

TECHNOLOGY APPLICATIONS: COLLABORATION EFFORTS TO IMPROVE
ACCOUNTING CURRICULUM

by

Shirley Ann Moore

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Abstract

Technological advancements have the potential to alter existing business practices, including the preparedness of new accounting professionals. Ensuring employers' expectations of new hires are met in conjunction with education and training, it is important to assess the adoption of technological innovations with respect to undergraduate college courses. Changing procedures in scholarly educational processes instructing accountancy necessitates a collaboration of practitioners and scholars. The authorities who govern accounting curriculum emphasize this need for collaboration efforts to ensure entry-level accountants are prepared to report financial positions accurately and fairly. In-depth interviews of two cases will reflect this assessment; employer needs and student preparedness through the lens of undergraduate accounting curriculum. A qualitative definitive position on the problem of a lack of technology will be presented in this study. While other methodological options for this study may have provided similar results, the selected method of a qualitative comparative case study allow opinions of the two cases of students and employers as the most effective technique to assess change in accounting curriculum in relation to employers' views.

Key Words: Accounting, technology curriculum, collaboration, governance, practitioners, expectations

Dedication

This study is dedicated to my loving husband, Martin C. Moore. Marty never gave up on me, even when I felt I couldn't go on. His words of encouragement, patience during the long nights of study, deadlines, several sicknesses, and life obstacles along the way. He always showed his strength and love for me through it all. To my loving daughters, and their sweet words of approval, always my reason to go on. To my mother, siblings, and other family members who were tolerant of my time away from them and for showing patience for the girl who always carried a book around. Most of all, my strength and dedication to this study have surely come from my Heavenly Father. His love and the Holy Spirit guided me each step of the way, all glory and praise to Him - Christ Jesus who strengthens me daily.

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The inspirational force for this study can certainly be attributed to my mother, Shirley Sweat Richardson. She first encountered the problem of a knowledge gap in training her entry-level employees to process bookkeeping transactions based on the manual applications in a computerized business world. In my work as an accounting practitioner and professor, I knew my destiny was to tie-together the two related issues and offer a solid basis for preparing those entering the profession. As accounting professionals began to call for an improvement, her encounter in this real-life application led to the relevance of this study.

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With a humble heart, I thank you all for making this study a reality!

Shirley Ann Moore

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Chapter 1

Introduction

The lack of embracing technology in accounting higher education curriculum form the key discussions in this paper where the greatest challenges of adaptation may be the lack of collaboration between practitioners and educators. A gap in knowledge exists on these claims however, the views of those closest to the profession; recent graduates and employers. The lack of their positions on preparedness for incoming entry-level positions in accounting and business offices may add the needed layer to solidify this issue. Assessing claims that undergraduate accounting students entering public and private practices may not be technologically prepared to meet employer expectations for correctly processing daily business transactions is offered in this study (Colby, Ehrlich, & Sullivan, 2011). This qualitative comparative multiple case study is specifically designed to present the views of two cases; those closest to the latent problem, employers and recent accounting and business graduates who are new hires in the profession. Without satisfactory technical knowledge gained from undergraduate curriculum, entry-level accountants are sure to suffer in junior accounting positions (Marriott, 2004).

Technological developments have a major impact on the way accountants process data as demonstrated through prior studies emphasizing usage gap in the applications of manually processing daily transactions using debit and credits in the modern accounting and business offices (Lim, Zhao, Tondeur, Chai, & Tsai, 2013). Higher education instructional procedures in the classroom have failed to align with professional advancements, including the daily tasks as emphasized by the governing

entities of the accounting profession (Güney, 2014). These tasks involve issuing payments for materials or labor, billing a client for services rendered or processing payroll (Colby, et al., 2011). While practitioners utilize technology in accounting applications; this has greatly surpassed what is currently taught in the classroom. Normal business accounting and operational tasks are standardized in technology usage; however, entry-level practitioners often require extensive training to adequately conduct these simple tasks. It is important, therefore, that a collaboration exists between the governing bodies of the accounting profession to align curriculum requirements with higher education to that of private practice.

Given inconsistencies in the classroom of implementing modernized critical thinking techniques and computerized task applications, entry-level accounting professionals, as well as the expectations of employers, show these inconsistencies are inconclusive and worthy of greater study (Reinstein & Bayou, 1997). An emergent design is purposefully needed in this qualitative comparative case study due to the nature of the data collection process. To provide a thorough understanding of this problem; observations, written documents, study participants' questioning, and the investigative procedures that often impact the types of data gathered are important (Yin, 2014).

An important aspect of the problem was contributed by the Pathways Commission, the report prompted the need for collaboration between accounting professional practice and accounting education, resulting in a call for improvement (Kozma, 2003). To better recognize if a potential lack of technological knowledge in

entry-level accounting exists, a glimpse into the foundation of the curriculum is a necessary component on which to build the details of this problem.

The details found within chapter one includes the major topics of this study, embracing the accounting professional needs in relation to undergraduate accounting education. The purpose for conducting the study is to investigate the entry-level job preparedness of accounting graduates in comparison to professional training necessary to meet the job requirements. The population of the study participants selected include five entry-level accounting professionals and their corresponding five hiring managers of accounting firms specific to Georgia. To comprehend the significance of the potential benefits to the accounting profession and the need to improve curriculum, the results provide views of the current accounting curriculum position and potential consequences of job preparedness. The nature of the study relies heavily on an emergent design to emphasize the combined collaboration of professionals and academics in comparing each case. Finally, the research questions section depicts the need for improving higher education curriculum and offer practical solutions to gaps in prior accounting knowledge, scholarly omissions, and practical inconsistencies that exist in collaboration efforts between the accounting profession and accounting higher education.

Background of the Problem

Computerized accounting software and advanced office technologies have revolutionized the speed and accuracy of accounting processes in public accountancy. As well as manufacturing, merchandising, and service-oriented accountancy reporting;

higher education has failed to incorporate these advancements in undergraduate accounting courses, according to Albrecht and Sacks (2000). The problem of an underprepared entry level accountant to enter daily business transactions without the use of a debit or credit entry may pose additional training requirements for processing these transactions using the advanced computerized processes (Chan, Song, Rivera, & Trongmateerut, 2016).

Professionals embraced computers and technology for speed and accuracy in transaction entry, and the associated cost savings, the accounting undergraduate college courses have failed to keep up with these modern methods. When a lack of educational changes exists in conjunction with the technological advancements, the business community may suffer significant productivity losses from the technological financial investments (Brynjolfsson & Hitt, 2000). This loss translates into lost revenue for firms that are busy training new hires rather than billing clients or pursuing additional prospects. Per the Association for Talent Development (Linn, 2015), the cost per employee can average as high as \$1,208.00 in training and development with an additional estimated 31.5 hours of instruction per year.

The effectiveness and use of technologies in the accounting educational processes, classroom instruction, and structure of the curriculum in which they are delivered in higher education continue to lack professional alignment. The governing bodies of accounting higher education, including the American Accounting Association (Albrecht & Sacks, 2000) express this realization as an advanced computerized accounting firm increases the speed and accuracy of accounting reporting. However, students are not being presented these computer-based

accounting concepts in undergraduate courses. Further, they lack the personal developmental skills needed to critically think through technology accounting competencies (Agyemang & Unerman, 1998). The undergraduate accounting courses often come as a shock to the students. They experience lectures, seminars, and workshops involving an independent style of education, thereby forcing a critical thinking element in learning accounting, yet without the technology in current use, their education goes unmerited (Williams, 1993). As undergraduate accounting courses continue to offer historical principles of accountancy based on the manual use of double entry posting processes, very little emphasis on advanced methods in classroom techniques, such as technology, is covered in the curriculum (Kozma, 2003).

Bookkeeping instructional classroom methods remained constant throughout history (Zubrinic, 1995). The double-entry bookkeeping system is the manual accounting concept taught in undergraduate college courses to business management and accounting curriculum. Specific requirements within the accounting profession consider technological skills in entry-level accounting positions a valuable asset and request those applicants with prior computer knowledge in new hires over those who lack technical training, regardless of their college education. This requires further investigation conducted by careful analysis of the data from the participants' by incorporating a qualitative comparative case study as represented by the details of this study.

The researcher selected five participants as a reasonable number needed for this study to stay within the financial bounds for the study and to meet full saturation. The

researcher was confined to a budget limit of \$500.00 to cover travel, food and other expenses related to the study. However, it was probable that fewer participants may have provided full saturation of data necessary to conduct this study, the budgetary requirements also varied accordingly. Using a purposeful section of the accounting recent graduates and management in accounting and business firms as the population for the selected case studies, this exemplified the ideal population for full stratification of the southeastern state of Georgia, while staying within the financial budget. It was not necessary to re-interview and revise the study, saturation was obtained with 10 participants and within the demographics of Georgia.

Problem Statement

The general problem is the gap between accounting educators and practitioners in accounting and business practice. The governing bodies of education have expressed the need for accounting curriculum advancements through the collaborative efforts of both practitioners and curriculum developers. A layer of professional excellency in conducting this study is ensured by the researcher who is employed as a practitioner in accounting with twenty years' experience and an accounting professor for five years. The researcher's qualifications in leadership as a practitioner in business and accounting education contribute a solid foundation of accounting knowledge. Conducting this qualitative comparative multiple case study offers a gained mastery of leadership literature, it further demonstrates competency in the profession through firsthand experience. Applying extensive knowledge in both historical and current organizational environments, this leadership approach contributes a solid study, rich in solutions to improve the profession. Studies offered

by Steadman and Green, (1995) determine that a lack of collaboration between professionally orientated, doctoral qualified educators and the need to make accounting education more technologically relevant for professional practice exist (Boyle, Carpenter, Hermanson, & Mensah, 2011). Such advancements and cooperation will prepare entry-level accountants capable of successfully meeting accounting junior positions, including the principles of accountancy with the added critical thinking elements in decision-making capabilities (Hildebrand, 2014).

Explicitly, the problem that college universities in the state of Georgia have similar concerns, their outdated curriculum pose problems for accounting professionals within this region. The possibility that collaboration efforts implemented between accounting professionals and education might improve the profession, offer insight into an improved innovative classroom. The goal of the researcher is to provide a specific investigation technique using a case study approach to analyze data from dual cases of practitioners and entry-level accountants through a qualitative comparative method. Using this focused section of the population inclusive of business and accounting firms as the selected cases, the researcher narrowed to specific demographics. This approach provides a thorough saturation in managerial and financial accounting and is representative of the ideal population ensuring full stratification of the southeastern state of Georgia.

Purpose of the Study

The purpose of this multiple comparative case study investigates the attitudes and opinions of five recently graduated college students and their five supervisors about

the utility of their college curriculum in preparing them for their entry-level accounting jobs. In addition, validating the professional needs of employers, the accounting curriculum is assessed to determine advancements in curriculum to present the employers' positions. An assessment of this fundamental aspect is whether the current teaching methodology of manual debits and credit posting are adequately preparing the entry-level accountant for the computerized applications used on the job. This researcher sought to recognize the impact and validate of curriculum problems in the accounting profession in relation to job needs and academic awareness within the specific southeastern region of Georgia (Albrecht & Sacks, 2000). Employers and students' expectations are productivity oriented and both cases of recent graduates and employers' frame their expectations around the skills and knowledge required to achieve those expectations (Bayerlein, 2015). A well-educated, work-ready accounting graduate formulate the core aspects of both college and employer competency expectations. The objective of this research is to assess if accounting undergraduates are academically prepared for entry-level positions in Georgia. In addition, students continue to demonstrate struggles with memorization of the rules of debits and credits necessary to better process accurate financial positions (Phillips & Schmidt, 2010). To better align financial accounting and managerial accounting (Steadman & Green, 1995) college courses with professional needs, the results from the recent graduates' views of entry-level job readiness and job requirements determined by the supervisors in Georgia are provided.

