals to develop ways for dealing with it

which includes using filtering software or developing heuristics such as deleting all unsolicited e-mail without opening it."

There were 255 participants in the study, not all participants answered every question in the study but all data were used in the data analysis. The 255 received responses included participants from all nine states in the study (Table 4-1). The participants were certified public accountants working in public practice in local, regional, national, international and the Big 4 accounting firms. The respondents indicated that 63.7% (n = 158) worked in local firms, 24.6% (n = 61) were from regional firms and 8.8% (n = 22) from national, international and the Big 4 firms.

A total of 247 participants responded to the question indicating age. The demographic information revealed that 49.4% (n = 122) of the respondents were older than 55, 36.8% (n = 91) were between the ages of 54 and 45, 9.3% (n = 23) were between the ages of 44 and 35 and, 4.4% (n = 11) were below the age of 35.

A total of 246 participants responded to the question indication gender, 84.6% (n=208) of the respondents were male and 15.4% (n = 38) were female. The participants were also asked if they had ever taken an online course and out of the 247 that responded to that question the majority, 61.5% (n=152) indicated that they had taken a course online or nearly 60% of the total respondents (n=255) had at one time taken an online course. The vast majority of the respondents that indicated having taken a course online 94.2% (n=146) indicated that they had taken continuing professional education courses. Continuing professional education or CPE is required in the field of accounting for CPA's. CPA's are required to complete 80 CPE credit hours every two years. 5.2% indicated that they had taken undergraduate courses

online and 5.2% indicated that they had taken graduate courses. Nine participants indicated that they had taken some other type of course online, those included driver's education, security clearance and operations courses, CPA preparation courses, advanced graduate course, certified specialist courses and a couple indicated that they had taken public notary and insurance license courses online. Table 4-2 shows a summary of the demographic profile of the participants in the study.

The study described three scenarios, in each scenario there were two applicants (Appendix A). Each applicant had earned a degree in accounting from an accredited institution, each had achieved a high level of academic excellence, each had excellent work history during college and good recommendations from prior employers and faculty members and each had favorable personal and professional qualities. After an initial interview neither applicant stood out as the clear choice. In each of the three independent scenarios the participant was asked to compare two applicants and signify how likely they would be to recommend each of the applicants for the job. The question was coded as 1 for Strongly Recommend (SR), 2 for Recommend (R), 3 for Unsure (U), 4 for Recommend with Reservation (RR), and 5 for Would not Recommend (NR).

In the first scenario Applicant "A" earned the necessary degree in accounting from an accredited college or university by completed 100% of his or her course work in a traditional classroom setting and Applicant "B" earned the necessary degree in accounting from an accredited college or university completing 50% of his or her courses online and the other 50% in a traditional classroom setting. The results of the study (Table 4-3) revealed that 97% (n = 225) of the respondents either strongly recommended or recommended Applicant "A", the applicant that completed coursework

in a traditional classroom with 58% (n = 134) of those responses being strongly recommend, with the mean response being 1.45 (Table 4-6). In contrast only 42.7% (n = 99) of respondents indicated that they would either strongly recommend or recommend Applicant "B", the student that completed 50% online, with a mean response of 2.77 (Table 4-6). Only 6.9% (n = 16) indicated that they would strongly recommend Applicant "B". No respondent indicated that they would recommend with reservation or not recommend Applicant "A", in contrast 23.3% (n = 54) of the respondents indicated that they would recommend Applicant "B".

In the second scenario Applicant "A" earned the necessary degree in accounting from an accredited college or university by completing 100% of his or her course work in a traditional classroom setting and Applicant "B" earned the necessary degree in accounting from an accredited college or university completing 100% of his or her courses online from a virtual or completely online institution. In this instance 98.3% (n = 243) of the respondents either strongly recommended or recommended Applicant "A" with 57% (n = 141) of those responses being strongly recommend (Table 4-4) with a mean response rate of 1.45 (Table 4-6). In this second scenario only 9% (n = 21) of respondents indicated that they would either strongly recommend or recommend Applicant "B", the candidate that had completed 100% of courses online or from a virtual institution with only one indicating that they would strongly recommend Applicant B with a mean response rate of 3.86 (Table 4-6). Again no respondent indicated that they would recommend with reservation or not recommend Applicant "A" but nearly 61% (n =

140) of the respondents indicated that they would recommend with reservation or not recommend Applicant B.

In the third scenario Applicant "A" earned the necessary degree in accounting from an accredited college or university by completing 50% of his or her course work in a traditional classroom setting and 50% of his or her course work online. In this same scenario Applicant "B" earned the necessary degree in accounting from an accredited college or university completing 100% of his or her courses online from a virtual or completely online institution. The results of the study (Table 4-5) showed 62.1% (n = 146) of the respondents either strongly recommended or recommended Applicant "A," the candidate that completed 50% of his or her courses online with 11.5% (n = 27) of those responses being strongly recommend and a mean response rate of 2.40. In the third scenario only 7% (n = 16) of respondents indicated that they would either strongly recommend or recommend Applicant "B", the candidate that completed all course work online with a mean response rate of 3.90. Only two indicated that they would strongly recommend Applicant "B." Only in the third scenario did any of the respondents indicated that they would recommend with reservation Applicant "A", 13.6% (n=32) none indicated that they would not recommend Applicant "A" but nearly 61.4% (n = 140) of the respondents indicated that they would recommend with reservation or not recommend Applicant "B".

It is interesting to note that the number of participants to recommend or strongly recommend the applicant that had completed 50% of his or her courses online increased when compared to an applicant that completed 100% of his or her courses online from a virtual or completely online institution rather than when they were

compared to an applicant that competed 100% of his or her courses in a traditional classroom setting. The participants of the study indicated that 62.1% (n=146) would either recommended or strongly recommended the applicant that completed 50% of his or her course online when compared to an applicant that completed all courses online with a mean of 2.77 and only 42.7% (n=99) recommended or strongly recommended the same applicant when compared to an applicant that competed all courses in a traditional classroom setting with a mean of 2.40. This strengthens the concept that employers prefer a candidate that has earned their degree in a traditional classroom setting either partially or totally over that of a candidate that has earned his or her degree online or from a virtual institution.

The results of the study revealed that there was a significant difference between the mean responses of men and women when one examined the first applicant, Applicant "A" (Table 4-7) in each of the three scenarios. In both the first and the second scenarios men had a lower mean response (Table 4-6) than women, 1.41 for men and 1.62 for women. This indicated that men were more likely to recommend or highly recommend the applicant that had completed 100% of his or her courses in a traditional classroom setting than women were when that applicant was compared to either an applicant that completed 50% or 100% of his or her courses online. In the third scenario where Applicant A completed 50% of his or her courses online and Applicant "B" completed 100% of his or her courses online, women had a lower mean response at 2.09 or more positive than men with a mean response of 2.45 for Applicant "A."

A majority of both men and women still preferred the applicant that had completed half of his or her education in a traditional classroom setting over the applicant that had

none but women had a higher level of recommendation than men for an applicant that had taken 50% online courses. In all three scenarios women had a lower mean response than men or a higher level of recommendation for applicant B. Overall it appeared that women were more tolerant or more accepting of an applicant that had earned his or her degree in a nontraditional manner and did not place as much value in the traditional residential classroom setting as did men. There was no significant difference between men and women when recommending Applicant "B" in each of the three scenarios (Table 4-7).

In all three scenarios no significance was found between the responses of those that had or had not taken a course online (Table 4-9). A summary of the responses for each scenario can be found in Table 4-8.

The second part of the study included three additional questions regarding the participant's perceptions of online education. The participants were asked if the type of institution (traditional, traditional with online courses, virtual college/university) from which the applicant obtained his or her degree would be of no importance as a hiring selection criterion. The question was coded with 1 for Agree (A), 2 for Moderately Agree (MA), 3 for Undecided (U), 4 for Moderately Disagree (MD), and 5 for Disagree (D).

The results (Table 4-10) indicated that nearly half of the respondents, 49% (n=122) disagreed and another 31% (n=79) of respondents moderately disagreed while only 13% (n=33) either agreed or moderately agreed that the type of institution was of no importance as a hiring selection criterion. This indicates that nearly 80% (n=201) of

respondents believed that the type of institution from where an applicant earns his or her degree is important in the hiring decision.

Data were analyzed for differences between men and women using chi squared and there was a significance of .014 (Table 4-11) when grouping agree and moderately agree and grouping moderately disagree and disagree turning the five point scale to a three point scale (Table 4-12).

The results as listed in Table 4-12 showed that women were more likely than men to agree or moderately agree (1) that they type of institution was of no importance as a hiring selection criterion. While the majority of women still moderately disagreed or disagreed (3) 63.2% (n=24), they did so at a significantly lower rate than men, 83.1% (n=172). Only 10.6% (n=22) of men agreed or moderately agreed that the type of institution was of no importance where 26.3% (n=10) of women agreed or moderately agreed with that statement. The mean response for men was 4.20 and the mean response for women was 3.68 with the overall mean response of all participants being 4.12 (Table 4-13). This result again indicated that women were more accepting than men of nontraditional forms of education and were more likely to accept an applicant that may have earned his or her degree from a virtual institution or partially online. Women also did not place as great a value on the type of institution an applicant earned his or her degree from as did men.

Independent sample T-Test with equal variances assumed resulted in a significance level of .010 (Table 4-14). These results appear to indicate that women may be more open to accepting a candidate for employment that has earned his or her degree from a non-traditional institution than men. Related to this result could be that a

larger although not significant percentage of the women respondents indicated that they had previously taken an online course than men with 68.4% (n=26) women responding that they had taken course online and 59.5% (n=122) of men indicating that they had taken a course online.

Comments from participants were analyzed using content analysis to examine the comments for keyword frequencies, common phases and related keywords. Data from that analysis were used to create categories and identify recurrent themes that appeared throughout the comments. All of the comments can be found in Appendix D and are printed verbatim. Five major key themes emerged regarding the importance of the type of educational institution an applicant obtained his or her degree, with the most common theme expressed by the participants being the need for personal interaction and the feeling that online classes or virtual institutions could not provide the necessary interpersonal skills needed to be successful in the field of public accounting. Out of the 68 comments received 29, or nearly 43% made mention of personal interaction and interpersonal skills lacking in an online class environment. The four other themes that emerged were first, the importance of the reputation of the institution for either traditional or online education being a factor in their perceived value of the degree earned, secondly the perceived quality or lack of quality of online courses or online/virtual institutions, some respondents perceived online classes as not having the same rigor as a tradition face to face courses and one equated online course to continuing professional education, a few commented that they were not aware of any online institution with a good academic reputation. Third the perception of the limited the type of instruction that can be offered online versus what can be done in a lecture or classroom environment and finally ethical issues regarding academic honesty with regard to online classes. Some concerns with regard to academic honesty involved the instructor not ever really knowing for certain who was actually doing the work; the lack of supervision in online instruction was suspect. This concern was repeated several times in other respondent's comments (Appendix D).

The second question in the second part of the study asked that participants if they believed that accounting courses could be effectively taught online. As with the previous question, the responses were on a five point scale with 1 for Agree (A), 2 for Moderately Agree (MA), 3 for Undecided (U), 4 for Moderately Disagree (MD), and 5 for Disagree (D). The responses to this question (Table 4-14) were split with almost an equal number responding at both ends of the scale. The mean response was 3.06 with 37% (N=93) responding agree or moderately agree and 39% (n=98) responding moderately disagree and disagree, 23% (n=59) were undecided.