Design

The design of the study is emergent and reflective, and the process varied slightly through development phases to completion. The study includes three females and two males study participants graduated with a GPA of 3.8 or greater and hired within three years of their graduation date. The supervisors interviewed included three females and two males. By comparing and contrasting the needs of the job requirements to the curriculum mandates for undergraduate accounting courses to those of professional needs, a solid foundation was established adding to the existing literature in the call for academic alignment. Face to face interviews, email communications and other communication methods such as telephone calls aided in developing data findings. These contact methods support data results of recent graduates' preparedness and supervisors' assessments of entry-level accounting positions using an open-ended style of questioning. This type of questioning allows input from the participants to gain a clear picture of their valuation of their education in job preparedness. The findings represent both groups responses in job preparedness of the recent graduates, and the hiring and training professional within the profession.

Significance of the Study

The American Accounting Association partnered with the largest U.S. Certified Public Accounting firms in 1989 to form and provide funding for the Accounting Education Change Commission, this eventually became known as the Pathways Commission. The Pathways Commission Report (Albrecht & Sacks, 2000) demonstrate the need for advancing bachelor-level accounting curriculum and exists to

improve academic knowledge components which translate into improved job knowledge (Hildebrand, 2014). The alignment of job demands to those of academically prepared entry-level account professionals is worthy of this investigation. This study provides the data relevant to the claims of the governing bodies, such as those of the American Accounting Association, against various cases including the study by Hildebrand (2014), Albrecht and Sacks (2000), Botes, Low, and Chapman (2014) who attest that undergraduate accounting courses are not preparing accounting professionals to meet current financial and managerial entry level job positions. The results obtained by this qualitative comparative multiple case study are directed at the accounting governing bodies, accounting educators, and hiring professionals. This researcher anticipated a validation of assessments of educational curriculum, job preparedness, and data beneficial to scholars, practitioners, and leaders within the accounting profession. In addition, the results provide data pertinent in contributing to assessing the needs of entry-level accounting practitioners and the claims for advancements in technological requirements, as well as critical thinking elements in higher education. The use of this comparative multiple case study offers a triangulation of the types of information and an analysis that evaluators seek to overcome potential biases that may be associated with a single source study.

Nature of the Study

Set against the backdrop of accounting curriculum in undergraduate courses, assertions that a lack of technologically driven classroom techniques exist with respect to the employers' computerized requirements and expectations of practitioners (Chan,

et al., 2016). It is reasonable that employers expect undergraduates to enter the accounting profession capable of making critical analytical decisions and fundamentally ready to step into their positions with little or minimal training (Albrecht & Sacks, 2000). However, professional governing bodies such as the American Institute of Certified Public Accountants (CPAs) and the Institute of Certified Managerial Accountancy (CMAs) of managerial and financial professions have expressed this is not the case; they stress that universities and colleges need to update curriculum to better align with entry-level accounting positions.

This study distinguishes from other studies with the focus on manual transaction posting of business activities curriculum in the rules of debits and credits comparative against meeting employer expectations based on computerized postings of business transactions with training requirements as one decisive factor. In contrast to the alignment of a cause and effect relationship in quantitative methodologies, this qualitative comparative case study offers the participants a personal narrative interpretation of their recent educational aptitudes in accounting courses necessary to meet managements' expectations. This qualitative inquiry is further distinguished by its emphasis on a holistic treatment of this phenomena. By staying within a reasonable geographic location, the budgetary confinement of the researcher is maintained, and the study time frame achieved. The research demographic is limited to Georgia in the southeastern United States. Existing cases have not provided data relevant to this specific southeastern region to influence educational systems, as well as the claims of potential employers within financial and managerial accounting professions. The

researcher did not expand the study beyond this demographic, the number of participants, and the topic.

The proposed qualitative multiple comparative case study provides an important aspect of scholarship, leadership, and practitioner knowledge needed to achieve the goals of educational knowledge in meeting employer expectations. This is an important component for filling the gap in knowledge for educators in designing the syllabus, selecting textbooks, and developing course evaluations. For professionals, this component ensures the highest standards of entry-level accounting positions as the economy continues to move toward global standards with an emphasis on the computerized processes to produce accurate and timely financial positions. Students may face even greater challenges as the accounting profession progresses into the international markets with compliance rules enforced. Additionally, those with the technologically based knowledge of accountancy will transition with ease and find an adaption to international accounting an easy step in the globalization of the profession (Carmona & Trombetta, 2008).

Research Questions

A gap in literature exists that schools of business that have not produced bachelor-level graduates in Georgia capable of meeting accounting employer expectations (Albrecht & Sacks, 2000). Technical skills and critical thinking abilities should be acquired through undergraduate programs; however, this deficiency may be due to the disconnect between actual practice and the theory of employer job knowledge expectations (Hildebrand, 2014). To ensure the knowledge gap is thoroughly examined

and establishes the cases of preparedness of entry-level accountants against the views of the hiring managers in a collaboration process, it is important that the following open-ended descriptive questions are answered in the research process focusing on the participants' aspects of the undergraduate experiences in entry-level jobs. The information of the supervisors is included assessing the training requirements of the recent graduates hired within two years. Reflection on the part of this researcher determines how backgrounds, cultural differences, and personal experiences influence interpretations. Official records and other employment information shared by employers which may compromise confidentiality laws are observed and not disclosed in this study. The questionnaire data results from the females and male participants compared to the questionnaire training results of the supervisors of the accounting firms was elucidated (Yin, 2014).

The researcher acts in the role of the interviewer in this study, and the data collection and security process are available on the participant consent forms included with the questions. The rights to privacy and confidentiality are maintained and participants are thoroughly informed of the study objectives. The open-ended questions describe how well-prepared graduates felt regarding undergraduate accounting education and the job training requirements of their first accounting entry-level positions. The questions address how a technologically advanced computerized undergraduate accounting course might improve entry-level accounting training. The questions also offer an open-ended style permitting the participants an opportunity to express their opinions about job preparedness. The researcher carefully and thoroughly evaluated the research questions to ensure their veracity to be fully understood by the participants.

Key evaluation questions are a major operative for selecting the specifics of the cases of the accounting profession and accounting education. The cases of the undergraduate accounting courses and the entry-level job training requirements were investigated and formulate the basis for establishing this analytical framework.

RQ1 – How may curriculum changes alter on-the-job training for employees new to the profession?

RQ2 – How might the accounting profession benefit from an updated technologically advanced curriculum?

Theoretical Framework

The methodological tactic for addressing the problem is a transformative theory approach, addressing issues of change in accountancy practice and education (Colby, et al., 2011). Achieving the purpose of this study influenced the need for change or improvement in the quality of higher education in the accounting profession and to better align the needs of the advancing accounting technologies in the modern college accounting classroom (Hoskins & White, 2013). A transformative approach in leadership offers change as the directive for followers, it also ensures the leadership qualities are developed in the transformative process of the followers (Leithwood & Jantzi, 1999). Transformative relational theory adds insight to detail in the components of the measurable patterns associated with gender, demographics, or socioeconomic classes of the participants often associated with the potential need for change within the accounting profession and accounting education. A theory used in the context of a quantitative, qualitative, mixed method approach is based on the historical precedent used for viewing

as a scientific prediction or as an explanation for what was expected to find, or predict (Thomas, 1997).

Through the lens of theory in the qualitative, quantitative mixed method perspective, the descriptive, explanatory, or predictive theory is used for the behaviors or attitudes of the participants based on hierarchy within their organizations, such as those for the hiring managers or the G.P.A. of the recent accounting graduates. Finally, the theory used in this study was descriptive, using a top-down approach where the conclusion is drawn from prior statements to reach a logical certainty, thus expanding on the variables using an if-then approach. In this type of scenario, the variables are measured based on the potential for additional training as required for the entry-level accounting professionals, or if the graduating accounting students' G.P.A are below the 3.8 range, needing additional training. While these variables are associated with the characteristics or attributes of an individual or organization that may be measured or observed in prior studies using a descriptive approach, their scores are applicable for several categories exclusive for this detailed study (Thompson, 2006).

Additionally, attributes or behaviors, which are prominent features in conducting non-experimental research, with the aim of being able to make predictions; these types of studies can also be useful for identifying attributes, behaviors, or phenomena that could be manipulated experimentally in subsequent research. A non-experimental research typically associated with attributes that are natural occurrences, such as those of behaviors or phenomenon, cannot be experimentally manipulated for obvious ethical considerations because of the historical context of the study. Behaviors can also contribute to issues within accounting education, for example students fail to perceive

themselves as future leaders in the professions of accounting and management.

Motivated by the assumption that as accountants, they may not have decision-making capabilities, the influence of curriculum fails to incorporate leadership behaviors.

Clearly, leadership theory for accounting students and their expectations of leadership behavior may be due, in part, to the students' linkage to the business environment. Leadership is a major component in the business organizational culture and the role of the accountant may be controversial or difficult to describe. Because behaviors may display an antagonistic attitude between entry-level accountants and supervisions, such animosity may be underlined by the resentment of the accountant to understand the computerized system, often depicted as an administrative process. The roles of recent accounting graduates represented by their view of certitude give them stability in their profession may be shaken if excessive training is necessary for job preparedness. In the role of leadership, they must correlate their leadership potential with their leadership skills as they transition from entry-level accountant, to staff accountant, and finally to administrative or managerial positions.

By providing a solid analysis of the data results, claims that accounting practitioners and undergraduate academic courses might improve the profession validate or rebut such positions. This transformational change theory offers the approach of computerized innovations in the classroom, with the technical and critical thinking skills to assess development through the perspective of the employer. In addition, the theory adds a layer of validation to solidify the needs assessment of the modern accounting professional in critical thinking elements with the technological advancements in the classroom necessary to meet the needs in the workplace. This comparative multiple case

study is especially suitable for alleviating gaps in knowledge with specific views on transformational change in accounting education which this investigation is focused. By contributing detailed records surrounding the context of the environmental, historical, and potential social factors that have a bearing on this study, possible conclusions about the extent to which this study's findings were found.

Using a qualitative multiple comparative case study, the primary purpose was to examine and understand the general phenomenon of accounting practitioner requirements for entry-level accountants as well as changes in accounting higher education. The case selection is the obvious method to research questions about the use of technology and the gap of technology usage in the classroom. This qualitative multiple comparative case study is based on the results of the main group of recently hired accounting graduates with the subgroup of supervisors within Georgia to assess the use of debits and credits and the use of technology to implement daily transaction entries. The recent graduates represent the main group, and the supervisors represent the subgroup of the study concerning technology or using manual processes. The usage focus of the study is limited to the constraints and financial burdens for the researcher (Bushby, 2013).

Additional aspects in relationships worthy of attention include the professor and student educational elements in the classroom. The primary concern for training entry-level jobs includes imparting critical thinking techniques and education technology in accounting undergraduate courses. Relational theory used in this study conveys the relationships between student and professor; employer and employee, and their importance in this case study (Güney, 2014).

Comparative case studies often involve the components of analysis and synthesis viewing the commonalities, differences, and distinctive patterns across a common phenomenon or theory such as the needs expressed in the accounting educational deliveries in the classroom. The contribution of this study to scholarship as well as practice enables students to be better equipped for job demands using technology, although it is omitted in the classroom. Disruptive technology theory in education change is one such component in introducing new technology deliveries. This theory concentrates on the practice of allowing students to use cell phones, tablets, and laptop computers for new opportunities in classroom deliveries (Psootka, 2013).

Definition of Terms

Certain criteria are required for accounting knowledge that includes bachelor-level or higher academia. It is important that a general knowledge of accountancy and definitions are present. Knowledge consisting of accounting rules are often interchangeable and important in incorporating the basic principles of accountancy. Critical thinking elements of transactional analysis and abilities to make better-informed business decisions will be discussed and is urged to be incorporated into the curriculum.