The responses were further analyzed using an independent T-Test with equal variances assumed and again there was a significant difference in the responses from men and women (Table 4-16). The mean score for men was 3.13 and 2.71 for women (Table 4-17). This finding is consistent with earlier findings that women appear to be more open to online education and are more likely to agree that accounting courses can be effectively taught on line.

When data were analyzed again to see if the responses differed among those that had taken a course online and those that had not, the independent T-Test showed a significance level of .061 with equal variance assumed (Table 4-18). Although not statistically significantly the mean score for those that had taken an online course was

2.94 and the mean score for those that had not taken an online course were 3.23, so those respondents that had previously taken an online course were more likely to agree with the concept that accounting classes could be effectively taught online (Table 4-19). This could indicate that with additional exposure and experience with online education the more comfortable the public will become with the perceived quality and effectiveness of online education.

The comments from participants when asked if accounting classes could be effectively taught on line had three primary themes. Taking note that the response to this question was split, there were those that felt accounting could be effectively taught online, those that felt it could not be effectively taught online primarily because of the lack of personal interaction and those that were not sure or said yes for a number of reasons. All of the comments can be found in Appendix D. Almost half (n=15) of the 33 comments submitted by the respondents held that online courses could not offer the personal and social interactions from either peers or instructors that are a benefit of the classroom environment. More than half (n=22) commented that they felt that accounting courses could be effectively taught online, of those, six believed that it would depend on the student and another four thought it would depend on the format and/or content of the course. Several of the respondents that believed accounting could be taught online qualified their approval with a limitation to foundation courses and those that are more technical in nature then added that they believed that the upper division course for the major should be taken in a traditional residential program.

The third question of the second part of the study asked the participants if the mix of online versus traditional courses taken by the applicant to complete his or her degree

in accounting would be of little importance to their organization. As with the two previous questions the responses were on a five point scale with 1 for Agree (A), 2 for Moderately Agree (MA), 3 for Undecided (U), 4 for Moderately Disagree (MD), and 5 for Disagree (D). Out of the 248 responses 65% (n=161) either disagreed or moderately disagreed and only 20% (n=50) agreed or moderately agreed (Table 4-20). The mean response was 3.65 indicating that the mix of online versus traditional course was indeed important (Table 4-21).

An independent T-Test showed no significant difference in the responses between men and women or between those that had or had not previously taken a course online. Analyses of the comments from the participants were repeatedly concerned with which classes would be taken online. Eleven of the twenty four comments received felt that some online classes would be acceptable and two stated that some online classes would be beneficial because a student would be exposed to both types of educational experiences. The overwhelming theme that developed was the desire for the major courses or the upper division courses to be from a traditional residential institution or in a traditional classroom setting and that online classes be limited to the more technical or foundation courses as mentioned in the previous question. Five of the comments continued to refer to the need for personal interaction in a classroom setting to effectively teach the necessary skills to be successful in the field of accounting. One of the comments made mention that the characteristics their firm looks for is aptitude and attitude and how they arrive at their degree was not most important. All of the comments are included in their entirety in Appendix D.

The final two questions of the second part of the study asked participants if in their opinion did they consider courses offered by known online institutions (such as The University of Phoenix, Capella University, Kaplan University) to be superior, equivalent or inferior to courses offered by traditional four year college/university programs and second to two year community college programs. The participants were also given the opportunity to comment on their response. The responses (Table 4-22) were on a three point scale with 1 for Superior (S), 2 for Equivalent (E) and 3 for Inferior (I). The vast majority of respondents, 86% (n=207) believed online classes offered by known online institutions to be inferior to those in a traditional classroom setting offered by a four year college or university with a mean response of 2.85 (Table 4-23).

There was no statistical significance in the responses between men and women or between those that had or had not taken an online course in the past. The mean response of men and women were 2.87 and 2.78 respectively (Table 4- 24). The mean response of those that had taken an online course in the past was 2.83 and 2.88 for those that had not taken an online course (Table 4-25).

Comments from the respondents returned four predominant themes. The leading response was that their opinion was based on perception and not from personal experience, especially not having personal experience with any of the suggested online or virtual institutions included as examples in the question. A second issue concerned the quality of the faculty working at online institutions; the respondent repeatedly mentioned the belief that online institutions did not have the same caliber of faculty members as those that are at traditional four year colleges and universities. One respondent commented on the inferiority of faculty in online institutions due to the fact

that online classes are often taught by moderators rather than full time faculty, another concern was on the high turnover rate of the faculty at online institutions. A third theme that had previously been raised was a belief that courses from online institutions were inferior because of the lack of interpersonal interaction between students and faculty and finally the belief that courses offered by online institutions were inferior based on personal experience with graduates from an online institution. One respondent indicated that the caliber of the students at online institutions were, in his opinion, inferior based on having taught online courses himself. All the comments can be found in the entirety in Appendix D.

When the respondents were asked if he or she considered courses offered by known online universities to be superior, equivalent or inferior to those offered by a traditional two-year community college the responses were a bit more positive than when they were compared with courses offered in a four year college or university with only 48% (n=118) considering them to be inferior as compared to 86% (n=207) believing them to be inferior to four year traditional institutions (Table 4-26). The mean response was 2.44 (Table 4-23). There once again was no statistical difference in the responses between men and women with mean response rates of 2.43 and 2.39 respectively (Table 4-24) but there was a significant difference when you compared the responses of those that had and had not previously taken an online course.

An independent sample T-Test showed a significance level of .044 when compared to the responses of those that had taken an online course with those that had not taken an online course (Table 4-27). The mean response of those that had taken an online course was 2.38 and the mean response of those that had not taken an online

course was 2.53 (Table 4-25). The majority, 56% (n=82) of the respondents that had previously taken an online course believed that courses offered by known online institutions to be either superior or equivalent to courses offered by a community college and the majority, 55% (n=52) of those that had not taken an online course believed them to be inferior. These results indicated that the participants that had experience with online education were more likely to believe online classes to be at least as good as those courses that would be offered by a community college or two year institution than those respondents that had not experience with online education or online courses.

Summary Conclusions

All of the responses to the questions in the study were analyzed for statistical significance based on the age of the respondents and on the size of the firm the respondents worked for. Neither of these factors appears to have an effect on the responses.

The findings of the research study indicate that the overall acceptability of online degrees as credential for employment by public accountants was very low. Accountants in public practice did indeed prefer new hires to have earned a degree in a traditional residential classroom setting. In several of the research questions there was significance found in the perceptions of men compared to women. Women appeared to be more open to different forms of education and did not rate a degree from a traditional institution as highly as men. Overall both men and women did prefer the traditional degree over the degree earned partially or entirely online. When certified public accountants were given the choice between a candidate with a traditional degree and a candidate that had earned his or her degree either partially or entirely online, the candidate with the traditional degree was overwhelming preferred. It also appeared that

the participants with previous experience with online education believed that accounting classes could be effectively taught online. The study also revealed that participants with prior experience with online courses believed online classes to be at least as good as those courses that would be offered by a community college or two year institution but inferior to those offered by traditional four year colleges and universities.

Table 4-1. Summary of respondents by state

State	Estimated E-mails	Known Participants	Known Return Rate
Alabama	206	7	3.4%
Florida	879	87	9.9%
Georgia	699	31	4.4%
Kentucky	156	9	5.8%
Louisiana	165	9	5.5%
Mississippi	114	12	10.5%
North Carolina	264	21	8.0%
South Carolina	116	8	6.9%
Tennessee	255	21	9.3%

Table 4-2. Demographic information

Variable	n	Percentage
Type of accounting firm		
Local	158	62%
Regional	61	24%
National	10	4%
International/Big Four	12	4.7%
Other	14	5.5%
Total	255	
Age		
Below 25	4	1.6%
25 to 34	7	2.8%
35 to 44	23	9.3%
45 to 54	91	36.8%
55 +	122	49.4%
Total	247	
Gender		
Male	208	84.6%
Female	38	15.4%
Total	246	
Has taken course online		
Yes	152	61.5%
No	95	38.5%
Total	247	
Type of course taken online		
CPE	146	94.2%
Undergrad	8	5.2%
Graduate	8	5.2%
Other	9	5.8%

Table 4-3. Scenario one

						Response
	SR	R	U	RR	NR	Count
Applicant A: Traditional	134	91	6	0	0	231
	58%	39%	3%	0%	0%	
Applicant B: 50% Online	16	83	79	46	8	232
	7%	36%	34%	20%	3%	
	answered question					254

Table 4-4. Scenario two

						Response
	SR	R	U	RR	NR	Count
Applicant A: Traditional	141	102	4	0	0	247
	57%	41%	2%	0%	0%	
Applicant B: 100% Online	1	20	70	59	81	231
	0%	9%	30%	26%	35%	
			ar	swered q	uestion	253

Table 4-5. Scenario three

						Response
	SA	R	U	RR	NR	Count
Applicant A: 50% Online	27	119	57	32	0	235
	11%	51%	24%	14%	0%	
Applicant B: 100% Online	2	14	72	56	84	228
	1%	6%	32%	24%	37%	
			ar	nswered o	uestion	251

Table 4-6. Mean response by gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
A1Traditional	Male	194	1.41	.543	.039
	Female	29	1.62	.561	.104
B1 50% Online	Male	191	2.80	.938	.068
	Female	34	2.53	1.051	.180
A2 Traditional	Male	202	1.40	.520	.037
	Female	36	1.67	.535	.089
B2 100% Online	Male	190	3.88	1.001	.073
	Female	34	3.71	1.115	.191
A3 50% Online	Male	193	2.45	.883	.064
	Female	35	2.09	.702	.119
B3 100% Online	Male	189	3.93	.990	.072
	Female	33	3.70	1.104	.192

Table 4-7. Independent samples test of response by gender

Equal variances			t-test for	Equality	of Means		
assumed						Lower	Upper
A1Traditional	-1.967	221	.050	213	.109	427	.000
B1 50% Online	1.498	223	.136	.266	.178	084	.617
A2 Traditional	-2.866	236	.005	271	.094	457	085
B2 100% Online	.940	222	.348	.178	.190	196	.552
A3 50% Online	2.315	226	.022	.365	.158	.054	.676
B3 100% Online	1.233	220	.219	.234	.190	140	.609

Table 4-8. Summary of response percentages

		SR	R	U	R	NR	Count
Scenario 1	A1-Traditional	58%	39%	3%	0%	0%	231
	B1-50% Online	7%	36%	34%	20%	3%	232
Scenario 2	A2-Traditional	57%	41%	2%	0%	0%	247
	B2-100% Online	0%	9%	30%	26%	35%	231
Scenario 3	A3-50% Online	11%	51%	24%	14%	0%	235
	B3-100% Online	1%	6%	32%	24%	37%	228

Table 4-9. ANOVA responses if participant had taken a course online

		Sum of		Mean		
		Squares	df	Square	F	Sig.
A1Traditional	Between Groups	.168	1	.168	.557	.456
	Within Groups	66.639	221	.302		
	Total	66.807	222			
B1 50%	Between Groups	.337	1	.337	.373	.542
Online	Within Groups	202.760	224	.905		
	Total	203.097	225			
A2 Traditional	Between Groups	.093	1	.093	.328	.567
	Within Groups	66.778	237	.282		
	Total	66.870	238			
B2 100%	Between Groups	1.051	1	1.051	1.016	.315
Online	Within Groups	229.788	222	1.035		
	Total	230.839	223			
A3 50%	Between Groups	.000	1	.000	.001	.980
Online	Within Groups	169.039	227	.745		
	Total	169.039	228			
B3 100%	Between Groups	.000	1	.000	.000	.990
Online	Within Groups	224.185	220	1.019		
	Total	224.185	221			

Table 4-10. Importance of type of educational institution

						Response
	Α	MA	U	MD	D	Count
Count	12	21	17	79	122	251
	5%	8%	7%	31%	49%	
				answered of	251	

^{*}The type of educational institution (traditional, traditional with online courses, virtual college/university) from which the applicant obtained his or her degree would be of no importance as a hiring selection criterion.