- Accounting: the language of business and incorporates basic principles using the rules of debits and credits in double-entry bookkeeping posting (Armstrong, Blouin, & Larcker, 2012).
- The rules of debits and credits: the ability to critically think and incorporate the steps needed for determining the specific account within a chart of accounting system to increase or decrease the balance by the transaction amount. In

addition to understanding the processes of accounting and business concepts and definitions, a clear representation is presented for critical thinking abilities as well (Bailey & Sawers, 2011).

- Critical thinking: the ability of an individual to mentally process activities and skillfully conceptualize, apply, analyze, synthesize, and evaluate information to reach an answer or conclusion (Jackson, 2015).

Therefore, in addition to understanding the accounting and business principles and definitions, the critical thinking elements is presented at the classroom level for the student to bring forth those abilities for application on the job. Given the broad range of comparative case studies in data collection and the emergent style of this study, a supplemental explanation was necessary for clarification of interchangeable terms and accounting principle concepts. The terms “recent graduates” and “entry-level accountants” are interchangeable within this study and refer to the same group of participants: the first case.

Assumptions

Assumptions in this study are based on the researcher’s experiences that often students are not adequately prepared to enter the accounting profession unless further training on computerized applications is conducted, it is assumed that students lack the ability to grasp such technologies (Chan, et al., 2016). An additional assumption may be that collaborations between governing accounting professional bodies and directors of the curriculum improve future entry-level job preparedness. Several additional assumptions are drawn from this study including the relationship aspects. First, the

behavioral aspects of participants may be a condition including relationships between entry-level accounting study participants and management in authority positions. Second, these relationships may be too complex to remain on topic with this study. Third, other behavioral aspects may be due to adverse working conditions that are beyond the scope of this study and allow for further studies. Additional studies may address issues pertaining to the behavioral aspects of relationships and are worthy of consideration in the outcomes of this study. It is a fair assumption that the direct elucidation of behavioral events, such as student grades, provide an interpreted measurement as a major component in the critical thinking elements discussed in the findings report.

The scope offers the parameters under which this study operated. The problem of the study fits within the scope of this comparative case study, with the importance of technology in higher education. The potential effects are emphasized on the collaboration of governing curriculum entities in preparing entry-level accounting professionals with the direction of future accounting college programs. The scope also includes limiting the number of participants to five recent graduates employed in accounting facilities and managerial offices limited to the geographical locations in Georgia, as these were aggregable to participate. The scope of study further consists of making an analytical assessment of the claims of the governing bodies of the accounting profession against the current curriculum of accounting undergraduate education courses. The scope also includes incorporating collaboration efforts between the entities of accounting governing bodies and educators in accounting.

Limitations

There are potential limitations present in this study where assumptions are established that bound the interpretation of data. Limitations also come from outside properties such as grade point averages of participants; in retrospect, this may have influenced the study results. This case study is aligned to the data interpretation, however with a standard qualitative design, often there is an effort to limit the role of personal interpretation for that period between the time the design is established, and the time of data collected. Comparative qualitative designs call for the individuals most responsible for explanations to be in the field aspects of the study, making observations, and offering interpretations simultaneously. It was important that as much effort as possible is incorporated to minimize the extent to which prior expectations and views are not allowed to potentially enter this study. Biases on the part of this researcher are minimized, as well as the expectations, assumptions, and views of others. Biases are also discussed and presented due to prior exposures by this researcher in scholarly and practitioner positions.

Lag times also pose potential limitations; from the conception of this study to the presentation of the findings, governing bodies of accounting education may have expressed a desire to collaborate with educational institutions to enhance their aspiration for improvement. Ethical improvements in accounting to incorporate undergraduate computerized technologies may have also occurred during the process of this ongoing study. Therefore, the duration of this study became an important factor, the emergent design remained a key issue due to the potential limitations of time and the potential need to shift focus if necessary.

Delimitations

The delimitations defined what this researcher did not include: adding additional information beyond the objective of the study, collecting data beyond what was specified, ensuring that evidence did not contradict data provided, and acknowledging any biases so that readers consider these delimitations when reading the study report. Boundary conditions are also adhered to such as the locations for study participants, including financial and managerial offices. Delimitations also include employer aspects that have a potential bearing on the privacy issues related to additional supportive employment documentation. Due to the emergent nature of this study, obstacles which may have hindered the data relating to employment records are not discussed, including certain business practices. Because of employment delimitations, this researcher assumes common hiring techniques based on professional standards within accountancy best practices. The specifics of universities are not emphasized such as private, liberal arts, experimental, or research universities beyond the objective of this study.

The conclusion for chapter one offers an opportunity for reflection when determining educational aspects in relation to the potential need for additional training through greater understanding and critical thinking elements in the classroom, in addition to the technological capabilities. This multiple comparative case study may lead to a change which expands to classifying critical thinking elements of decision-making for entry-level accounting practitioners. This comparative case study also demonstrates the importance of how developing accounting systems are advancing with increasing importance of accounting practitioners' expectations (Chapman, Cooper, & Miller, 2009). Further considerations include the globalization of the accounting

profession into international markets and governance of the International Financial Accounting Standards.

The analyzed outcome of this comparative case study is presented for publication in an accountancy and educational trade journals, such as *Issues in Accounting Education*, *The Journal of Accountancy*, or *Strategic Finance*. The results contribute to existing issues in accounting education by assessing the needs of the entry-level accounting professional and determine if, in fact, advancements are needed. By comparing the results of the graduates to accounting supervisors, this study makes a substantial contribution to professionals and offer if advancements are needed in the current accounting curriculum. Regarding policy making, this comparative case study represents an influential assessment of the need to improve curriculum, therefore impacts the reinforcement of this assertion (Carden, 2009).

Several conclusions were drawn from this study, including the relationship aspects. First, the behavioral aspects of participants included relationships between study participants and management in authority positions. Second, these relationships were too complex for this researcher to remain on topic. Third, other behavioral aspects included adverse working conditions that are beyond the scope of this study and may be considered in further studies. Additional studies may address issues pertaining to the behavioral aspects of relationships and are worthy of consideration in the outcomes of this study. In addition, the disruptive technologies of students in the classroom, such as the use of cell phones, laptops, and tablets for improving education deliveries is worthy of consideration.

Chapter Summary

This chapter summary makes available relevant information to gain an understanding of how the components of improving the accounting profession and the accounting undergraduate courses were discovered. The steps used in this qualitative method analysis incorporated computerized technologies using NVIVO software to evaluate results of both cases. The interview approach of open-ended questions allows participants an opportunity to express their views in an unlimited dialogue. The researcher studied the responses with a focus on certain aspects of the data and disregarded other components not pertinent to this study. All data was cataloged with specific focuses aggregated into themes. Historical data is presented to formulate a basis of the necessities approach with an emphasis on improvement in accounting undergraduate education.

Incorporating this qualitative comparative case study using computerized software applications to analyze the data into themes and databases, presents the most effective method for conducting this study. Specific coding is used tying together key components of the narratives, making verbal relationships among the codes. The computer is the most effective means for the codification of key terms, and each participant response is coded to the appropriate subtheme. Interrelating themes are facilitated comparing each code or string of text for accuracy. Components such as gender are included, although not the contributing factor for this study. The issues of importance were presented in the review of the literature, addressing the problems for improvement in quality accounting education and professional improvements.

Historical and current studies were also presented in the literary review chapter to

position this comparative case study within that context. Adding to existing literature and offering a fresh lens by comparing results from the students' perspective to the views and opinions of practitioners place this study as an added option for understanding the problem posed by governing accountancy bodies. Adding information to the current gap in literature from the comparative cases of students to management enhance the profession of business and accountancy to promote improvements in the profession.

Chapter 2

Literature Review

This review of the literature provides relevant information for the discussion of accounting improvements emphasizing prior studies applicable to this study. The gaps in literature are presented and highlighted to show exclusions as related to this study. The topics included in this review address the historical and current content of the accounting profession. Accounting historical writings are discussed to show those who have paved the way for the vast important research topics available for study. Beyond the current content, the conceptual framework literature is presented in this study followed by the methodology literature. The design literature offers support from the prior designs to include germinal methodologies associated with this design.

Title Searches and Documentation

An examination of the details of prior studies addressing the components of manual bookkeeping processes and those of computerized driven applications in the modern classroom is presented in contrast to the need assessment of the modern computerized managerial and accounting office. This review strategy illuminates prior studies to demonstrate the path or development of current knowledge, organized in a manner for ease of transition on the topic of computerized applications to manual classroom applications and synthesized to prior studies to add to existing knowledge. The problem of undergraduate accounting education to computerized accounting applications involve the ability of students to analyze manual business transactions against the use of computer-driven transaction processes. This review of literature is an

important component in this study and offers similar solutions to questions that remain unanswered.

This literary review provides information on gaps in prior studies and adds information to assess whether former studies align with this study. In this review, an emphasis is placed on studies that offer a collaboration effort between the governing bodies of the profession, the professional practitioner, and those who are entrusted with the higher education of future accounting practitioners. Their failures encompass the critical thinking elements and lack a comparison and contrast approach of accounting graduates with employer needs through the lens of training requirements.

The review begins by providing the historical establishment of accounting and a discussion of principal bodies responsible for the administration of accounting rules and regulations in the United States. Also provided is the illustration of necessity for improvement with collaborative between practitioners, scholars, and entry-level accounting professionals. Foundations of accounting are an important component to understanding the emergence of the profession to the modern practitioner, therefore an emphasis on outdated methods of manual accounting processes continuing in the classroom curriculum is reviewed. A review of historical literature is the background for understanding the earliest known developments in accounting.

Historical Content

The accounting method of recording, posting and processing business transactions first began in 1416 BC by Benedikt Kotruljevic as he presented *On Orderly Keeping the Business Records*. As a necessary component to record keeping of the

merchant shipping trade industry, Kotruljevic developed the first system to record and maintain accounting records in an orderly manner (Zubrinic, 1995). Advancing the knowledge of systematically recording the transaction processes of trade activities in 1494, Luca Pacioli wrote the *De Scripturis* providing a comprehensive account of the process of recording trade activities using the same double entry recording system first devised by Kotruljevic. While the system was first implemented by Kotruljevic, it was Pacioli who popularized the system and became known as the father of accounting (Gleeson-White, 2012). This process is the same manual process or double entry bookkeeping system which continues to be taught in the modern classroom.

The governing bodies of the American Accounting Association stress that clear evidence establishes a need for improvements to ensure the sustainability of the accounting educational community from historical and outdated teaching principles. It is further shown that a necessary collaboration of the two entities of the profession and education should exist to maintain integrity within the profession. Proponents of the study by Albrecht & Sacks (2000) claim that it is an imperative mandate for higher education to meet the needs of the accounting profession. The authors stated that the education of accounting is declining and that as far back as the 1990s, the profession continues to ignore the calls for improvement. The American Accounting Association stress that if improvements continue to go unanswered, accounting education may find reductions in funding and a decline in graduation rate

Albrecht and Sacks (2000) further emphasize prior studies including *What Corporate America Wants in Entry-level Accountants; The Practice Analysis of Management Accounting; And Counting More, Counting Less* – Institute of Managerial

Accountants; *CPA Vision Project: Focus on the Horizon* - American Institute of Certified Public Accountants; *Future Accounting Education, Preparing for the Expanding Profession* – Bedford Report; *The Future Viability of Accounting Education* – American Accounting Association; *The Accounting Education Change Commission: Its History and Impact* – American Accounting Association. While these studies continue to go unnoticed by higher educational communities, professionals call for improvements in accounting higher education, yet despite these efforts, accounting education continues to be delivered as it has for centuries. Accounting undergraduate education is based on the rules of debits and credits with an absence of critical thinking elements in classroom deliveries and lacks the computerized applications of daily business transactions. It is also highlighted (Albrecht & Sacks, 2000) that the leading proponents mandating the need for change include globalization, technology, and a shift in the paradigm of accounting include a concentration of power in large market investments. These three components of change have resulted in the need to recognize that the old model of accounting is now available to anyone with a computer, accounting software, and the savvy to be represented as an accountant. The outdated classroom applications are furthering the gap in accounting preparedness in contrast to the new models of business applications and practitioner preparedness.

In an alternate view of the claims of the governing bodies to improve accounting, higher education, faculty, and certain practitioners disagree on the work accountants will be performing in the future. The alternate claims were represented in a chart in which numbers the most ranked for demand from first to fifth, one as the most important positions. Faculty identified audit work as the most important future work for

accounting professionals, e-commerce consulting was second, systems consulting was third, tax consulting as fourth, and strategic consulting as last. On the other hand; the study of practitioners expressed that future accounting professional jobs in order of importance include financial analysis as first, financial planning as second, financial reporting as third, strategic consulting as fourth, and systems consulting last. The faculty was represented as believing that audit and assurance services provide the greatest need for future demand, although these claims may not be represented by facts and current data. This literary review section includes additional documentation addressing the need for improving accounting higher education. The possible reason educators and scholars continue to ignore the call for curriculum advancements may be found in the clear lack of doctoral qualified accounting educators as expressed in a study by Boyle, et al. (2011).

Addressing the Accounting and Auditing Faculty Shortage: Practitioners' Perception of Academia, Current Issues in Auditing is presented as the study published in the Pathways Commission Report by the American Accounting Association which provides relevant data from fifteen U.S. graduate programs (Boyle, et al., 2011). The respondents of the study included ten females and nine males with a common age range of 51-60 years old. The respondents had more than twenty years' professional experience with most possessing Certified Public Accountant Licensure from various states. The study expressed a distinction between traditional qualified doctoral programs and non-traditional accounting doctoral programs. The conclusion expressed that the American Accounting Associates anticipate that non-traditional doctoral

programs can develop into a new important source of accounting faculty at AACSB-accredited institutions.

The following recommendations for improvement in doctoral qualified education consider these major points to incorporate a broaden-range of acceptable doctoral qualified educators in accounting as addressed by Albrecht & Sacks, (2000).

1. Continued monitoring of non-traditional program marketplace developments. Collect data on new programs, experiences of current programs, the focus of programs, publications of program graduates, placement of program graduates, etc. (Albrecht & Sacks, 2000).

2. Encouragement of additional non-traditional program formation with full appreciation of the unique challenges of offering such programs. Help institutions and faculty to appreciate the unique challenges of such programs as executive-level students and premium tuition; faculty time, commitment, and responsiveness; leveraging the experience and connections of the students; dealing with managing student time constraints and multiple responsibilities; realities of program administration and funding; etc. (Albrecht & Sacks, 2000).

3. Highlighting of non-traditional doctoral programs to practicing accountants. Raise awareness of such programs through journal articles, presentations, web presence, etc.

4. Promotion of non-traditional program acceptance in the academic marketplace. Educate the academic community on the unique nature, focus, and scope of these programs which can vary widely by the program, as well as on the characteristics of

students who enter such programs, their subsequent placement and performance (see item #1) (Albrecht & Sacks, 2000).

Professors should also possess skills beyond the technical aspects of accounting to include the critical thinking components of college education and teach critical thinking abilities in classroom applications. In the study conducted by Reinstein and Bayou (1997), information pertinent to developing the ability of entry-level accountants to perform evaluation components using critical thinking skills was provided. However, this study provided information that accounting education is important for providing students with the requisite set of skills that accountants seek. Included in these skills is a strong communication process, quantitative analysis of data, interpersonal skills within an accounting office, and intellectual skills supporting emotional intelligence. Critical thinking for accountants involves the ability to evaluate and express solid judgment in processing daily business transactions. Critical thinking incorporates the ability to identify and successfully solve problems, particularly issues that may have multiple solutions. In this aspect, the accountant must use critical thinking and good judgment for posting the clients' financial transactions. Higher level knowledge involves higher level skills; this is an open-minded ability, thoroughness, and flexibility. Critical thinking is a difficult skill to teach due to the nature of processes that enlighten and support those skills.

The study by Boyle, et al. (2011) information for accounting education suggesting educators incorporate the higher-level knowledge skills in a series of applications that compliment lower level memorization skills is discussed. Critical thinking skills can be a complex process for learning how to comprehend issues and

analyzing, logically synthesizing and assessing problems to narrowing the scope to form a decision. Due to computer applications in accounting, much more relevance can be seen in the components for incorporating critical thinking in entry-level accounting positions. This provides an affirmation that these skills are a necessary component, particularly through the lens of computerized technical aspects of modern accounting applications.

The student view of employer expectations is also a worthwhile topic for the understanding of advancements in the curriculum as a necessary component of the professor viewpoint. While students may feel that the transition from student to employee is difficult, the struggle is based on the expectations versus the realities encountered in the entry-level job. This can be seen in prior studies in which unmet expectations have resulted in lower-level positions of employees. Turnover intentions and the values of employers may be related to the unmet expectations. Due to these situations, it is important that students be better informed of expectations in realistic terms. Realistic job expectations may provide entry-level accounting positions with fewer turnover rates. In the study by Phillips and Crain (1996) an intentional use of 129 participants of students proved that their expectations for an entry level accounting position exhibited unrealistic expectations. Added insight include the expectations of students to improve employment retention and ease the transition from student to employee. Given the potential realities of accounting employment, the survey instrumentation provides the realities of an intent of employment. The purpose of the study aims to clarify the realities of entry-level accounting positions. The study also demonstrates a recognition that a collaboration should exist between the education of

student entry-level accounting positions and employer expectations. Providing such insight in the classroom might help prepare the students to adjust to the new environment and formalize expectations of employers against unrealistic assumptions of students. This insight might alleviate turnover rates in entry-level accounting positions and may promote longevity in accounting careers and advancements. Accounting faculty would be instrumental in preparing the transferring students, however, without the collaborative efforts of universities and practitioners, professors may not be aware of the need for assisting students' transference to professional. To ensure such changes occur in accounting education, advancements in undergraduate curriculum is stressed.

Current Content

Since the introduction of the personal computer to the workplace in the 1980s, the accounting profession has generally embraced the technology with eagerness. Accounting education, on the other hand, continues to instruct undergraduate college students using the same techniques first introduced centuries ago by Kotruljevic and Pacioli (Zubrinic, 1995); (Gleeson-White, 2012). In direct relation to the use of computers and software applications, financial and managerial accounting knowledge amplified the methods used in financial and managerial accounting in record business transactions. This resulted in increased accuracy in reporting financial positions for businesses and individuals. This foundational epistemology in manual accounting processes provides a basis for a detailed understanding of the accounting cycle for practitioners and educators in ways in which students can apply critical thinking techniques in decision-making processes in accounting applications.

Current educators are mandating that a necessary advancement in college instruction is necessary, and several of the administrative and governing organizations such as the American Accounting Association, the Institute of Certified Public Accountants, and the Institute of Certified Managerial Accountants agree. These governing organizations attest that undergraduate college students may not be prepared to enter the accounting profession; these organizations challenge curriculum which omits computerized instruction. The struggle to adapt accounting courses for undergraduate students to align with professional applications driven by automated computerized systems has been argued by industry leaders in the Pathways Commission Report. The Pathways Commission also developed the vision model for the future of the accounting professionals to promote a prosperous society by using critical thinking techniques and good judgment in preparing financial reporting. The Pathways Commission was established by the American Institute of Certified Public Accountants and the Institute of Managerial Accountants. The latest accounting textbook editions do not include examples of computerized entries for business transactions, however, as of this writing, several textbooks have been introduced to the Pathways Commission and the goal for the future of accounting. The Commission also reported the necessity that advancing the curriculum should include computerized techniques and the students' ability to use critical thinking techniques. The goal of providing computer applications in the financial and managerial accounting courses is to improve students' preparedness to meet entry-level job requirements and the desire to meet professional needs is worth assessing. Comparing the claims of the governing bodies of the accounting profession with the current curriculum is worthy of this investigation.

A study by Botes, Low and Chapman, (2014) *Is accounting education sufficiently Sustainable?* provides greater detail in the need for improving accounting education. This mixed methods approach asserts several views on the sustainability of accounting education in New Zealand. Although this study does not address accounting education in the United States, it does provide a foundation through which a failed accounting curriculum can be viewed. Interviews and online surveys were conducted with both the graduates and academia. Findings demonstrated that the university needed to improve or provide an optional higher undergraduate or postgraduate in sustainability. Evidence from the lecturers' personal experiences in education has suggested that accounting courses better develop a student's knowledge of sustainability as the lecturers' have time to take an interdisciplinary approach to teach and look at *big issues*, such as how accounting can either support or hinder the sustainability directions for businesses and society. Chapman, et al. (2009) provide information describing the relevance of accounting in modern society. Their assessment promote accounting as a fundamental component in capitalistic' societies, and therefore, this essay and analysis of Anthony Hopwood provide an important component for adding to the importance of a well-prepared entry-level accounting professional. The evaluation in this review express the need to recognize accounting as no longer a mundane exercise of business processes, instead to emphasize the importance of the behavioral, institutional, organizational, and social dimensions of accountancy. This growth demands scholars recognize the importance of engaging the profession in this manner and uphold its importance in how this discipline influences most aspects of life through the calculative practices of accounting. In addition, further information is presented by A.G. Hopwood

(2007) *Whither accounting research?* in which it is expressed that accounting research is intensively lacking in technological innovations and is also detached from the practice. This view further accentuates the need for this comparative case study and the efforts of collaboration between scholar and practitioner.

Colby, et al. (2011) offer additional importance on an improved accounting curriculum presented in their study, *Rethinking Undergraduate Business Education Liberal Learning for the Profession*. They found business education too narrow and fails to challenge students in creative thinking techniques; this aligns with the lack of critical thinking elements expressed by the governing entities of this study. These authors presented the results of a national study of undergraduate business education undertaken by *The Carnegie Foundation for the Advancement of Teaching*. The book defines the efforts of varied sets of institutions addressing curriculum limitations. Further supporting the best elements of liberal art learning integrated with students' learning of business disciplines to develop an intelligent morally grounded professional with critical thinking decision-making capabilities. A clear understanding of these elements' necessities the applicability of critical thinking capabilities seen in accountants to understand adjusting entries. This requires accounting students have a purposeful understanding of accrual accounting methods in which adjusting entries are mandatory. The situation for using double-entry accounting applications therefore is important for students to use critical thinking applications. Per Phillips and Schmidt (2010) students often struggle with the concept of double entry posting of debits and credits, including those necessary in reversing entry adjusting postings in accrual accounting. A solution to this problem may be alleviated in technology-driven applications where accountants incorporate critical

thinking abilities to determine which accounts would increase or decrease. Improved job performance is again seen as a critical element in the modern accounting profession and worthy of consideration in all applications of accounting, the private practice sector of accounting is not alone in this dilemma.

Employer expectations should also be incorporated into the review process of prior literature as well as an assessment of the realistic perceptions and expectations. In a study assessing expectations, Kavanagh and Drennan (2008) provided information pertinent to understanding the relevance of meeting employer expectations. This study poses a mixed methods approach, examining the stakeholders, students, and employers in an attempt for students to gain an understanding of what employers expect in the soft skills of communications, analytical processes, and other skills, such as professional abilities and teamwork efforts. The quantitative questions developed in this study provide prior pilot focus group information, including rating scale questions and demographic information. Expectations in accounting practice using a semi-structured approach incorporating an interview approach allowing all participants the same questions were also presented. The limitations of the study expressed were based on only three universities of study participants thereby affecting the finding results. The students express continuous training and education through the lens of improving career goals and increased salary. This study adds an interesting component through the emphasis of realistic employer expectations and students' understanding of what is expected. The results show students and employers agree on the skill sets, while higher order skills, such as emotional intelligence and critical thinking elements, were not clearly understood. This study also makes an interesting contribution by adding critical thinking

elements and other aspects of entry-level accounting employer expectations. Curriculum advancements involve accounting skills beyond the technical skills and this study provides additional components for the collaboration efforts for practice and education with technology.