Table 4-11. Chi-square test by gender and importance of type of educational institution

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.479 ^a	2	.014
N of Valid Cases	245		

Table 4-12. Importance of type of educational institution gender cross-tabulation 3 point scale

			Gender		
			Male	Female	Total
Scale	A or MA (1)	Count	22	10	32
		% within Gender	10.6%	26.3%	13.1%
	U (2)	Count	13	4	17
		% within Gender	6.3%	10.5%	6.9%
	MD or D (3)	Count	172	24	196
		% within Gender	83.1%	63.2%	80.0%
Total		Count	207	38	245
		% within Gender	100%	100%	100%

^{*}The type of educational institution (traditional, traditional with online courses, virtual college/university) from which the applicant obtained his or her degree would be of no importance as a hiring selection criterion.

Table 4-13. Mean response by gender of importance of type of educational institution

					Std. Error
	Gender	N	Mean	Std. Deviation	Mean
Type of institution	Male	207	4.20	1.063	.074
important	Female	38	3.68	1.435	.233

Table 4-14. Independent samples test mean response of importance of educational institution by gender

		t-test for Equality of Means						
			Std. 95% Confidence Interval					ence Interval
Equal variances					Mean	Error		
assumed	t	df	Sig.	(2-tailed)	Diff	Diff	Lower	Upper
Type of institution								
important	2.582	243		.010	.514	.199	.122	.906

Table 4-15. Accounting courses can be effectively taught through the Internet to students enrolled in online courses

	А	MA	U	MD	D	Response Count
Count	21	74	59	65	33	252
	8%	29%	23%	26%	13%	
				answered	question	252

Table 4-16. Independent samples test mean response by gender can accounting classes be taught online

			Sig.	Mean	Std. Error	95% Confid	ence Interval
	t	df	(2-tailed)	Diff	Diff	Lower	Upper
Can acct classes							
be taught online	1.977	244	.049	.414	.210	.002	.827

Table 4-17. Mean response by gender can accounting classes be taught online

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Can acct classes be	Male	208	3.13	1.185	.082
taught online	Female	38	2.71	1.206	.196

Table 4-18. Independent samples test can accounting classes be taught online

			t-test for Equality of Means					
			Std. 95% Confidence Interval					
Equal variances				Mean	Error			
assumed	t	df	Sig. (2-tailed)	Diff	Diff	Lower	Upper	
Can acct classes								
be taught online	-1.884	245	.061	291	.154	595	.013	

Table 4-19. Mean response can accounting classes be taught online and taken course online

0.1					
	Has respondent taken			Std.	Std. Error
	online class	N	Mean	Deviation	Mean
Can acct classes be	Yes	152	2.94	1.230	.100
taught online	No	95	3.23	1.096	.112

Table 4-20. The mix of online vs. traditional courses taken would be of little importance

						Response
	Α	MA	U	MD	D	Count
Count	12	38	37	99	62	248
	5%	15%	15%	40%	25%	
			ä	answered c	juestion	248

Table 4-21. Mean response mix of online v traditional courses

Response	N	Minimum	Maximum	Mean	Std. Deviation
Does the mix of online v.					
traditional classes matter	248	1	5	3.65	1.153

Table 4-22. Courses offered by online institutions compared to traditional 4 year

	Superior	Equivalent	Inferior	Response Count
	1	34	207	242
Responses	.04%	14%	86%	
		answei	red question	242

^{*}In your opinion do you consider courses offered by known online institutions (such as The University of Phoenix, Capella University, Kaplan University) compared to courses offered by traditional four year college/university programs to be:

Table 4-23. Mean response comparing online courses to 4 year and 2 year institutions

					Std.
	Ν	Minimum	Maximum	Mean	Deviation
Are online classes equal to 4 year	242	1	3	2.85	.368
Are Online classes equal to CC	245	1	3	2.44	.581

Table 4-24. Mean response comparing online courses to 4 year and 2 year institutions for men and women

				Std.	Std. Error
	Gender	N	Mean	Deviation	Mean
Are online classes	Male	199	2.87	.353	.025
equal to 4 year	Female	37	2.78	.417	.069
Are online classes	Male	201	2.43	.589	.042
equal to CC	Female	38	2.39	.547	.089

Table 4-25. Mean response comparing online courses to 4 year and 2 year institutions for those that have and have not taken course online.

	Has Respondent			Std.	Std. Error
	taken Online Class	N	Mean	Deviation	Mean
Are online classes	Yes	144	2.83	.374	.031
equal to 4 year	No	93	2.88	.357	.037
Are online classes	Yes	146	2.38	.600	.050
equal to CC	No	94	2.53	.543	.056

Table 4-26. Courses offered by online institutions compared to traditional 2 year

	Superior	Equivalent	Inferior	Response Count
	11	116	118	245
Responses	4%	47%	48%	
		answer	245	

^{*}In your opinion do you consider courses offered by known online universities (such as The University of Phoenix, Capella University, Kaplan University) compared to courses offered by traditional two-year community colleges to be

Table 4-27. Independent samples test

Equality	of Mea	ากร	
	Std.	95% Confidence Interval	
Mean	Error		
Diff	Diff	Lower	Upper
048	.049	145	.048
155	.077	306	004
		Mean Error Diff Diff 048 .049	Mean Error Diff Diff Lower 048 .049145

CHAPTER 5 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

In an effort to determine the acceptability of degrees earned partially or entirely online as credentials for employment in the field of public accounting the researcher conducted a study into the attitudes of certified public accountants (CPAs) working in public practice the south eastern United States. The states included in the study were Florida, Georgia, Tennessee, South Carolina, North Carolina, Alabama, Kentucky, Mississippi, and Louisiana. The researcher surveyed certified public accountants concerning their perceptions about online degrees and their willingness to hire candidates for an entry level staff accountant position. The study described three scenarios; in each of the three independent scenarios the participant was asked to compare two applicants and signify how likely they would be to recommend each of the applicants for the job. The differentiation between the two candidates in each of the scenarios was the manner in which the applicant had obtained the necessary degree in accounting. The applicants in question either completed 100% of the required courses towards a degree in accounting in a traditional classroom setting or completed 50% of the required coursework online and 50% in a traditional classroom setting or the applicant completed 100% of the courses required to obtain the necessary degree in accounting online.

A second purpose of the study was to examine if the participant's personal experience with online education or online courses had an effect on the perceived value of a degree earned online versus a degree earned in a traditional classroom setting.

A third purpose of the study was to examine if the type of accounting firm, age, or gender of the participant had an effect on the perceived value of a degree earned online versus a degree earned in a traditional classroom setting.

The population was obtained from a list provider of certified public accountants in the United States. The researcher sent an e-mail invitation to participate in the study to the certified public accountant's contact e-mail address provided by the list. The e-mail invitation contained a hyperlink to the study located on a web based survey company's website. The study yielded a total of 255 responses.

Conclusions

Although the findings of this study are not final or conclusive it was evident from data obtained that an accounting degree earned partially or entirely online was not perceived as equal to a degree earned in a traditional classroom setting by those making the hiring decisions at certified public accounting firms, those being CPAs of the accounting firm. The participants of the study overwhelmingly preferred the candidate with the traditional residential education over the candidate that had completed all or part of the required courses towards a degree online. These findings are consistent with those of similar studies conducted by Adams and DeFleur (2005, 2006, 2007) in several hiring situations. The current student that chooses to take classes online for the conveniences they provide or a student that must take courses online because traditional classes are full at some of our largest institutions may find themselves at a competitive disadvantage when it comes time for employment. A recent graduate of an online institution may find it difficult to gain entry into the field of public accounting, especially in the current day competitive environment for employment. When the participants of the study were asked how likely they would be to recommend a

candidate that had obtained the necessary degree in accounting in a traditional residential classroom setting compared to a candidate that had completed 50% of the necessary courses toward a degree online, 97% of the respondents indicated that they would either recommend or highly recommend the applicant with the traditional education and only 42% of respondents indicated that they would recommend or highly recommend the applicant that had completed half of the required courses online

The results were even more telling when the participant was asked to consider a candidate that had completed 100% of the required coursework in a traditional classroom setting and a candidate that had earned the required degree 100% online from a virtual institution. In this scenario only 9% of the respondents were willing to either recommend or highly recommend the applicant with the online degree, in contrast 98.3% of respondents indicated that they would either recommend or highly recommend the applicant with the traditional degree. These findings were consistent regardless of age, size of the firm the participant worked for or previous personal experience with online courses.

The study also revealed that a majority of respondents believed the type of institution (traditional residential, traditional with online courses and virtual) and the mix of online versus traditional courses an applicant has taken to be important in the hiring decision. Respondents indicated that the institution where the degree was obtained would be important in a hiring decision; these findings were consistent with those found in a study conducted with human resource professionals (Obringer, 2006). Nearly 80% of respondents indicated that the type of institution from which a candidate earned his or her degree was important as a hiring criteria and 65% of respondents indicated that the

mix of traditional versus online courses a candidate took towards earning a degree was important in the hiring criteria. This combined with the fact that there was a significant preference for the candidate with the traditional education indicates that again a student that has taken courses online or has an earned a degree online or from a virtual institution is at a disadvantage when it comes to being hired in the field of public accounting.

Previous studies that looked at the acceptability of online degrees as credentials for employment or as credentials for admissions to graduate school did not indicate any differences with regard to demographic differences. There was significant difference found in the perceptions of men and women in several areas of the study. Women appeared to be more open to different forms of education and did not rate a degree from a traditional institution as highly as men even though a majority of both men and women surveyed preferred the traditional degree over the degree earned partially or entirely online. The mean response from women was consistently lower than that of men for the candidate with the non-traditional degree in each of the three scenarios given, meaning that women indicated a higher level of recommendation for the candidate with the non-traditional education than did men. Conversely, men had a lower mean response for the candidate with the traditional degree in each of the three scenarios than did women indicating that men gave a higher level of recommendation to the traditional education or more traditional education than women. Women were also less likely to indicate that they type of institution from which a candidate earned his or her degree was important in the hiring criteria. This continues to support the possibility that women are more open to nontraditional forms of education.

It is interesting to note that when the participants were asked if they believed that accounting classes could be effectively taught online the responses were split with nearly half believing that accounting courses could be effectively taught online and half indicating that they could not be effectively taught online. The comments that followed the response tended to qualify this answer indicating that only foundation courses should be taught online. Once again there was significance found in the responses of men and women with women being more likely to indicate that accounting courses could be effectively taught online and men more likely to indicate that they could not, suggesting again that woman were more open to nontraditional forms of education. Those participants that had previously taken courses online were also more likely to indicate that they believed accounting classes could be effectively taught online although 86% of respondents believed online courses to be inferior to those taught at a traditional four year college or university. The study also revealed that the participants with previous experience with online education were more likely to indicate that they believed online classes to be at least as good as those courses that would be offered by a community college or two year institution. This finding could indicate that as more and more people take courses online, the understanding and acceptability of this form of education could continue to increase.

The qualitative comments suggest that the greatest perceived shortcoming of online education was the lack of personal interaction with other students and faculty. Professionals in the field of accounting considered the skills learned and developed in relation to personal interaction including dialog with colleges/classmates, the ability to question and be questioned face to face and other opportunities for interaction provided

by the classroom setting to be a key to success beyond what can be obtained from books and exams and transfer of knowledge from professor to student. The act of transferring knowledge from professor to student was not enough; the college experience in its entirety was what was expressed as important. This was repeatedly mentioned as a reason for preferring a candidate that had obtained a degree in the traditional manor over a degree obtained online.

Implications

As colleges and universities seek to find ways of increasing revenues, the number of online programs and online courses offered by these institutions will also continue to expand. The largest growth in online education has been from the largest institutions that already offer online courses expanding online course offerings (Allan & Seaman 2009). The results of this study clearly indicate that degrees earned online or even partially online are regarded as inferior to a degree earned in a traditional residential college or university. An unintended consequence of this growth in online education could be the creation of a second class of graduates, with those students that have completed all courses towards a degree in a traditional residential program being on the top and students with online courses having their degree devalued. Even though past research has indicated that online courses have resulted in outcomes and test scores equivalent to those from traditional residential courses, the perceived value and acceptability of online courses and of online degrees is clearly another matter and not deemed equivalent by those making the hiring decisions. This research indicated that at least in the field of accounting, prospective employers do prefer a traditional degree and do not perceive a degree earned online as equal.

Students that are making the decision between a traditional residential program and one offered online need to understand the implications of the decision, if prospective employers are going to devalue the degree earned online or even partially online the student needs to make an informed decision. Colleges and universities that offer such programs need to understand the implications of these programs on both the graduates and the employers. Colleges and universities are offering courses online and market them as equivalent to those offered in a traditional residential classroom setting. Online courses are used to fulfill the requirements towards college degrees just as those offered in residential programs, but the potential employers appear not value them equally, the results of this study indicate as much. Colleges and universities could potentially be perceived as doing a disservice the students enrolled in these courses. If employers are questioning the value of such degrees, important ethical or policy issues could be raised.

Recommendations for Further Research

This study was limited to the area of accounting, more specifically the participants of the study were certified public accountants working in public accounting firms and the candidates in question were limited to applicants that had earned degrees accounting from accredited institutions. In order to gain a better understanding of the perceptions and acceptability of online education as credentials and preparation for employment this study should be repeated in other areas of study and other professions. This study should also be repeated in the field of accounting to see if the acceptability and perceptions of online education change over time.

Some of the qualitative comments lead the researcher to believe that there were different perceptions of online education depending on the academic level, be it

graduate or undergraduate. This study did not specify the necessary degree for employment as being a graduate or undergraduate degree in accounting. This omission was by design. Public accounting firms hire candidates with either a graduate or an undergraduate degree in accounting. The academic qualifications for employment differ by state primarily determined by the requirements for the certified public accounting exam. It would beneficial to do further research exclusively in the area of graduate education in the area of accounting as well as graduate education overall. This could be very beneficial to many constituents in light of the increase number of online graduate programs in both traditional and virtual colleges and universities.

The results of this study clearly indicate the need for further research to better understand the acceptability of online education. It appears evident from the growth in online education in the past several years that this form of education will only continue to expand, therefore understanding the marketability of an online degree needs to be better understood in order to benefit all of the stakeholders involved.

APPENDIX A SURVEY INSTRUMENT

The Acceptability of Online Education as Credentials for Employment

The following questionnaire consists of only a few questions. Each question can be answered by checking a box. Your participation should require no more than 10 minutes of your time.

All questionnaires are anonymous and responses will be aggregated and reported in summary form. Thank you in advance for your participation.

DIRECTIONS: Listed on the next page are three different scenarios. In each, the applicant has applied for an entry level staff accountant position that is currently open and under the supervision of your department or area. Please assume that in each of these situations you will be the person who makes the final recommendation as to which of the applicants should be hired.

Please also assume the following:

- (1) Each applicant has the same: (a) high level of academic excellence, (b) excellent work history during college, (c) good recommendations from prior employers, and faculty members (d) favorable personal and professional qualities.
- (2) Each applicant has earned a degree in accounting from an accredited institution but has limited professional experience directly related to the staff accountant position.
- (3) As a result of initial interviews, neither applicant stands out as the clear choice for the position. In the above respects, both have the qualities that your firm/organization considers desirable.

For each of the independent scenarios select the category that best expresses your opinion for each of the two applicants regarding how likely you would be to recommend as the most qualified. For each applicant select only one level of recommendation for the open position.

Applicant B

Part 1 Scenario One: Applicant A: has the necessary degree in accounting. The degree was awarded by an accredited college or university where 100 percent of the applicant's courses were completed via traditional classroom and lab instruction. Applicant B: has the necessary degree in accounting. The degree was awarded by an accredited college or university, where 50 percent of the applicant's courses were completed via traditional classroom and lab instruction and the other 50 percent of the applicant's courses were taken online. Recommend with Strongly recommend Recommend Unsure Would not recommend reservation Applicant A 0 0 0 Applicant B 0 0 Scenario Two: Applicant A: has the necessary degree in accounting. The degree was awarded by an accredited college or university where 100 percent of the applicant's courses were completed via traditional classroom and lab instruction. Applicant B: has the necessary degree in accounting. The degree was awarded by an accredited "online university." This university does not have a campus, classrooms, labs or library, and 100 percent of the applicant's courses were taken online. Recommend with Strongly recommend Recommend Unsure Would not recommend reservation Applicant A

O

Scenario Three:

Applicant A:

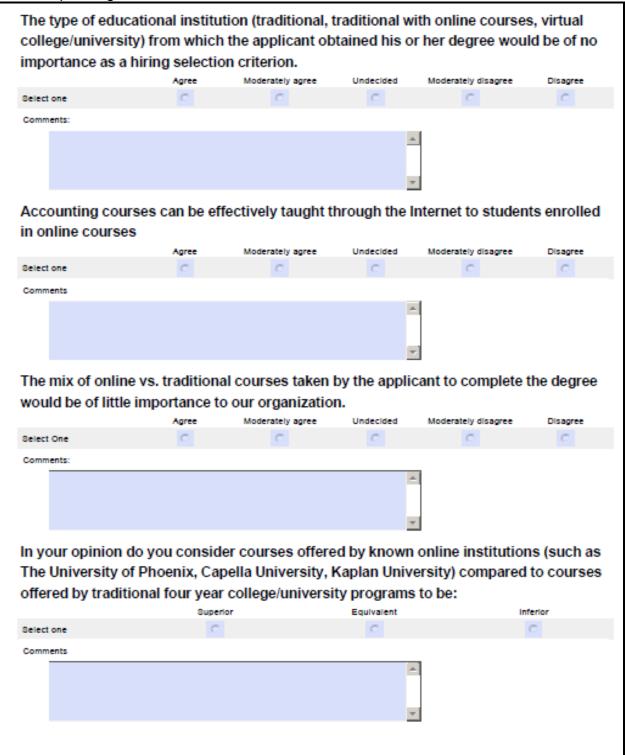
has the necessary degree in accounting. The degree was awarded by an accredited college or university, where 50 percent of the applicant's courses were completed via traditional classroom and lab instruction and the other 50 percent of the applicant's courses were taken online.

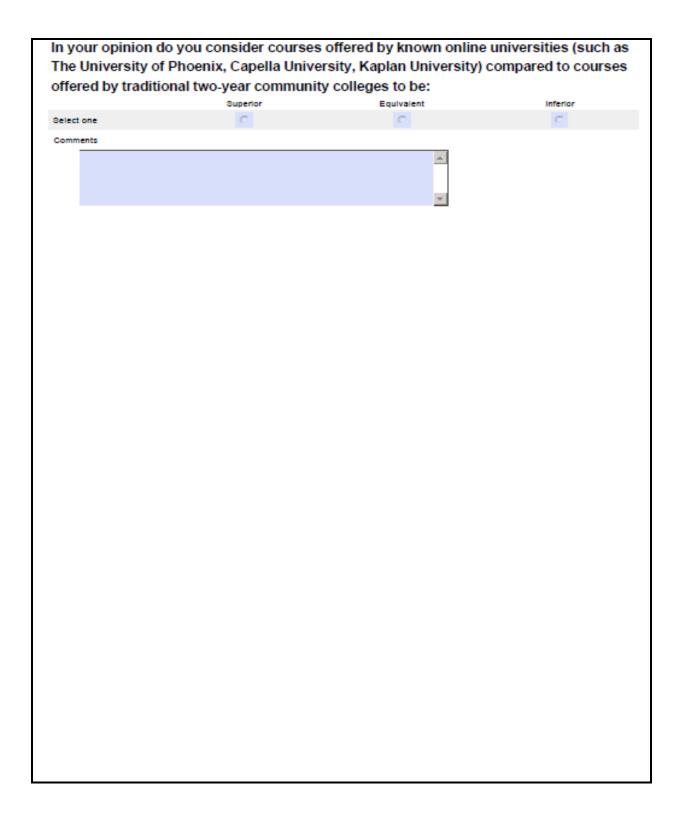
Applicant B:

has the necessary degree in accounting. The degree was awarded by an accredited "online university." This university does not have a campus, classrooms, labs or library, and 100 percent of the applicant's courses were taken online.

	Strongly recommend	Recommend	Unsure	Recommend with reservation	Would not recommend
Applicant A	C	C	O	C	C
Applicant B	0	C	0	0	0

Part 2 Explaining Your Answers





Part 3 Background/Demographic Information

Have you ever taken an onlir	ne course?			
C Yes		C No		
If you resonded yes to taking	g an online cour	se, what type of o	course was taken?	
Continuing Professional Education (CF		Graduate		
Undergraduate		Cther		
Other (please specify)				
Does your organization reim (traditional or online)?	burse employe	es for any portion	of educational expenses	
C Yes	C No		N/A	
Comment				
		4		
		▼.		
lf your organization does ren	niburse for edu	cation expenses,	do they reimburse	
employees for educational e		-	-	
C Yes		C No		
Comments				
		_		
		▼		
Please indicate the type of fir	rm you work for			
Local	National	E	Big Four	
Regional	International	E	Other	
Other (please specify)				
Please indicate your age gro	oup:			
Please indicate your age gro	oup:		55 +	
		Z.	55 +	
below 2525 - 34	C 35 - 44		55 +	
below 2525 - 34	C 35 - 44	C Female	55 +	
below 25 25 - 34 Please indicate your gender Male	C 35 - 44 C 45 - 54	C Female	55 +	
below 25 25 - 34 Please indicate your gender	C 35 - 44 C 45 - 54	C Female	55 +	

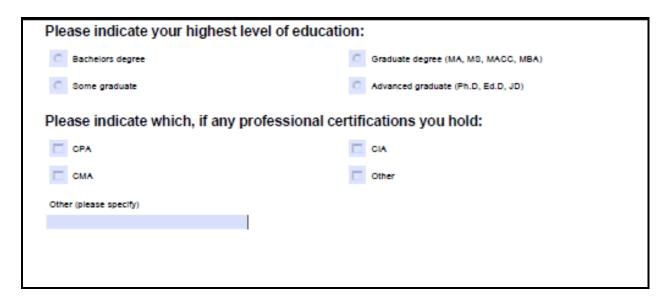
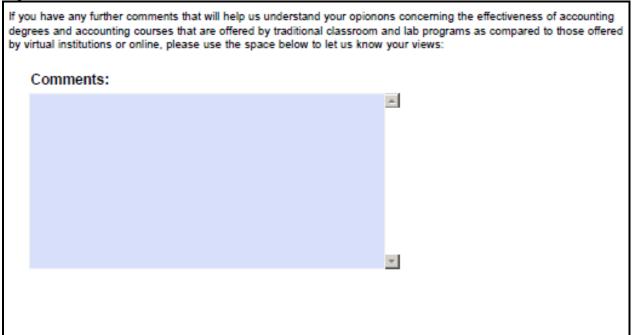


Figure 1 Part 4 Comments



Thank you for your participation.