In the *Journal of Accounting Education*, an alternative view of accounting improvement education was covered by Earl Wilson (2013) as an explanation for how governmental accounting has improved. Although Wilson's perspective does not address the private sectors of improvements in accounting, the study demonstrates how improvements can occur through collaborative efforts of practice with educators. The improvements were presented in governmental accounting, including standards and practices, the author attributes educators as leading facilitators for improving textbooks and curriculum. Improved education in governmental accounting clears the path for the advancements and fosters the quality seen in practicing collaborated efforts with education.

An important view on quality in higher education can also be seen through the lens of the educators in non-governmental courses as well. It is also important to recognize studies that express views on the quality of higher education institutions by various measures. In a study conducted by Fogarty, Zimmerman, and Richardson (2016) the authors identified accounting faculty; their views offered the institution's academic success as a strength over research value, particularly in a discipline such as accounting. Educational organizations measure success based on the best faculty and student enrollment with ample funding for operational, development and growth. But rankings are not just measured on prestige, enrollment, doctoral qualifications, and

publishing efforts of faculty higher education in accounting, success is measured through academics which tend to be closer to the work world of the accounting profession. Accounting faculty, therefore, may stress relevance over rigor in what they believe measures educational quality and seen in their efforts to better align with the practice. Faculty stress educational efforts should prepare students for job entrance and practice preparedness over further education often associated with college prestige. Accounting faculty, therefore, are focused on teaching activities and ways to better engage students as opposed to research efforts that promote collegiate standings. Fogarty, et al. (2016) offer value in the assessment of college standings in views of academic verses doctoral qualified research efforts in accountancy.

Challenges to accounting education due to innovation, competitive environments, and technology changes are seen in the study where Chang and Chow (1999) posited a balanced scorecard approach to improve outcomes. Fundamental changes and ways to improve accounting seen through their study based on the survey and interview responses of participants from eleven colleges and universities. A balanced scorecard is a technique of measuring future drivers based on past performance indicators. This study is based on managerial accounting concepts rather than financial principles. Managerial accounting is an internal organizational reporting process; financial accounting focuses on public accounting and is external user orientated. The balanced scorecard approach identifies a mix of performance drivers and outcome measures. This study contributes to the overall aspects of organizational accounting reporting techniques and demonstrates the importance of critical thinking, and metacognitive abilities of accounting professionals. The study also provides relevant

data to this study through the report of the National Association of College and University Business Officers (NACUBO), 1996. This organization launched a balanced scorecard planning and performance management system for thirty institutional functions based on three primary data sources: internal financial reports, benchmarks, and faculty, staff and student-customer satisfaction surveys. The study was conducted under the framework of the university mission statements and values; however, despite the favorable experience, a lack of balanced scorecard in educational institutions was proven. In conclusion, the study expressed that the balanced scorecard approach, while applicable to measurements, lacks the ability to stimulate accounting educational components necessary for improving accounting education. Terms such as a balanced scorecard, performance measurements, and performance expectations, can be commonly used within the business sectors of accountancy and should also be discussed along with other measurement approaches.

Employer expectations for job preparedness is an important aspect for this researcher and worthy of incorporating into the literary review section to ensure realistic views are provided. As expressed in a study conducted by Low, Botes, Dela Rue, and Allen (2016) using a qualitative method of inquiry, these researchers use semi-structured interviews to express that fundamental accounting technical skills are necessary. Their opinions offer an opposing view that colleges are preparing accounting graduates, as well as academic institutions, and over half of the employers that graduates were adequately prepared in technical skills. The employers also expressed that soft-skills should be emphasized in undergraduate courses, such as interpersonal abilities, emotional intelligence, and the ability to adapt to the firm culture. While these are

quality employee traits, course offerings in accounting may not realistically provide such abilities in emotional intelligence. Their findings also provide the need for improvement in accounting curriculum was not as pervasive as the governing bodies of the profession expressed. The results show that academic institutions may not structure themselves to instill workplace practical skills in students. The results did confirm that what might be construed as critical thinking skills were needed in curriculum including those non-technical skills of interpersonal, communication, and firm cultural expectations. Further research was suggested in the study to incorporate non-technical skills, emotional intelligence, and the differences in the curriculum in various universities. This opposing view of the need for improving the accounting curriculum failed to incorporate such changing professional future global accounting changes.

It is anticipated that accounting professionals are preparing for mergers into a global economy; this transition of the accounting profession stress the needs of the practitioner to adequately meet this challenge through an educational readiness curriculum. College students in undergraduate courses are provided with the International Financial Reporting Standards (IFRS) alongside the standards required in the generally accepted accounting principles (GAAP) in the U.S. International standards are a looming instructional requirement for accounting college courses, and the transition to incorporate and merge the international standards to U.S. standards have been slow. International standards should be fully introduced in undergraduate courses and stress that employers require a general knowledge (Jones, Vedd, & Yoon, 2009). This adds to the claims of improving accounting curriculum and is important to provide additional insights into accounting curriculum improvements. The merger

is a slow process and may not necessarily be due to curriculum, but to the governmental authority's legal standards and requirements. Globalization may prove to be the greater mandate than those of governing policy-makers and accounting students may find the adaptation to increased knowledge an additional on-the-job training activity. The researcher incorporated a survey instrumentation and a test pilot process to assess the questionnaire which was used in the California State University accounting department and administered to fifteen employer participants. The effort demonstrating the differing desires of international employers' needs with those of national employers, as well as small or large managerial and financial accounting professions. The desire for collaborative efforts of universities and accounting practitioners were used to determine the needs for entry-level accounting positions. The importance of accounting faculty development, as well as entry-level knowledge attained through undergraduate accounting curricula was shown to be necessary.

Faculty perceptions for performance are also important as professors determine their positions in the need to improve the accounting curriculum. This is an important aspect for determining collaboration between education and profession, as well as classroom techniques improvement and assessment measures for instructors. Per the evaluation, criteria of scholarly research, teaching, and service, Hart and Wang (2016) provide a study that aims to compare accounting faculty and student assessment of good teaching skills through the efforts of a checklist. The efforts here provide an interesting addition in the claims for improvement through the views of students who had completed recent accounting courses. This contributes to understanding quality teaching and seeks to provide improvement criteria for accounting instruction. The lens of the student

indicates what factors are important for good teaching qualities in this study. (Hart & Wang, 2016).

The studies by Hart and Wang (2016) stress the importance of accounting academic rigor as expressed by accounting faculty and is justified to students who on the other hand do not like having academically challenging classes. The two groups preferred approachability with grading criteria that are fair and accurate. Students value professors with good communication skills, positive personality, and behavioral traits which proves these attributes promote learning. Hart and Wang (2016) also stress the gap in academic and professional accounting expertise. Academic accountants are deeply immersed in research, in contrast to professional accountants who often struggle to keep up with the demands of specialized knowledge and the needs of emerging markets. Due to this gap in accounting criteria, collaboration efforts of the two entities continue to struggle for common ground in what is expected of students. The assessment of effective teaching is also shown to lack an agreement between professors and students; professors express that incorporating critical thinking skills in problem-solving proves effective. Students disagree and rate instructor performance lower when these techniques are applied. The study participants of the students comprised of 142 females, 162 males, while the faculty participants included 23 females and 42 males from 30 colleges within the southeastern U.S.

The relationship of faculty to student portrays a margin between being rigorous and reasonable; although students do not enjoy challenging classes, they prefer fairness in the curriculum in agreement with accounting faculty. Several limitations were discussed in this study including the exchange for minimum extra credit for student participation.

The participants included graduate as well as undergraduate level students, and the good teacher quality was not definitive and less specific on qualities. An additional distinction between the student participants was due to the varying majors of accounting majors and business majors. Both require accounting graduate and undergraduate prerequisite courses; however, undergraduate accounting courses do not require computerized accounting and technical applications that are taught in upper courses of advanced and intermediate accounting classes.

Critical thinking elements continue to be requirements for graduate-level business and accounting courses while undergraduate accounting and business classes may be less likely to be required in undergraduate. It is noteworthy that computerized aspects of accountancy and the business classes may be less likely to require critical thinking. It is significant to note that computerized technical aspects of accountancy and the critical thinking elements are examined through the lens of employer expectations in entry-level accounting positions.

Theoretical Framework Literature

The theoretical framework in chapter one introduced readers to the relevant issue of an underprepared accounting professional based on undergraduate instructional needs against the need's assessment of the hiring manager in financial and managerial accounting positions. Details relevant to this study include the comparative multiple case study; and necessitates a qualitative approach (Yin, 2014). The participants were interviewed using methods such as email, face-to-face, and Skype. Coding is relevant to the result analysis, and the recommended popular qualitative software programs were

implemented. Of this software, included for consideration in this study will be MAXqda, (www.maxqda.com), Atlas.ti (www.atlastti.com), and QSR NVivo, (www.qsrinternational.com). NVIVO became the selected software used for coding the responses of the participants of both cases; entry-level recent graduates and seasoned training accountants.

Despite relevant analytical differences, the strategy used in prior studies may deem different from those posed for this study. Frameworks that develop a linear, hierarchical approach building from the top down to the bottom was used. The data interpretation process was divided among themes and descriptions. The interrelating themes were then compiled per the distinctions. Beginning with the case study approach, prior cases were sought to build upon, the theme section was then designed, and each piece of data was coded per topic. Related theories or concepts directly associated with this study were incorporated via the qualitative comparative multiple case study. By including the qualitative details, the reader will be familiar with the table containing the lists of the definitions of the various codes and an explanation of the code.

Methodological Literature

In the United States, college accounting courses were first taught at the Wharton School in 1883 as a conceptual theory course. The course was later redesigned to prepare students to pass the Uniform Certified Public Accounting examination, also known as the CPA exam. The courses were combined into one focus, with the financial course goal to prepare the students in the CPA examination. The focus of the managerial courses is intended to prepare students for managerial business. Today, accounting principles

courses include both the financial and managerial accounting concepts with the financial course as a prerequisite to the managerial course. These courses are often taught in a continuum sequence, with the financial course as a prerequisite to the managerial course in most universities, and both must be completed to move forward in the business and accounting degree programs. While the manual processing system provides an underlying knowledge of the accounting concepts, the student lacks the knowledge of computerized applications which becomes a burden for professional bodies. In evaluating the concepts of accounting knowledge, the lack of computerized concepts of accounting data processing is assumed to limit the accounting graduate in entry-level positions, particularly in critical thinking techniques, per industry leaders (Albrecht & Sacks, 2000). The knowledge of daily processes of posting transactions is a rational assumption, however it may not include the epistemologies of practitioners in the field of finance and management. The lack of existing validation of this knowledge through empirical scientific methods, referred to as positivism, is the existence of this reality (Johnson & Duberly, 2001). It may be a justifiable assumption that computer skills necessitate undergraduate preparedness in entry-level accounting positions, and additional research is needed to substantiate these assertions. A posteriori knowledge in accounting and critical thinking techniques perspective provides that students should know the basis of why an action is taken in processing business transactions. Without the epistemological foundations of manual accounting processes, students may lack the ability to critically think through accounting processes.

Various studies have offered proficient information on this topic; however, additional insight is clearly presented in the works of the business philosopher Fredrick

W. Taylor. Taylor was selected to provide a qualitative comparative view specifically relating to managerial accounting methodologies used in the 20th century. The Taylor philosophy provides views in higher education applications of ethics, critical thinking techniques, and philosophical epistemology necessary for 21st-century accounting and managerial business leaders (Blake & Moseley, 2010). Comparing Taylor's approach of scientific management, established in 1911, to the essentials of modern business and accounting philosophical epistemology abilities of managers and accountants, as well as the critical thinking issues of modern businesses, the syllabi of the 21st-century college business and accounting courses necessarily should advance. Taylor developed scientific management techniques to better quantify economical business operations, address staffing issues, manage the maintenance of inventories, and organizational control reporting (Blake & Moseley, 2010). Although controversial during its time, the scientific methods and case studies developed by Taylor as outlined in his work by Blake and Moseley (2010) were instrumental in advancing the way management understood managerial accounting systems of the day. Taylor advanced critical thinking perspectives in product and process costing, lean-management, the theory of constraints, activity-based-costing, and activity-based-management. Advancements in managerial accounting operations, however, continue to become more complex as the multitude of procedures developed due to growth, technology, and globalization. By incorporating advancements in higher education curriculum to include philosophical epistemology, critical thinking, and ethical considerations in the modern classroom, in addition to the scientific management developments of early advancements by authors such as Taylor, advancing

the curriculum may be a necessary component for future financial business and accounting managerial professional courses.

Philosophical epistemology incorporated in modern business and accounting curriculum may provide management with foundational abilities through education to analyze the scientific management principles developed by Fredrick Taylor.

Philosophical epistemology is a branch of philosophy that examines the nature, origin, method, and limitations of human knowledge (Poulsen, 2013). By integrating philosophical epistemology in business and accounting college courses, managerial accountants anticipate improving critical thinking skills, thereby improving their ability to analyze each element. The cooperation of workforces and employee selection assess the division of work and responsibility of managers and workers. In contrast, managers who simply incorporate the principles developed by Taylor without increasing the critical thinking skills may consequently find their organization lacking in productivity and efficiency. Furthermore, the management principles embraced in past eras, such as those incorporated by Taylor, also lack technologically sophisticated systems which allow quicker access to data. Such technological advancements are not currently taught in undergraduate managerial accounting courses and lack the ability of managers to focus on control of operations and decision-making skills (Kulesza, Weaver, & Friedman, 2011). These improvements are key fundamentals for the modern business and accounting leader and are instrumental in successful operations.

Research Design Literature

The research design literature for this study emphasizes the ethnomethodology in the selected method to convey the understanding of the assumed need to advance the accounting curriculum and produce an analysis of the methods applied to the study. The briefly described research design is expounded on through the qualitative comparative case study to explore the views of recent undergraduate accounting students to the need assessment of hiring professionals in managerial and financial accounting positions. To understand the role of accounting advancements needs, it is important to look at current research and how it appraises practice. Further, it is important to consider the obstacles to innovation in the classroom and the studies addressing these issues and how they might be overcome. Several distinguished accounting academics have expressed their views about the state of accounting in recent years and the obstacles to innovation. Per Greg Waymire, in a speech conveyed at the American Accounting Association Annual Meeting, he regarded the “growth” of accounting scholarship as “immobile.” He further expressed that accounting research has become narrow with an emphasis on financial accounting, principally using archival methods, with increasing homogeneity and lack of innovation representing a “recipe for extinction.

Hopwood (2007) likewise observed that accounting research has not met the challenges of rapidly changing business environments, but instead is “seen as conservative and cautious, also too rigid with a traditional insufficiently contention with the new and to embrace novel insights and bodies of knowledge.” Similar views expressed by Hopwood, Kaplan express concerns that accounting scholars have distanced themselves from the accounting processes and have lost opportunities to contribute to

practice. Kaplan (2011) name risk measurement and management issues as some neglected areas. In addition to the views expressed by Greg Waymire, Hopwood and Kaplan observed that accounting academics display a strong “herding” behavior and follow where others have already gone, rather than forging a new path by studying a new issue in an innovative way. The author additionally suggested that the pervasiveness of “a narrow set of generally accepted research methods” (primarily empirical-archival methods) have resulted in a “reactive” research design, often limiting research innovation along with the inability to promptly address emerging issues. Kaplan noted that empirical-archival researchers must delay their research of a phenomenon until sufficient archival data becomes available. Kaplan attributed the constriction of research methods to several factors including, most notably the lower levels of involvement with the accounting profession relative to other academic disciplines (leading to a lack of integration of practice and theory) and a lack of innovation in accounting education as asserted by the claims of governing bodies.

While instructional strategies using innovation in the classroom to deliver the principles of accounting may be a worthy idea, incorporating application games and other such computerized applications may not incorporate real-world scenarios. Computer-driven approaches, such as games in the classroom as expressed by Chan et al. (2016), failed to reach the goal of promoting accounting knowledge technology due to the entertainment aspects of the procedure. Game-based learning failed to offer the technology necessary to enhance accountancy learning. Such an approach offers entertainment to students but fails to deliver on job competency and preparedness (Chan et al., 2016). Using an intrinsic motivation method approach, the study concluded their

theory in the quantitative results of the participants in computer-driven approaches for accounting learning. This study contradicts the often-engaging efforts of college educators in innovations, professors who resist computer applications and advancements in the classroom.

In a study conducted by Watty, McKay, and Ngo (2016) using a questionnaire research approach, expressed that new ways of delivering classroom instruction may be resisted when asked to adopt innovation and computerized approaches. The authors emphasize that the resistance is not with the technology itself, but the lack of interest by educators in delivering the innovations. Using a qualitative data approach, conducting interviews with accounting educators provided astounding results that 93% resisted using new technology resulting in a barrier to classroom innovation. The use of accounting discipline as the focus in this study provides that results may show similar outcomes in other disciplines as well. The paper by Watty, et al. (2016) provides possible explanations for the educator resistance with a suite of potential recommendations to improve the resistance. Technology illiteracy in professors offers one possible reason for the resistance and the lack of training as a contributing factor. Training alone may not alleviate the barrier; educators should reimagine the curricula and support the digital literacy skills of 21st-century students. Other contributing factors may include that faculty may be unsure how to implement new technologies. What is clear, this study contributes significantly to the claims that the accounting discipline has been slow to embrace technology and adoption of classroom innovation remains limited. The conceptual framework for this study offers a technology

acceptance model (TAM), however, this framework tends to measure technology as an intention metric rather than actual usage.

Conclusions

It is important to recognize that the assertion of an advancement in higher education to meet the demands of the accounting profession have led to the need for a strong study. The research questions express the views on the current situation using an open-ended questioning technique to confirm or refute this claim. As derived from the literature reviewed, each of the expressed governing bodies and the need for collaboration of the profession with the academic community certainly exists. In addition to incorporating critical thinking elements into the undergraduate accounting courses, it can be argued that accounting is a fundamental aspect in the development of modern capitalist societies and is ever changing due to the global expansion of international markets.

A shift in a new paradigm of system thinking in accounting education is evolving and worthy of study. The influence of accounting leadership, communication and personal motivations in global organizations, institutional developments, and an adaption of the rules which inadvertently facilitates the growth of accounting educational concepts is certainly called for. While accounting sets the governing rules and techniques used to monitor financial positions of organizations and institutions in meeting goals and performance appraisal, accounting also provides data used for budgeting, investing, and financing the growth of organizations (Chapman, et al., 2009).

Chapter Summary

The key points presented in chapter two emphasize the need for a new paradigm of thinking in relation to research questions and advancements in higher education as demonstrated in the literary review. The historical methods of managerial applications to the modern advancements of innovation as presented in the historical literature express the need for elaboration in financial and managerial accounting in alignment and collaboration of the profession with higher education. Additional studies, while also a necessary component of leadership system thinking provide solid evidence for convergence with profession and educators and remains to be fulfilled by accountancy scholars of the profession. Finding and solving potential gaps in accountancy literature studies greatly benefit the accounting profession by providing the details of the vast deficiencies which currently exist in the accounting system thinking paradigms and standardization techniques as taught in the current curriculum. In addition, the gap which currently exists leaves room for improvements in the educational aspects of innovation, critical thinking, and metacognitive skills needed in higher education. Studies remain to be conducted to aid the standard setting processes, provide solutions to the lack of critical thinking elements in reporting requirements, and add to the existing literature for the call for improvement. The previous literary researcher methods used to assess the current accounting curriculum emphasized the need for a qualitative approach of open-ended questioning to understand the lived experiences of study participants.

Metacognitive skills associated with critical thinking elements offers additional exploration as an expressed deficiency and requires further study beyond what is offered

as an introduction to these aptitudes in the classroom. In addition, the current lack of scholarly prepared leaders in accounting higher education to improve technologies and innovation along with the critical thinking elements in the curriculum could provide the needed qualitative, quantitative, and other methods of studies to the profession greatly needed. These studies could also provide specific areas of detailed information for various regions of the international business community, thereby increasing a balance of intellectually prepared leadership power in financial and managerial positions. The research inquiry of this study seeks to add relevant information with the explanation of entry-level job preparedness, the components of a collaboration effort between education and practitioners, as well as critical thinking abilities. The methodology used to understand these details and offer insight on the results will be presented in the following chapter specific to the two cases with the components used to present their views and outcomes of this study.

Chapter 3

Methodology

The methodological information in this section detail the fieldwork activities conducted by this researcher and clarify the data collection and management procedures implemented. The cases in this study are collective and involve the extensive study of the views of the two groups of participants: recent graduate entry-level accounting professional's opinions and the training hiring managers or supervisor's assessment of job preparedness; both based on the applicability of the rules of debits and credits in the workplace. This qualitative comparative multiple case study involves the described two cases in an open-end narrative allowing the participants to express their lived experiences in relation to the application of their education in the workplace.

When two or more cases such as this are used, the primary purpose is to understand the phenomenon comparatively and identify the contrasts, explain the patterns, and provide a prospectus on the continuity of the accounting profession in relation to undergraduate accounting higher education curriculum. As it has been expressed by the accounting profession governing bodies, such as the American Accounting Association and the American Institute of Certified Public Accountants; an advancement is needed to meet employer expectation (Albrecht & Sacks, 2000). It is important, therefore, that the cases of accounting curricula and job preparedness are selected as the exemplary best practices. These cases offer the best approach to determine the effectiveness of current accounting curriculum and assess the training needs of entry-level accounting jobs. Elements within this methodology process

demonstrate the appropriateness of this qualitative comparative multiple case study, due to the more realistic responses of the participants, rather than information that would be obtained from other methods.

The subsections offer the details of the appropriateness of the selection of the participants and provide the ethical implications of the informed consent agreements of the participants. In addition, the ethical considerations provide confidentiality mechanisms to ensure the integrity of documentation records use. The students' educational background records validate their scholastic positions based on grade point averages, and their preparedness of entry-level accounting jobs. These subsections are presented and include the design procedures used for the participants.

The design of the participants consists of two groups as the strategy essentials in the foundations for this multiple comparative case study. The two groups contain recent graduate entry-level accountants as one case, and the hiring training managers or supervisors of accounting business organizations as the opposing comparative case. The data collection procedure included several computerized software methods specifically incorporated for the data collection of the two cases, with the researcher as the instrument. The data collection and analysis procedure required computerized software as detailed in the steps taken to address the participants' questionnaires, (Shuttleworth, 2008). The participants consist of the two groups based on the emergent style of the study and incorporated as the study progressed. The integration into a broader understanding of readiness for accounting professionals are based on their understanding of the mechanics of daily accounting processes and discussed using face-to-face and email interviews to gather data.

Research Method and Design Appropriateness

The design of the comparative cases involves two units: recent graduate students entering their first accounting jobs as the first case, and the managers responsible for the entry-level job training requirements as the second case. By understanding the application of the rules of the debits and credits manual processes taught in entry-level accounting courses as it integrates in the accounting jobs driven by computer software, one may view and offer an assessment of the contextual differing or similar views of the two cases. This understanding incorporates the graduates and practitioners in an integration of technology skills-based curriculum verses a knowledge-based curriculum as an application in practice. This design offers the most applicable data collection method necessary to analyze the manual bookkeeping processes in a technologically advanced accounting practice through pen-ended questioning narrative data (Yin, 2014). The two cases of participants offer their opinions based on their lived experiences in undergraduate accounting courses preparedness, training elements from the supervision positions and both cases' views of integration of the two components in accounting education and entry-level job instruction requirements and collaboration.