APPENDIX B APPROVAL OF PROTOCOL



PO Box 112250 Gainesville, FL 32611-2250 352-392-0433 (Phone) 352-392-9234 (Fax) irb2@ufl.edu

DATE:

June 23, 2009

TO:

Monica M. Jeancola 625 Hayman Ct.

Debary, FL 32713

FROM:

Ira S. Fischler, PhD, Chair

University of Florida

Institutional Review Board 02

SUBJECT:

Approval of Protocol #2009-U-0462

TITLE:

An investigation into the acceptability of online degrees earned as credentials

for obtaining employment in public accounting firms

SPONSOR:

None

I am pleased to advise you that the University of Florida Institutional Review Board has recommended approval of this protocol. Based on its review, the UFIRB determined that this research presents no more than minimal risk to participants, and based on 45 CFR 46.117(c), An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either: (1) That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or (2) That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

Ado

The IRB authorizes you to administer the informed consent process as specified in the protocol. If you wish to make any changes to this protocol, *including the need to increase the number of participants authorized*, you must disclose your plans before you implement them so that the Board can assess their impact on your protocol. In addition, you must report to the Board any unexpected complications that affect your participants.

If you have not completed this protocol by <u>May 9, 2010</u>, please telephone our office (392-0433), and we will discuss the renewal process with you. It is important that you keep your Department Chair informed about the status of this research protocol.

ISF:dl

An Equal Opportunity Institution

APPENDIX C INVITATION E-MAIL TO PARTICIPANTS

Dear Colleague,

My name is Monica Jeancola. I am currently a doctoral student at the University of Florida's College of Education. Like you, I am a CPA, and I know the demands of that curriculum. I am also an instructor of accounting at Stetson University's Rinker Institute of Tax and Accountancy. University accounting programs are continually looking for ways to improve the curriculum as well as course delivery methods.

I need your help. Your feedback to my survey (Accounting Education Survey) about accounting instruction will help us better understand how to produce the most effective college accounting graduates. With the increased availability of distance education and online courses, many of today's candidates are taking one, several or all of their courses online. The purpose of the study is to examine practicing accountants' perceptions of the academic quality and employability of students involved in various forms of delivery of accounting education. My project investigates the views of an undergraduate or graduate accounting degrees earned online or from a virtual institution as opposed to a traditional degree granting institution where face to face classroom time is the norm.

You can help by completing the survey at this link: Accounting Education Survey. or at https://www.surveymonkey.com/s/DJQPR7W. The survey will only take approximately 10 minutes of your time.

Your confidentiality is guaranteed, and data will only be reported in summary. Submitting the survey is your consent for your responses to be compiled with others. You will not be individually identified with your questionnaire or responses. There are no direct benefits, risks or compensation to you for participating in the study. Results will be published in my doctoral dissertation as authorized by the University of Florida, and may ultimately be presented in other formats such as academic journal articles or conference presentations. You can request a copy of the summary results by e-mailing me at mjeancol@ufl.edu or mjeancol@stetson.edu.

You also have the right to express concerns to me at the e-mail or number found below. Additionally you may contact the University of Florida Institutional Review Board at irb2@ufl.edu or at UFIRB2, P. O. Box 112250, Gainesville, FL 32611-2250 or by calling (352) 392-0433.

Thank you in advance for your feedback and contributing to our understanding of an important accounting education issue.

Sincerely,
Monica Jeancola, CPA
Instructor of Accounting and Information Technology
421 N. Woodland Blvd, # 8358
Deland, FL 32723
(386) 822-8898; mjeancol@ufl.edu or mjeancol@stetson.edu

APPENDIX D PARTICIPANT COMMENTS

Comments from respondents for the first question of the second part of the study. "The type of educations institution (traditional, traditional with online courses, virtual college/university) from which the applicant obtained his or her degree would be

of no importance as a hiring selection criterion", are listed verbatim.

- 1) While online broaden access to our educational institutions, the degree of personal interface would be important in my hiring decisions.
- 2) I find that online candidates or more computer savvy & self-motivated. They tend to have self-taught discipline.
- 3) Classroom interaction with instructor in such courses as auditing allow the instructor to interject "real world" aspects of the profession not easily communicated online.
- 4) I do not have a problem with online courses from a University with a physical campus location but I have more reservations about one that has no physical campus. I guess it is because the one with the physical campus location likely has a long standing reputation already for the quality of its instruction.
- 5) The degree of interaction in a social setting is as important and knowledge of content. The type of institution is therefore an important criteria.
- 6) I think that the interaction with the faculty in the lecture format and the connection that the student makes with the faculty is one of the most important factors of an education.
- 7) Basic accounting requires practice sets, correcting ones errors and experience shared with peers.
- 8) I think the learning process is more well-rounded when the student has direct interaction/contact to other students and or a professor
- 9) I view certain on-line programs as not being as good as in class learning.
- 10) Reputation of the institution matters whether traditional or not.
- 11) The Educational Institution is a big factor in this type of decision.
- 12) The social aspects of college are an important part of education. The degree from a virtual school will not provide the social aspect of being a CPA.

- 13) Accounting as I have practiced for the last 37 years not only requires analytical skills but the ability to communicate with clients, staff, third parties. Interaction with Professors begins the process in developing these skills and begins the progression of an individual's mental evolution needed to handle not only the accounting issues but the human complexities that they will face in the market place.
- 14) We already have opinions as to which institutions provide the best candidates for our practice
- 15) Being from the old school (I've been in practice 40 years), I would not be comfortable with a student who took all their courses online. There's no face-to-face interaction, it's difficult to give an exam that has a written portion versus multiple choice, true/false, etc., and there's no opportunity to see how the student interacts with other students. Personality is an extremely important criteria for me. I chaired the AICPA Task Force which created the Model Curriculum to be used in a 150 hour environment. One of the major conclusions reached by the task force (I was the only non-academic member) was the need for non-technical skill training such as oral and written communication. This is not as likely in an online environment.
- 16) I am the managing partner of a 15 person firm. I personally would not consider hiring an applicant that went to a virtual school. It's not just about course content, it is about day to day appearance, inter-personal skills and all the miscellaneous knowledge available on a campus.
- 17) A completely virtual school allows little collaboration. Even though public accounting doesn't seem to lend itself to collaboration, it is a vital part of our work.
- 18) grades presentation work ethic are all important factors educational institution can be a factor but not necessarily an important one
- 19) We always consider where the accountant received their degree.
- 20) I believe that the perception...correct or incorrect...exists that a 100% virtual educational experience is not as effective as a traditional education. Most "traditional" schools offer more and more online classes today...but higher level classes within the major (accounting) are perceived to be better in a more traditional setting.
- 21) Level of knowledge and controlled tests is more of an indication of the perception. I have taught in classroom and online my in-class students have a harder time with tests that are not open book but those who succeed can more effectively remember what was taught
- 22) I prefer blend of independent self-discipline often accompanied by online programs, and collaboration with peers along with Q&A in classroom.
- 23) I find that most graduates as a whole, are not employable without some type of "on the job" experience and those with minimal real world exposure, still require considerable training.

- 24) I still think one needs classroom type instruction
- 25) I currently view pure online universities as "buy a diploma" institutions.
- 26) I believe that online/virtual college education has the potential for cheating and that fact cannot be ignored. I strongly believe that traditional classroom instruction is the best method.
- 27) I teach online courses and I know the students cannot receive the same level of instruction as in the real classroom.
- 28) Accounting, much less forensic accounting, requires individuals to utilize far more communication and intuitive skills than many other careers. Many of these skills can and should be enhanced through face-to-face interaction that is not conducive to most online learning experiences (with or without two-way video).
- 29) I give much more credit to a UF grad over someone from Univ of Phoenix
- 30) My experience with one accounting staff revealed the on-line education didn't produce the best results.
- 31) While I would seriously question what appeared to me a mail order junk internet schooling, I find that the college degree itself is no guarantee of quality any longer. I look for work experience and former supervisor comments with much more weight than college credentials. If they can't perform in the probationary period, the candidate is out.
- 32) I have an issue with an individual that earned his degree without class room participation and without any human interaction.
- 33) Depends on the particular institution and the requirements of that institution. Our most recent new hire obtained her degree (it was a second degree her first was in mathematics) taking all of her courses on line. There were some benefits to that process just as there are some benefits to the classroom setting. I would like to see a mix of on line and traditional courses.
- 34) Makes a big difference what school it is.
- 35) I agree with a graduate degree program that is 100% online but I don't agree for this in a undergraduate degree program.
- 36) Certain courses lend themselves to online instruction and I have no problem with that form of instruction where appropriate. My concern would be what kind of interpersonal skills the candidate would have if they received 100% of their instruction through online or virtual instruction. Somehow the candidate needs to be able to bridge the gap between being book smart and the verbal communication skills needed to interact with a client.

- 37) I am not that familiar with on course so my answers have some issues. However, with the one person that I am familiar with he seems to be able to do the work but takes additional time to do it. That being said I don't know if it is the person or the system. Online may allow a person additional time to perform work (as compared to campus courses) which might be acceptable academically with no or limited time frame deadlines but is not acceptable with the time deadlines that we regularly have to face.
- 38) Traditional and established educational institution has higher degree of credibility than total online\ virtual\college university at least in the present business world from my perspective.
- 39) In public accounting, interpersonal skills are very important. I marked unsure on the candidate with less traditional class time, because it depends on the reason they chose the online route. If it was in order to work more hours they may be a better candidate than the traditional candidate. If there was no compensating interpersonal experience for the online candidates I would rate them lower
- 40) it is not only the course and how it was performed but the interaction and communication skills demonstrated by students that enter into the hiring decision something that non-traditional institutions cannot offer.
- 41) Online courses do not demonstrate the ability to work in team settings.
- 42) I am not aware of a completely virtual accredited degree program with a good reputation, or any reputation for that matter.
- 43) I think students need the "hands on" attention and collaboration that a traditional institution can offer.
- 44) Accounting students need more real world experiences and I feel like if they are going the online route or classroom setting either one, should include a mandatory internship.
- 45) Online classes do not offer interaction with others an important aspect of public accounting
- 46) I believe the interaction received in the traditional classroom setting would provide a better conceptual understanding versus strictly on-line courses.
- 47) Less than traditional institution would suggest more investigation into actual knowledge level of the individual.
- 48) Class room has more control and better interaction with examples and discussion as. On line courses can be taken by anyone with any kind of help. If the online classes test were in a controlled environment or monitored for each test then I would place more importance on the person.