The similarities or differences from the cases of the profession and education refute or support why these claims affect the outcome or the impact within the accountancy future. In addition, a key feature of this comparative case study is to understand the casualty, or the extent to which an intervention in the situation caused an attribution or a link between what was observed and future results. By comparing the outcomes of the multiple cases of the accountancy profession claims against those of the education sector claims, different components or characteristics are presented that appear

to be the deciding factors for why specific outcomes have continued. The outcomes of the study also help identify why such behaviors within both communities have continued to control their sectors and why a collaboration of education and practice have not occurred to improve the future of accountancy.

The decision to utilize a qualitative multiple comparative case study as the chosen methodology for conducting this study is the most appropriate procedure for meeting the goal of contributing to existing knowledge in higher education as well as determining if undergraduate accounting education offers the appropriate knowledge necessary for meeting employer expectations. A case study of two views; the experiences of the recently graduated accountants as one case, in comparison to the expectations of employers in normal compilation procedures as the other case. This offers the researcher an opportunity to study the results and contribute to existing knowledge from two perspectives and forming a triangulation view (Yin, 2014). Confirmation or rebuttal of the claims of unprepared undergraduates for entry-level accounting positions determined if the needs of hiring managers were met. The analysis of the data provides an opportunity to view the two cases and while the qualitative comparative case study was the chosen method for this study, an alternative method of a mixed method approach was considered, incorporating variables of the quantitative applications. The choice for viewing the multiple cases and selecting the qualitative comparative case study as the best option however was preferred to understand the participants' views.

Research Questions/Hypothesis

There are many procedures that could be used by the researcher to gather data and further knowledge about a phenomenon such as accountancy preparedness.

Acquiring the expressed experiences and views of participants is one such method in a qualitative study, particularly with a comparative case study such as this. The population of the participants for this case study includes recent graduates, also known as the entry-level accounting professionals as one case; the additional case includes the hiring training managers or supervisors. This researcher is the person from whom the case-study data is collected through the interview process with one or more partakers relevant to their greater understanding of the proposed problem (Yin, 2014).

Study responsibility is one of the many rubrics of the values which this researcher instilled into the study. This researcher includes an ethical statement of integrity within the confidentiality consent agreement form (Creswell, 2013). This researcher also ensures the integrity of the data collection process of interviewing by reading each question exactly as it is written. Participants reviewed the draft case study results to validate the accuracy of their views to avoid potential mistakes. Mistakes in results may occur when a respondent has not been fully committed to the seriousness of the interview process and lacks the knowledge to accurately answer the accounting questions. To improve interview results and avoid mistakes, it was significant to emphasize the importance of a complete answer by accurately modeling proper respondent behavior on the part of this researcher as the interviewer.

Reflexivity is the process of reflecting on preconceived interpretations and evaluate this researcher's positions on data. Bracketing in the process of setting aside personal experiences, reflecting on preconceived notions and setting aside knowledge of prior studies. Therefore, to remove potential biases, this researcher will incorporate reflectivity in bracketing as a means of neutrality in this study (Hoskins & White, 2013). An ethical statement included in this study by embraced the following six principles; this researcher safeguarded:

- ensure the quality and integrity of the study;
- maintain the written informed consent documents;
- respect the confidentiality and anonymity of the participants;
- ensure that the participants did participate voluntarily;
- avoid harm to the participants; and
- show that this study is independent and impartial.

Population and Sample

Using a proportional selection process with a basis for the population of this case study consisting of three females and two male recent graduating college students produce and obtain a rich dialogue of their views. A proportional sample is a type of selection process which focuses on the purpose and is used to obtain an accurate sample of respondents. A purposive random sample selection of proportions of female to male was not a component to gain a deeper understanding of first, the main participants, and next, the organizations. While the word "random" has several meanings, for this study it

applies to the basic daily activities of an accounting professional including females and males and the accounting firms or organizations. The yielded portions of female to male ratio have no numerical components, they are only representing diversity in the profession and demonstrated in the interviewing process of the lived experiences in the accounting profession. As the study progressed, other considerations such as race, religion, and economic positions are not considered for this study.

Educational aspects are important and grade point averages considered, with a minimum of 3.8 graduation rate as a basis for inclusion in this selection process. The grade point factor might have influenced the study if qualified applicants did not meet this request, and a lower GPA was considered as the study emerged. This decision is based on prior studies which stressed the importance of the mastery of knowledge within accounting and understanding the mechanisms with entry-level positions in business and accounting (Pfeiffer & Fong, 2002).

The selection process of the recent graduates' supervisors from the accounting firms are not based on a specific criterion; rather their population and sample size are dependent on the firms receptive to the study within Georgia as the comparative case. Due to the emergent process of this phase of the study, the supervisors responsible for training and the assessment of the recent hires were incorporated into the study as the firms were located and accepted into the study. The sample size logic is based on criteria regarding case replications that are included in this study (Yin, 2014). In consideration of the training managers or supervisors, it is important to reflect on their expectations of entry-level job preparedness with respect to and in consideration of grade point averages of the recent graduates or entry-level accountants.

The population of the study consists primarily of students who have recently graduated from accounting and business classes within the demographic region limited to Georgia. This population included participants of a female to male ratio satisfying a random selection process. Their responses are viewed in contrast to the hiring managers of both managerial and financial reporting entities, thereby representing the two cases

An alternative approach for this qualitative case study may have been to conduct a predictive quantitative method, where statistical models articulate predictive behavior of the students (the dependent variable) from another the training managers (the independent variable). As such, a prediction model may have offered similar results in a numerical manner, but statistical models and dependent variables would prohibit the freedom of an open-ended questioning approach. Prediction models are applied in many real-world situations when conducting research in the quantitative tradition and should be considered as an option for future studies. However, this approach was not conducted, rather it was emphasized as an alternative study to this qualitative method and may also have been a consideration for a mixed method application.

In this case study application, the verbal responses are articulated from recent graduate students to state their positions in relation to preparedness for entry-level accounting positions. The prediction that students with the lowest GPA, or those not introduced to computerized accounting applications are required to undergo the necessary additional training, was not a component in the analysis. Therefore, given the considerations of this qualitative comparative case study to a mixed-methods approach that incorporates many of the quantitative applications, including the numerical values in an analysis, this research focus is presented in a qualitative comparative case study based

on the language of participants. The research does not address additional training as a factor due GPA averages to apply manual accountancy knowledge verses a computerized driven approach.

The sample of this study consists of five recent graduates and five accounting or business supervisors from Georgia to assess the graduates' educational preparedness for entry-level job positions. Accounting and business firms from Georgia agreed to participate in the study using open-ended questionnaires for staff and supervisors using the same questions given to the graduates. The graduates are represented by females and males, with diverse ethnicity including multiple variations within the study in random selection process. The recruitment process involved locating recent graduates in business and accounting as the first case. The students were located by reviewing the graduating classes in business and accounting college roster lists from online and on campus colleges as possible study candidates. Information such as email addresses and phone contacts were gathered, and the researcher contacted the graduates to request study participation.

To locate hiring and training managers in accounting and business offices, public internet domains were used as a medium to contact potential participants as the second case. Per Eysenbach and Till (2001) open social media platforms offer a positive way to contact professionals within specific categories who may be passionate about their professions and eager to share their views. The researcher was prepared if training managers refuse to participate, or not respond, the recent graduates would be asked the questions concerning their training based on their education and only one case would have been considered

Both cases were contacted and agreed to participate, the selection process was then implemented. The selections were a complete random assortment; however, the researcher strived to incorporate portions of the subgroup of male and female equally. While the methodology for the study is based on the qualitative multiple comparative cases of employee to employer, a hierarchy exist, as it often does in workplace settings. Therefore, sample selection was incorporated at various levels of management within the profession. To ensure the power imbalances of managers to employees did not influence results, interviews also included members possessing no influential factors within their organizations (Becker, 1970). By means of this emergent design, the processes for this qualitative comparative case study is not tightly prescribed and the processes shifted as the data collection process proceeded. Based on inquiry and evaluation of the in-depth analysis, this study was bound by time and activity, therefore an emergent nature was a necessary.

Informed Consent and Confidentiality

Informed consent includes the ethical statement and agreements of the study participants expressively protecting their rights, ensuring their privacy, and guaranteeing security with participation freely given. The need for protecting participants and their views comes from the fact that this case study involves human affairs, their individual interpretations and lived experiences in undergraduate accounting courses, as well as entry-level accounting positions. An explicit relationship to the form of this study is within compliance of the university for this study consent forms. All participants' involvement is freely given or declined as they choose based on their understanding of

the study and is stated in the consent form. The consent forms were included with the written questions as part of the interview process in print form and provided to the participants, as this emergent study developed (Marshall & Rossman, 2014).

The fundamental ethical principle for this study is this: no coercion was used in any way to obtain information from the participants, all research participation for this study was conducted in a strictly voluntary basis and stated so in the consent forms. This researcher upheld the ethical statement terms of this agreement. Ethical considerations of privacy of graduates' GPA level were included in consent forms. Essential details resulting from graduate students' grades are noted in the findings reports to ensure the range of skills were represented fairly and fully disclosed as a factor in the consent forms. Signed consent forms are securely maintained in the files of this researcher and a copy provided to each of the participants, including recent graduates and the employer positions of supervisors, training personnel, or hiring managers. A statement allowing the participants to fully opt out of the study is included in the consent forms. Participants acknowledged they may opt out of the study via email to the researcher at any time. Destruction of records are ensured via incineration methods as stated in consent forms and the researcher adhered to this policy. Records are not accessible to those beyond the bounds of this study, a strict confidentiality policy is maintained and adhered to by this researcher as stated in the consent forms, signed and agreed upon by all participants.

Confidentiality of participants is adhered to in the data collection and security statement available on the participant non-disclosure forms, these forms are included with the questionnaires and explained in the interview process. Non-disclosure forms

are adhered to in this study ensuring the confidentiality of participants' private information. The participants were thoroughly informed of the study objectives, assurance of confidentiality, non-disclosure of private information and rights to privacy. All aspects of this study were explained to the participants per the American Psychological Association ethical standards code, stating the researcher did fully explain the purpose of this study, the procedures involved to ensure participants are conversant of any risks and that no incentives were offered. The identities are secured within the researcher's private office files and maintained under locked file cabinets, accessible only to this researcher.

Finally, to ensure that the ethical integrity of the study is maintained, and participant risk is ascertained throughout the study, the researcher-maintains documentation that the ethical agreement and confidentiality agreements of participants are observed. Questioning is limited to normal, everyday information and was not unduly stressful. This study does not involve questioning of bad habits or negative behaviors, nor invokes personal information about relationships of a negative nature in employment. Negative inquiries of any type are avoided for all participants in this study.

Instrumentation and Data Collection

Qualitative comparative case studies allow for an open-ended approach for questioning of multiple participants from different cases. Therefore, this method allows participants more freedom to express their opinions and offer views of preparedness in accountancy. Discoverability of the participants' views are conducted in several ways to

ensure saturation: interviews, questionnaires, and group administered discussions as necessary to obtain data. Documentation is obtained as further evidence, with the aim of strengthening the findings through convergence and triangulation of the data. Strengthening the intent of the participants' subjective views and feelings about the phenomena of accounting principles, in relation to their entry into the accounting profession, is based on the interpretive validity of the researcher (Lewis, 2015). The researcher traveled to locations where online and other methods were not conducive for gathering data. Regular mail was considered as an option where participants were beyond the bounds of this researcher if necessary. Phone calls to participants were conducted to determine interview options and the researcher complied with the best and most convenient method for the participants. Using open-ended questionnaires and interviews, the data was gathered from the female and male recent graduates of accounting and business, as well as the questionnaire interviews of the training assessment of the supervisors from accounting firms in Georgia. Open-ended questioning allows freedom of expression, and the ability to discuss their personal views. The researcher provided an added assurance of protection and ethical treatment of their thoughts during the interview process. The open-ended questions are identical for both the female and male recent undergraduate participants, numbered and dispersed in the same manner for both sets of participants as the questions relate to their undergraduate college accounting knowledge and their views on job preparedness.