- 49) A large part of success in public accounting consists of personal interaction. We currently observe that individuals who have a larger portion of their lives connected to electronic content are less capable in settings requiring personal interaction. On-line learning can be efficient, but classroom settings, particularly in upper level course with smaller class sizes and active debate, are important skill builders.
- 50) The school would make significant difference in my decision but the school and the grades would only be a portion of what makes up the decision. The personal impression of the person, the way they carry themselves, their GPA and other elements would probably mean more than the school. No one graduates from school capable of doing much in accounting. Their person strength of character, desire to grow and achieve, their work ethic are very important to determine if they are an acceptable candidate.
- 51) I use the credibility of underlying educational institution as one of the basic qualifying criteria. I consider a degree from an online, non-campus "university" to be equivalent to continuing professional education. It provides technical knowledge but is not equivalent to a university degree. People with these qualifications are not offered the opportunity to interview.
- 52) Class room interaction helps build communication skills. I'm not familiar with online courses or virtual universities and how they conduct classes (i.e. do they conduct classes via video conferencing?), however, if a candidate has other experiences that expose them to the need to build direct communication skills, then that would be an important factor.
- 53) I would want to know the reputation of the educational institution and the past results of its graduates. Have we had former students and how did they perform? Do I know of other firms who have hired the students and how did they perform?
- 54) It would depend on other factors
- 55) Not sure about 100% virtual college
- 56) Demonstrating the ability to adapt to on line courses is good but interaction in the traditional setting is also important.
- 57) I was hired into a fast track management program of one of the largest top 10 corporations because I didn't look like an Accountant. Back to value...I encourage corporations to hire "the best." A mis-hire can cost the hiring company many times over the financial package under which they are hired.
- 58) There are other elements to consider such as in a more traditional environment there is likely more face-to-face interaction with other classmates/teachers and therefore better development of interpersonal skills

- 59) The experience of interacting with other students in a traditional classroom environment provides an opportunity to develop interpersonal skills that are very valuable in today's competitive environment.
- 60) The ability to ensure the student is actually participating in the on-line course without cheating.
- 61) I'd worry about what coursework was taken and the reliability of the testing process.
- 62) It would matter unless you had prior experience with a graduate from each type of education institution (traditional,). It makes a difference even with graduates of two traditional educational institutions based on prior history with their graduates,
- 63) There is no substitute for hands on experience and direct interaction with peers and instructors.
- 64) I have taught accounting at the college level for 35 yrs and I had (at times) a tough time making sure that the work completed was the students. Students can be trusted when supervised--there is no supervision with online courses. I don't know whose work is being handed in.
- 65) I believe the student needs to have some face to face interaction with faculty and students to be a rounded individual
- 66) It is very important to go to a traditional school. From my experience the "online" or "non-traditional" universities are much easier and anyone can get in unlike a normal university.
- 67) While a lot of work can be done via internet, remote, there are important communication and social skills learned in a traditional environment.
- 68) I think there is value in traditional classroom settings related to peer pressure and interpersonal interactions.

Comments from respondents for the second question of the second part of the study. "Accounting courses can be effectively taught through the Internet to students enrolled in online course", are listed verbatim.

- 1) I feel that 99% of accounting is in fact computer based & instruction via webinar's etc. are just as effective to students as in classroom.
- 2) It depends on the format of the online course and the ability of the student to interact with the instructor and his/her peers.

- 3) The technical portion can be taught over the internet to some extent. That is not the total education process. You lose the interaction with the professor and fellow classmates.
- 4) Classroom interaction with instructor in such courses as auditing allow the instructor to interject "real world" aspects of the profession not easily communicated online
- 5) I believe you can teach bookkeeping though the internet, accounting is more complex it requires interpretation analysis and judgment. These are not always clear. The development of these traits in my opinion require interaction with talented professors who can help these students begin to understand the search for wisdom that must occur through they're professional career. "we can know from other men's knowledge we cannot acquire wisdom from other men's wisdom"1.

Dov Siedman author Book "How" "Why how you do anything means everything in business and life" Sorry about the footnote but I am not an author, but the quote which I use often came from the book.

- 6) Accounting courses are teachable online. However, as noted above, book learning does not prepare the student for the real world. It only gives them the ticket to enter the real world. I've seen too many cases where the grades were great but the new hire couldn't interact with peers, had comprehension issues in a practical environment, and accordingly did not survive. Use of adjunct faculty in classroom situations would do more to train the professionals of tomorrow than just teaching debits and credits from a textbook.
- 7) That statement is probably true if course content were the only knowledge you get in a "live" course, there is so much learned by the student in the banter of real people
- 8) It depends on the student. I think the perception that classes are better in person in your specific area of study (accounting) is a valid one.
- 9) More testing and communication by the instructor is necessary for online classes to ensure the knowledge is not just coming from the book
- 10) Dependents on students, as I understand there have been studies that suggest there are approximately five different learning styles among us.
- 11) Probably, but I have no personal experience in this method to relate to.
- 12) Certain parts of a course could be taught via internet but face to face interaction is an important part of the education process.
- 13) depends......accounting is difficult as it is so one would need someone to ask questions to and to bounce ideas off of.

- 14) Students need to have instructors in the classroom to answer questions and demonstrate the material. Students also need the interaction with other students and their instructors to learn to effectively communicate with people in the real world. Too many people can only communicate through their computer, and face to face personal relationship skills are not be learned.
- 15) Accounting education can be effectively delivered through any number of systems. Venue, relative to that delivery, is secondary to the quality of content.
- 16) There are some accounting courses that could be effectively taught by the internet but some should have classroom interaction
- 17) There is something to be said for the collaborative/collegial atmosphere developed in the classroom and work groups. My direct experience with on-line courses seems to default to a "fill in the squares" kind of education providing little "dimension" to the student's experience.
- 18) I think for some students, they already have their social interaction and communication/teamwork skills in play. We have a senior accountant now who is a working mother getting her final classes for her BS degree online. She was in the military for four years and is more mature than a college kid right out of high school. The internet is a god send to her and of no importance as far as we are concerned about the quality of her education.
- 19) It really depends on the student, and can create an issue with concentration and multi-tasking that will be reflected in the working habits of the individual.
- 20) Continue to believe that personal interaction is an important part of student development at a university
- 21) I see no problem with a student learning the basics online.
- 22) The more advanced accounting\tax courses would be more difficult to teach in an online manner only
- 23) Does not always include real life accounting scenarios.
- 24) I have not seen or taken an accounting course online so I am not able to judge.
- 25) I believe in a "hands on" environment. Yes online classes are a wonderful way for students to be able to receive further education, but I would need to see firsthand what they are able to do. Guess you can say I'm "old" school.
- 26) This really becomes self-teaching at this point, social interaction is important in our profession, this could be a factor in "home school" situation. Would have to do more investigation.

- 27) Some may but for my above comments at present, I do not believe they are monitored so I do not think they are as effective.
- 28) I think they can but I would still like some actual classroom experience, if possible. The level of the course would also impact how effective it would be.
- 29) It is easy to fall behind in online courses. Depends on the person as to how much is learned.
- 30) I would think it would depend on the individual.
- 31) accounting requires judgment and experience and every situation has to be properly analyzed to reach the correct conclusion. Pure online learning is learning in isolation with minimum feedback.
- 32) The classroom offers so much more inaction amongst teachers and students which is so necessary. The other students opinions and experiences are an integral part of the learning experience.
- 33) Students can learn the basics through on line courses. This assumes an instructor is available to assist in difficult areas.

Comments from respondents for the third question of the second part of the study. "The mix of online vs. traditional courses taken by the applicant to complete the degree would be of little importance to our organization" are listed verbatim.

- 1) Depends on which ones were taken traditionally versus online. Mechanical aspects of accounting and tax could probably be taught as effectively online as in a traditional classroom. However, when the material involves more judgmental areas, the instructor's interaction with the students would provide insight into the reasoning behind certain decisions.
- 2) The mix is very important. A limited number of online courses would not be problematic. But anywhere close to 50% would be a problem.
- 3) A 50/50 mix of online and traditional would help insure good technical and social skill development. A mix could strengthen a candidates skills by experiencing the best of both types of educational processes.
- 4) Online courses are fine and can teach the fundamentals of accounting, but they do not teach the interpersonal skills needed to be a CPA.

- 5) I believe my earlier comments accurately reflect my position. I would say some courses could be taken online, but not the ones that may be crucial in the real world environment
- 6) Which courses taught online as opposed to in class would be of importance
- 7) I often simply describe our hiring criteria as aptitude and attitude. If our selection process works, we are most interested in candidates that have both, and less interested in how they emerged.
- 8) We test all candidates for skill level.
- 9) At the end of the day, a student must have communication skills beyond typing in keyboards in order to stand out in our field. Whether they get this in high school or jobs experience or in college is immaterial to me. Colleges have become the high school of my day and the middle school of the 50's. As long as a candidate shows certain skills to survive in business and an aptitude to apply knowledge with common sense it matters little to us how they got their formal education.
- 10) I would love to see this.
- 11) Continue to believe that personal interaction is an important part of student development at a university
- 12) If the candidate demonstrated an ability to converse in "accounting language" I don't care how they got their degree. Most candidates I've seen, however, aren't able to do this or to apply the knowledge they have to real life situations where no one lays out the pertinent facts for them. It seems that they consistently have difficulty investigating and asking questions to determine the required information.
- 13) It depends on the 'rankings' of the institutions and the reasons for online vs. traditional. Many online schools, even though accredited, have reputations as diploma mills.
- 14) Would depend upon which accounting on line program the applicant was enrolled in.
- 15) An occasional online course, less than 10%, would have little or no effect.
- 16) Disagree, would want to evaluate more thoroughly for the online student
- 17) some classes may be better on line than others but until more controls are placed, I cannot say I agree. The other types of testing such as CPA, CFP, CFE, all required monitored exams so should the class work..
- 18) It would matter if most of major courses were taken online
- 19) As I said on the above answer, the level would be important.

- 20) Some courses, like auditing may be hard to learn from without interaction with other students and instructors.
- 21) There are certain courses that require interaction with other peers and instructors to fully understand the content of the course.
- 22) Better than all online but my previous answer applies here also.
- 23) I would take an applicant from a traditional school over a on line school. A mix would be acceptable with the emphasis in the major field more in the traditional school.
- 24) It is important. Going to traditional courses requires more discipline and dedication.

Comments from respondents' fourth question in the second part of the study. "In your opinion do you consider courses offered by known online institutions (such as The University of Phoenix, Capella University, Kaplan University) compared to courses offered by traditional four year college/university programs to be, superior, equivalent or inferior", are listed verbatim.

- 1) Although I perceive them as inferior, the truth is that I really don't know whether that is truly the case.
- 2) Faculty for those institutions are generally not of the caliber of full time university faculty. Their skills as instructors are suspect.
- 3) The teachers are not the same. Some may be better than college professors, but little quality control of the teachers exist in the online institutions.
- 4) not sure- this was not a choice in your survey
- 5) We've never had a good experience with an online university degreed person
- 6) It is sad that you can buy a degree online. I have never heard any of my peers say "Wow, a University of Phoenix Grad"
- 7) i really have no basis for making that comparison
- 8) Perception...but also somewhat backed up by limited hiring we have done from online institutions compared to traditional educational settings.

- 9) I have seen too many instances where the course online was taught moderated by a student who had very little experience.
- 10) The college campus experience is a social environment that aids young candidates in migrating into work environment. My score above is slight, as I have a lot of respect for the economics and quality of programs in online environment. I confess some ignorance about how or if there are opportunities within the online world to also attend certain functions for presentations and Q&A. Challenge for online programs is to develop market plan to close this gap, or if there are shortcomings in program, to close this as well.
- 11) Frankly, I haven't experienced any difference.
- 12) this is an educated guess by me as I am not altogether sure
- 13) I taught for Phoenix and some of those students should not have graduated from elementary school. They get through the program by leeching onto the brighter students and allowing the group project grade to carry them.
- 14) I see various curricula and syllabi from these institutions as part of my participation in a regulatory committee. I think there is a very distinct difference.
- 15) We get professor recommendations for most of our hires. These recommendations are based on professor history with the student.
- 16) I have long believed you get from a class what you want to take from it. Those who demand more from online instructors would do the same in person. Those who do the least to get by will be outed in the real world. I think online classes can be effective, but there are some students who do not learn well in this environment. Students need to know themselves and have definite plans to make the most of a class.
- 17) I marked equivalent. That is far from equal. As an analogy what we found in race relations is that there is no such thing as "different but equal". Universities should strive to offer both.
- 18) Continue to believe that personal interaction is an important part of student development at a university
- 19) I have no firsthand experience to be able to make this comparison.
- 20) Equivalent in most cases as far as content. They do not require group interaction that is necessary for most accountants who want to progress within a firm.
- 21) I would evaluate each one and choose the most suitable one regardless of the institution
- 22) We have had one employee who did this and her knowledge was insufficient.

- 23) Again the on-line courses don't provide the personal interaction.
- 24) Opinion based on perception not actual knowledge of those institutions
- 25) Since, I moved to Tucson, AZ. I have worked for a few firms. and all co-workers have 4 year degrees at traditional universities. and their knowledge is so poor of accounting principles it is not even funny. I, handle so many IRS audits for the one firm. There was no records or no journal/ledger just a spreadsheet titled e.g. auto:petrol and amounts listed. no dates, source documents. I ended up designing my own spreadsheet work-book for handling these corporations and re-doing their books from scratch. IRS was surprised when we starting meeting for going thru companies books. I was able to provide and support every entry I made audit time from 4+ hours to less than 1/2 hour. I also have resigned and started my own firm. There are so many businesses here with screwed up records or as IRS has said might as well say no records. I question the uni's these colleagues graduated from.
- 26) It allows more students to take courses to be able to get an education but the expense of such courses does not compare to the bricks and mortar. It should be cheaper but in some cases it is the same or more expensive. Also same opinion as above.
- 27) I don't have enough personal knowledge to have a view.
- 28) I am not familiar with the online courses. I believe some of the introductory or non accounting courses could be taken online. I believe the major accounting courses should be taken in a classroom setting because the interaction between student, instructor and other classmates is paramount to a robust and well-rounded experience.
- 29) depends on the quality of the traditional school
- 30) But I am not familiar with those institutions.
- 31) I prefer to pass on this question. I was asked to consider "teaching" @ The University of Phoenix and elected not to. Education is a pathway to knowledge, and it does not have to be in a room provided by a profit driven enterprise.
- 32) I am assuming that the traditional programs would be from equally well renown 4-yr. schools. There are poor traditional schools that I would hold as inferior to the best-known online programs.
- 33) Have no experience with them
- 34) Due to limited exposure to online institutions and graduates, I would answer inferior.
- 35) These schools (to me) have students that are "buying" their degrees. I have taught for one (once) and been offered jobs by others. I will NOT teach for these

institutions--you can get in trouble for giving a honest grade. The student wins every time. Don't forget an employer trusts your honesty in giving out grades.

- 36) They are for-profit organization and they want as much turnover as possible, hence the quality is not as good.
- 37) Really, undecided. I have known one individual studying for her associates degree in accounting and she explained how it works. I still feel that there are important communication and social skills learned in a traditional environment that is missed with online courses. Hiding behind a monitor...

Comments from respondents' fifth question in the second part of the study.

"In your opinion do you consider courses offered by known online institutions (such as The University of Phoenix, Capella University, Kaplan University) compared to courses offered by traditional two year community colleges to be, superior, equivalent or inferior", are listed verbatim.

- 1) No basis for evaluation
- 2) I really don't have an answer here because Florida 2 year schools have always prepared students to finish their 4 or 5 year degree at an appropriate accredited institution. We do not hire interns, part-time or full time people from 2 year schools.
- 3) My opinion is that online courses probably have the content of most two year colleges, they lack the interpersonal skills developed by contact with other students on a day to day basis
- 4) I'm somewhat guessing at this response I'm assuming a 'university' on-line or not would be superior to a 2 year community college
- 5) No real basis...two year community college level classes would probably have less of a distinction in an online setting compared to a traditional setting. The higher level classes (beyond community college level) would have...in my opinion...more of a distinction.
- 6) If score above permitted "different" selection, I would have chosen that. Not sure how to contrast, but I expect key for all three (traditional campus, community college and online) is dependent on the quality of enrolled students. Whichever educational model attracts the best and brightest wins
- 7) I am a product a two year community college and my experience for my first two years was in many ways superior to those of friends who went away to the larger four

year schools. Again, I find the source of schooling to be somewhat immaterial to the hiring decision.

- 8) Primarily because the 2 year programs are generally inferior.
- 9) Continue to believe that personal interaction is an important part of student development at a university
- 10) So much depends on the instructor. All things being equal, I don't have a problem with basic accounting courses that would be taken in the first two years being taught on line. I have no firsthand knowledge with candidates who have received degrees from the online universities in this question.
- 11) Again, I would evaluate each one and choose the most suitable course regardless of the institution
- 12) Lots of two-year colleges do great, but generally do not offer many "major" courses.
- 13) My perception of the courses
- 14) Community colleges can be for some people a better place to be. The online schools can be good also.
- 15) Inferior, if the same level courses are being discussed, i.e. accounting for sophomores, for example.
- 16) but depends on the community college
- 17) I taught at a two year college as well as a four year college and used the same testing and required the same performance. Can I say that for all teachers at a two year college? NO
- 18) Anything is better than the online universities.
- 19) Undecided.

Final comments from respondents are listed verbatim.

1) It has been my experience that traditional accredited schools do not necessarily ensure quality hires, it is up to the individual. Thus I see the possibility of an online student outshining the traditional student. Online education will be a stigma that will take time to overcome. It will take results to indicate otherwise. I look at it much like the way higher education might look at a home schooled student vs the traditional student.

- 2) If a candidate does not have real world experience working in a business, not necessarily a CPA firm and they have the highest level degree from any university we do not consider them. The other factor is software training, if a candidate has never used QuickBooks we don't consider them. Most businesses are severely under-served by the CPA community as a whole because accounting theory and tax are the main lessons taught. Teach them how to run a business, manage real raw data for management purposes, HR and practical real scenarios, learn that a tax return is a one time a year event. Learn that an audit is not everything. Give the students a vision for more than working for a big 4 firm that if they ever decide to leave that type of firm they have absolutely no marketable skills....
- 3) Perceived quality of the accredited institution affects my decisions as well.
- 4) I believe that online courses are easier to pass due to the lack of supervision required. This being the case I feel they are inferior. I may be wrong but listening to my clients talk about online courses it is easier to have someone else do the work or cheat or take advantage of the system in place.
- 5) I also have reservations about non-traditional universities with physical campus locations like DeVry University and the Keller Graduate School, so my bias is not just against wholly online institutions. I guess the longer an institution has been around or the more I know about it the more comfortable I would be with recommending one of its graduates. That said, I may also not favor a particular institution even if it is a long-standing traditional institution because I may have encountered several current or former employees from that institution who I feel did not get a good, well-rounded education.
- 6) I believe that all practical courses are better taught and discussed in front of a whole classroom where all pupils can ask questions in front of everybody else.
- 7) This survey was completed by our firm administrator rather than one of our partner CPAs.
- 8) The total campus experience is invaluable. The networking that is developed can be used for life. Also it is very hard to inspire a student over the internet vs. the classroom experience
- 9) very important to obtain classroom instruction, discussion in class, with differing opinions and points of view are crucial to the learning process
- 10) I feel that a large part of the value of a "traditional" accounting education is gained through the classroom "give and take" between students and professors which I think would be hard to duplicate in an online classroom.
- 11) I'm not sure why I answered the first page questions the way I did or why it appears I perceive some greater value in face-to-face in-classroom instruction over online instruction. It may have something to do with my age/experience although I whole-heartedly embrace the use of computers and technology in all aspects of life, including

business and education. I suspect it has everything to do with the fact I've never taken an on-line course and am unfamiliar with the quality of instruction. It certainly gives me cause to think about it.

- 12) I consider on-line courses to generally be more demanding for the student and produce higher levels of competency. However, traditional courses held on campus provide a physical social development culture that on-line courses cannot provide.
- 13) From discussions with other professionals in my firm and other similar firms, I think there is a general lack of knowledge about online courses. General consensus seems to be that filling in with a couple of online courses in completing your degree is OK, but that a student also needs the majority of class time to be in-person.
- 14) Online courses offered through existing traditional 4 year institutions are just as effective as attending through a traditional class room for graduate and other post graduate type degrees. For an undergraduate, a major majority of the classes should be taken through traditional classroom and lab programs. We would give very little consideration to an entry level staff who earned an undergraduate degree from an online university.
- 15) My opinion is clear from my previous comments
- 16) I believe the day to day exchanges that take place in "live" classrooms provide some of the most important chunks of an accounting education. Elimination of open question and answer, debate, or other academic discussions leave a student short changed. How do you get to know a professor, classmates or future professional peers without the necessary contact of attending class. Hope this helps
- 17) I believe certain on-line course work to be equivalent to traditional in-class instruction. However, I also believe there are other intangibles you get from attending the traditional universities. Extracurricular activities also plays a large role in those that a successful in the public accounting arena.
- 18) I do not consider the virtual college or university an educational institution. They are a profit motivated business and not a university of college. Education has to be secondary. I wonder what standers, if any, are met for accreditation by the virtual universities or the teachers or professors or whatever they call themselves. They should not allowed to be called universities or colleges. How about trade school.
- 19) A limited amount of on-line learning can be effective as part of an overall program of accounting education; however, the most valuable young professionals in my experience (those possessing technical knowledge, interpersonal skills, writing ability, etc.) have attended traditional four-year university programs, or community college/four-year university combinations. A computer screen cannot begin to match the richness of the educational experience generated by a committed college professor or instructor. You would have treasured the experience of sitting in Joe Master's classes!

- 20) I have a natural bias associated with having been educated 25 years ago at a UNC-Chapel Hill. I value the education and experience including revisiting campus still. So the branding of a university means something. I hear of professionals age 40 and older who have enrolled in online programs for advanced degrees, which I believe has a distinctive niche. One of my daughters attended community college first, then transferred to four-year school. This was attributed to her academic preparedness, but I also like this model as economic decision for many students and families. I have seen studies that too many of our college students are undisciplined in their behaviors and expect there is merit for this concern that college represents four-year party before work begins, and perhaps a little learning occurs too. I am open minded about online degree programs, but some strategies to overcome biases like mine, and to elevate brands for entry level personnel stills has some work to go. And perhaps time and success of online students' in profession will move cultural appreciation for this model. Hope my comments are helpful.
- 21) I usually try and take CPE online as it is more convenient for me and allows for me to schedule my time for CPE. As to online accounting for a degree.....as long as one can pass the CPA exam, one has obviously done well. If I had to hazard an educated opinion, I would think a mixture of online and typical classroom would be most effective...........
- 22) Personally, I feel that online courses offer a degree of flexibility and convenience that cannot be found when taking traditional classroom courses. However, from an employer standpoint, I feel that classroom experience and exposure cannot be replicated in an online course and as such the online degree lacks a certain desirable element. I also (perhaps unfortunately) still carry the perception that online degrees are sub-par and not of the same caliber or degree of difficulty as traditional classroom degrees.
- 23) There is not enough evidence yet to determine if online learning is equivalent to classroom learning.
- 24) I do not have enough experience working with new hires with virtual educations. I would like to see data on their pass rates on the CPA exam versus traditional students. A huge requirement for success in public accounting is to be able to communicate effectively with everyone involved in client service, including clients at all levels, firm management, subordinates and peers. This includes oral and written communications. I find this is usually the factor that separates staff that exceed expectations and those that don't. My perception is that those communications skills are taught far less in on online environment than traditional learning.
- 25) I recognize that every one learns differently. In my opinion, certain classes can be taken on line and be effective. However, I do not believe that core accounting courses can be effectively learned on line.
- 26) I have not researched online the Online Universities mentioned (Phoenix, Kaplan, etc). However their advertising seems to tease students that obtaining their

degree will be a shortcut if they go through their virtual classrooms. They tell the students that the degree can be "easily" and "quickly" obtained. It seems to me that students that want to take the shortcut method will be workers that want to use shortcut methods in their jobs, may be workers that will want to hurry through their work, and may not take the time to be accurate.

- 27) I think part of the problem is the commitment of the online professors. These online universities pay instructors from under \$1,000 to highs around \$2,500 to teach a course. A traditional state university will (from my memory) pay over \$80,000/year. A traditional professor probably teaches fewer than a dozen course per year. An online professor would have to teach 32 courses at the \$2,500 per course rate to get that much. So naturally the online professors have to be stay at home moms or someone teaching as a way to earn some spare change. Either way they aren't as concerned with the courses or as qualified (assuming salary is positively correlated with compensation) as the traditional professors.
- 28) I think students should have a four year degree and then be required to two years of experience to become a CPA in any state of the US
- 29) I would not like to see human interaction leave the education process.
- 30) I am a strong believer that a students, intelligence, organization skills, people skill and work ethics will be more important than the institution he or she attended or that institutions method of teaching.
- 31) One advantage of on line courses is being able to study and review items at your own pace.

Second advantage involves "chat groups" - on line groups will generally be more focused than in person groups. One advantage to traditional is that a good instructor can explain a concept several ways until it is understood. The instructor can also watch the students and know if they are understanding the concept. Second advantage to traditional - real friendships can be formed which will be beneficial in the business world. It is more difficult to have business relations with "virtual friends".

- 32) I do not have much knowledge about the quality of on-line classes as compared to in-the-classroom classes. I assume the opportunity for questions and interaction among students would be less for on-line classes. I think the overall quality of the entity would be more important than how the class is taught, but most of us have little knowledge of how good on-line universities are. I guess you could say our opinions are, for the most part, uninformed.
- 33) Somehow programs need to try and integrate more practical experience. For example, auditing classes rarely has practical experience as part of the classes. So we get applicants who have no idea what they are getting into and therefore do not last as staff members. Also, writing is a big part of where we profession is headed and we need to focus on that also.

- 34) Based on the quality of many of the students I've seen from online schools and metropolitan schools, I am prejudiced with regards to candidates from these schools.
- 35) My experience with students coming out of school continues to show that the development of interpersonal skills, in addition to accounting knowledge, is critical in a firm such as ours.
- 36) Your questions are rather broad and therefore hard to answer; however, I would be more skeptical of the education credentials of an accounting graduate who had not yet passed the CPA exam if a significant portion of their accounting education was obtained through a totally on-line institution like Phoenix University. I think on-line courses offered as an extension of an accredited traditional university could be more consistently relied upon to prepare a CPA candidate for the exam.
- 37) I think there is a perception among people in my age bracket and older that online colleges are akin to correspondence schools that you see advertised on television so they do not have the credibility of a traditional university. In other words, I am quite sure we do not factually know the difference between an on-line education and what is acquired in a traditional classroom setting. Clearly, the trend is to move towards on-line educational formats. However, to obtain acceptance and credibility, this will be a difficult and lengthy process. The education establishment will have to overcome their educational snobbery when it comes to the effectiveness of providing on-line education to the masses!
- 38) I have encountered less frustration with students in traditional classroom and lab programs understanding basic and other principles. Students in virtual institutions or online lack valuable direct, on hand coaching from instructors, and classroom peers. This often leads to frustration
- 39) we are a firm of around 90 people in central Florida. I do most of the professional hiring. it is my experience that classroom training and interaction with instructors and other students is essential in the development of well-rounded professionals. Some online courses to supplement traditional classroom courses leading to a degree are not detrimental.
- 40) I feel that class room instruction from an experienced professor is an important part of the student's overall education.
- 41) believe degree should include internship
- 42) Online courses can be very good. Have some concern if it is possible for others to take tests etc. for the student. That risk can be offset by a mix of traditional classes and tests under supervised conditions. Do think that personal interaction is very important in the accounting education field.
- 43) I feel that on-line courses may not be as difficult as a regular classroom setting. Also, I feel that the social aspect of college and dealing directly with professor and students is preferable to someone who didn't I don't know if I would ever hire someone

who completed their degree 100% on-line without reviewing the college and their experience.

44) There is no opportunity for interaction with the student. There is no opportunity for the kind of teaching which leads to the higher level of thinking which makes the best of the best in accounting (or in any field or profession). Leading questions and follow up questions which lead to more thinking cannot be tailored to the responses provided.

What we see already is that there is a lack of real world practical learning going on in the schools. The basics of accounting are not known now when the students come to work. They are very bright with great computer skills but do not understand basic accounting in most cases. I think that is a shame on the education system. Accounting is the language of business and should be taught to those who want to be in the profession.

Finally, if you want to do what education should do - teach and touch lives - get in the classroom with people.

- 45) I consider online courses offered by fully accredited universities within their accredited curriculum to be equivalent to on campus seminars (more or less effective depending upon the conscientiousness of the student.)
- 46) The "technical" accomplishments that an individual acquires through college, whether traditional or online, is about 25% of the package that we look for in a candidate. Other characteristics that we try to identify in a candidate is their work ethic, passion for the profession, are they organized in their life (i.e. can they handle a variety of different activities), do they have a generally positive attitude toward life, do they have good communication skills, and finally, do they want to help others and improve things they are involved in.
- 47) I really don't know much about online universities.
- 48) I own a small CPA practice in Atlanta, GA. I am a "high tech" type firm and utilize all work from home staff located in locations throughout the US. So I am not against utilizing the latest in technology.

I have also taken several classes online for Continuing Education. So I am not biased against the internet.

Nevertheless, as you can tell from my answers - I don't feel that education from home without the classroom experience can compare to that experience obtained by attending a quality four year university. You are exposed to many people and can get their views, make friends, establish a network, etc. that will last you a lifetime.

49) I went to a five-year college with co-op program. The most important aspect of education is actual experience. You learn more by doing!

I dislike the 150 hr requirement for CPAs because it only decelerates the time frame when a young accountant actually gets started in the profession. I find all of these graduate degrees to be of little value. I'd rather see the young accountant have a year or two experiences rather than another degree. Also, it becomes tougher for that candidate to study/pass the CPA exam after the added school load - This elongates the time for young people to complete/pass their CPA exam.

We need more CPAs with actual field knowledge - not more supposedly book smart accountants distracted by trying to find time to study/pass a CPA exam.

50) I believe that online courses are important and will increase in the future as the cost of education continues to grow. I am not opposed to the University of Phoenix type of programs but they need to demonstrate that they are effective. All online courses whether offered by local or regional universities or the virtual courses must be able to substantiate their effectiveness by showing that they have qualified instructors who are not only properly degreed but are skilled at presenting online courses.

Question: Do online universities have monitoring to make sure students are performing their own work? If so, how is this done and how often? Are instructors trained to identify student performance?

- 51) My experience indicates that potential candidates who attended on line Universities are usually working in addition to their studies. Their work experience is very important and can make up for the lack of classroom education described in your survey. If work experience is the same for both candidates, I would lean toward a candidate that went to a traditional classroom University.
- 52) There is more to an education than books, e.g. interaction and socialization with other students and professors.
- 53) Don't forget the "e" for the "i." I wish you well, but make sure you consider people. A common thread in live is that many times we find ourselves in business positions in which we have little control. At this time, over 60% of the people in the work place are not happy in the job they are doing. If interested, I can share more. Regards
- Class room instruction has always been best for me. Instruction and interaction with instructors and peers in a class room setting is best absorbed and practice applicable. I have been in on-line classes for CPE and the question and answer process is limiting and incomplete when compared with classroom experiences.
- 55) I am a 26-year practitioner who also teaches. In addition to being a mid-level college administrator and being a public accountant part-time, I teach MBA Accounting for Decision Makers in a regionally-accredited traditional college; we have online assignments, but major in-seat traditional classes.
- 56) I have no actual experience with U. of Phoenix, etc.

57) Whether it be public accounting, private or governmental, the accounting profession is a "people" business. While it may be possible to study the accounting curriculum though an online methodology, I believe a great deal of learning and understanding is missed through such medium. When I look at a potential associate, I look at many factors beyond the grade point average. I look at the person's ability to engage in the daily aspects of the profession. In other words, I look at how well rounded that individual is. I would also seek information from their professors and instructors about how they were as students. Those who obtain a degree solely online lack the benefits that result from the relationships associated with their teachers and fellow students.

Further, the college experience extends beyond the classroom, and I'm not certain there is a way to remove the clinical aspects of online study. I'm more inclined to interview someone who fulfilled "all" of the requirements of higher education.

- 58) The traditional classroom programs, by this I mean private or state universities meet standards that are not required by virtual institutions. The amount of money allocated to state colleges and universities far exceed what is available to others. Profit is the motive of virtual institutions not education. I did not do well in English!
- 59) I think it is a question of how much of what is taught is retained when doing a lot of courses online.
- 60) Having taken many online courses as well as live instruction, I feel online courses do not satisfy the same learning objectives as live instruction courses. Our field of accounting relies heavily on teamwork and interaction with both inside and outside clients this experience is not duplicable in an online format. In addition due to the depth of accounting curriculum, it can hardly be adequately taught through reading, self study or "listening in" via computer. Accounting requires a degree of judgment skills which is a difficult skill to teach at best, and it is necessary to interact with others in order to best exercise and develop that skill. In my extensive history of online classes, I have yet to participate in a forum where this can be duplicated.
- 61) The problem I would have is the assumption I have to make with the facts that the courses taken on-line were 100% on line. I would have answered somewhat differently if some of the coursework was on-line but still required in class time for student/professor interaction and the requirement that responses to questions and problem resolution had to occur in real time and with others present. The problem with a course that is 100% on-line is that the student is not subjected to the real world experience of being in the clients presence when confronted with questions, issues and problems. I am familiar with Universities which offer courses that combine the on-line experience with significant class room participation and I think these situations probably make sense. In other words, that is the real world.
- 62) I currently see a lot of very "dumb" CPA's in this world!!

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BIOGRAPHICAL SKETCH

Monica Mendoza Jeancola holds a bachelor's of Business Administration with a major in accounting and a Master of Business Administration from Stetson University and is also a CPA. After graduating with her bachelor's in accounting she worked in public accounting for McGladrey & Pullen, LLC in Ft. Lauderdale, Florida and then as an assistant controller and control in corporate accounting for several years before entering the world of academe. She has been teaching accounting and information technology at Stetson University in Deland, Florida for 13 years.