The questions for the training managers or supervisors were also identical questions from firm to firm or organizations; all training and hiring entities did receive the same set of questioning in written form and in the interviewing process as it related

to their positions. Each of the two cases; the recent graduates of females and male entry level accounting professionals and the hiring managers or supervisors, received their questionnaires with no deviations of each case. The strength of this questioning method ensured an impartial view for each case, the recent graduates and the employment training supervisors interviewed through a consistent approach. This questioning method also offered an opportunity to explore potential boundaries of the social processes within the accounting profession and higher education for entry-level accountants in their application of the rules of debits and credits in the workplace. In this qualitative research study, the researcher is the primary instrument due to the intimate involvement in both the data collection procedures and in interpretation of the data. The protocol for case studies normally do not follow a formal procedure in the developmental stages and therefore are emergent as the study advances, including categorizing the data into patterns by the researcher.

Patterns within the language of accounting may be difficult to evaluate, incorporating an effective computerized tool was the most effective instrumentation used to ensure reliability of terminology and validity. The selected computerized software application used for coding and analyzing the verbiage is NVivo Pro, version 12. Also, the proposed instrumentation relied heavily on the researcher as the primary data collector, with collection tools including email, telephone, as well as face-to-face interviews. The various analytical tools used in this study is based on availability of participants, the collection tools were determined by the participants agreement of location and interview methods.

Validity and Reliability

One of the key concerns of a study involves triangulation of the data, the collection procedures from multiple sources provides evidence in this design technique. Multiple sources of evidence may impose greater problems for some researchers, including dependability and trustworthiness of the evidence. This may be due to a lack of understanding the techniques required for each method of data collection, including questionnaires, interviews, and documentation. Therefore, it was important this researcher demonstrated wide-ranging knowledge of the multiple data collection techniques involved. To verify the successful output of meanings and ensure patterns are understood, the researcher reviewed the responses multiple times and cross-referenced each verb and description. It is important to show how and why the participants feel their undergraduate courses may or may not have contributed to their knowledge in entry-level accounting positions. The researcher offered a robust narrative in each application of this process and fully explained the results to the participants to ensure triangulation of the data was met (Neuman, 2011).

Data Recording

Developing codes for the categories was the first step taken in the instrumentation procedure. The researcher used a recording device to ensure the participants' verbiage were exact. Permission forms were obtained with signatures from the participants including the option to not be recorded and only transcribed. The next step was the verbiage selection of the most reliable accounting terms used in the application of the rules of debits and credits and the training necessities of employers.

During the data gathering process, anonymization of transcripts became a very important part of the transcribing process. The researcher developed a strategy to avoid issues in this area, the participants' names and organizations were abbreviated using the first letter of the participants' last name and a number relating to each case. Once the study moved to publication, the participant names were anonymized, the names of people and contextual names such as organizations, locations and so on, were all removed to protect and ensure their privacy.

Further categorization in the adverse and confident context of the application in their entry-level job positions is conducted in relation to validity and cogency of the training requirements was the next step. The contrasting case of the employment training requirements assessment is the final step and conducted in the same manner with categorization of the adverse and constructive views of the rules of debits and credits through the lens of the common accounting language located in the patterns. Practical advice offered by Corbin and Strauss (1990) present methods that enable researchers to analyze, interpret, and make sense of their data. In coding, analyzing and evaluation of the data, the definitive steps were followed with additional insights as the study necessitates. Transcribing the data once analyzed and evaluated included three approaches; exact transcribing word for word, intelligent transcribing seeking relevant terms, and finally discourse or conversational transcribing. The researcher approach transcribing in these step by step processes was to narrow down the participants' exact meaning or explanation as it is not an interpretative process (Cook, 1990).

Data Analysis

Narrative data analysis is a technique that involves providing an explanation; it may be referred to as analytical narrative, narrative explanation, narrative structural analysis or sequence analysis used by the researcher locating core elements used to map the formalized grammatical structure for the data (Creswell & Poth, 2017). Each form of data analysis was aligned to the specific question asked of the participants. The analysis of this case study involved searching for patterns in textual form, insights and concepts manipulated into two subsets; the case of recent graduates and the training managers (Yin, 2014). The degree to which the researcher accurately portrayed the meanings provided an accurate portrayal of the connotations given by the participants, dependent upon member checking and peer review. This strategy determined if participants agree with the researcher's interpretation and allowed for modifications as necessary. The analytical and critical thinking skills of the researcher in understanding both accounting education connecting accounting and business professions is a key component in the narrative analysis of the data, including the accounting terms, key phrases, and training language.

Identifying the patterns within the phrases, terms, and words includes scanning for their repetitive use, as well as identifying those with uncommon reactions by participants is imperative. While primary data comparisons are key, secondary data such as documentation was also considered and included in pattern identification (Larsson, 1993). Another valuable aspect included identifying key aspects of the issues which were not discussed in the data and was included in notes of the researcher. Points which may have been overlooked were emphatic or may be things other than those related to

accounting and included in the notes. Significant phrases and statements of a nonaccounting nature were extracted from the data and constructed in a list to ensure the participant's meanings are maintained. A summary of the participants' descriptive statements, their essence, or their phenomenological statements were revisited to ensure nonrelated points were noted. Participants reviews were conducted to evaluate the data results for accuracy with results maintained in an orderly manner, and easily accessible for review. To further ensure an accurate analysis was conducted, an important component was the necessity of a timely analysis. The researcher began the analysis process immediately upon retrieval of data, and due to the emergent nature of the qualitative comparative cases, the researcher ensured the integrity of the data of each group.

Case study research is a qualitative, narrative research method, this research was conducted in this manner to offer the best application for conducting real-world views including those associated with education and technology in the classroom, as well as the applications of technology in the accounting profession (Yin, 2014). Despite the lack of widespread recognition of case study research as a research method, one of the primary concerns with this method involves the issues related to dependability and trustworthiness of the case study data collection procedures and as well as ensuring the protection of the data (Anney, 2014). The establishment of dependability of the data was conducted by implementing participant verification, reviewing their responses, and validating the data results with the researcher. To ensure trustworthiness of data and add a layer of validation as needed, additional resources of participants were sought, to

include managerial accounting professionals, in addition to financial accounting practitioners.

Lincoln and Guba (1985) offer four criteria for ensuring integrity of qualitative research and explicitly proposition these as an alternative to traditional criteria including credibility, transferability, dependability and confirmability. To further ensure trustworthiness of the data, the researcher included extended fieldwork. This enhancement included visiting managerial accountants in private organizations to observe their accounting procedures, in addition to visiting financial accounting public firms. As this study emerged, the two distinctive positions of managerial and financial accounting within the accounting profession offered more participant possibilities to include supervisors and training managers. By including two groups in this case, greater member checking and peer review were accurately portrayed. Data interpretation of training and assessment of entry-level accountants provided an inclusive criterion for this study resulting in improved results. The findings of the researcher are elaborated with detailed explanations in chapter four (Bowen, 2005).

Preconceived positions on behalf of this researcher could negate this study in an influenced position, including pros or cons for advancing undergraduate accounting curriculum. Understanding the details from the cases as thoroughly as possible and understanding the potential biases in the data collection and analysis procedures resolved this problem. Another method for avoiding biases was accomplished by triangulating the collection processes; interviews in addition to open-ended questionnaires, observations and historical documentation offer a common-sense method to resolve this

potential problem. Avoiding biases and maintaining the integrity of the data and the data collection process was the primary concern for the researcher.

Summary

The purpose of chapter three is to present the methodology used to gather the data needed to gain a thorough understanding of the participants' views and their lived experiences. Incorporating a qualitative comparable multiple case study in the accounting profession and accounting education, both entry level accountants and novice accountants' views on the applicability of the principles of the accounting rules of debits and credits usefulness in entry level accounting job was analyzed. Using this meticulous and systematic data gathering plan and design as described in this section of the cases, the researcher offers the evidence through a language-based method. This method of data gathering, and analysis provides the best plan for locating patterns in the verbal responses of open-ended questioning in entry level job preparedness by both sets of participants; recent graduates and training managers in accounting practices of managerial and financial accountants.

It may be argued that a case study is narrow and lacks sufficient evidence to fit the entire query of undergraduate accounting courses in relation to job preparedness, an inquiry such as this does provide the lived experiences of those who fully understand the problem in undergraduate education in relation to the accounting profession. The points this research study addresses include the accounting professional governing bodies claims for advancement of higher education, per hiring professionals engaged in training requirements including the validation of assessments of educational curriculum and job

preparedness. The results also provide data useful to scholars, practitioners, and leaders within the accounting profession. In addition, the study results provide data pertinent in contributing to assessing needs of entry level accounting practitioners and the claims for advancements in technological requirements and critical thinking elements in higher education and add the needed research to these claims.

In the role of researcher, it is important to remember that, even in a multi-subject case study, each case was treated individually and point cross case conclusions were drawn. The purpose of this comparative case study is not to prove or disprove such a theory of that within the accounting profession. The objective rather of this case study is to offer new and important information to accountancy, the governing bodies, and the relationship of accounting higher education in job preparedness. Chapter four will introduce the participant's views and the collection procedures used in the gathering of the data details. This will include the instrumentation and questioning details in an emergent style with options of incorporating additional questions as needed. The details of the two groups represented in chapter four findings provide views of the recent graduates who have entered the accounting profession and the views of those involved in practice of managerial and financial accounting training. Chapter four also provides a review of the problem and purpose for the study in relation to job preparedness, data collection procedures, demographics of the study, participant collection procedures, and instrumentation used in the study found in the following results chapter.

Chapter 4

Analysis and Results

The purpose of chapter four is to provide detailed results of the collection procedures and instrumentation used to show expressed opinions of those recently entering the profession of accountancy, collaboration efforts between those who govern accountancy higher education, and practitioners' opinions of training in private and public firms. The accounting and business expectations can be exemplified by the evidence of both cases in this results section. With the current accounting education situation compared against the needs of future accounting practitioners; these findings offer a triangulation to the claim of incorporating technical skills and critical thinking abilities in current undergraduate accounting curriculum through the expressed views of the cases. The question of technology through the lens of critical thinking assess the need for adaptation to technological applications of debits and credits processing in the classroom and in the modern office. Based on these findings, the participants viewed how well a curriculum change to incorporate computer applications in conjunction with critical thinking skills might assist entry level accounting professionals in meeting the expectations of their employers.

Research Questions/Hypothesis

The governing bodies of undergraduate accounting education are responsible for producing classroom instruction, they assert the rules of accounting curriculum, particularly the application of debits and credits should be taught using computerized technologies. Prior studies incorporating a case study approach have not shown the

fundamental aspects of technology applications might improve business and accounting training. This study provides a solid foundational assessment of those views. By comparing opinions of two groups of participants who engage in the daily applications, the evidence of an evolving profession is presented. These results also include issues related to globalization, technology and training in preparedness for these changing dynamics. It also offers an added consideration on the financial aspects of costs related to training and education.

The problem that a claim has not been assessed from those closest to the issue of an improvement in education governing bodies of the accounting profession have expressed the need for technological implementation of classroom applications in processing the daily business transactions using the rules of debits and credits. This involves a hands-on approach of the practitioners' use of computerized software verses the manual entry of increases or decreases to various accounts in processing transactions currently taught in undergraduate accounting college courses. The lack of collaboration of knowledge between higher education and practitioners of managerial and financial accounting exists in manual verses computerized curriculum in undergraduate courses. The problem seen through the lens of training needs assessment, with costs factors associated to additional training, and assessing if employers' expectations are being met, are based on the current accounting curriculum. While the governing bodies of higher education continue to develop manual application curriculum, the critical thinking elements of the entry-level accountant go unmet in job preparedness, therefore improvements go unmet. The problem of usage gap from classroom to office have shown the disparities of collaboration efforts between education and employers; this

problem drives the primary purpose for conducting and presenting the findings of this study.

The purpose for conducting the study is to show if recent graduates feel prepared for entry-level accounting or business positions and if they received adequate education to meet their employers' expectations in relation to manual verses computerized transaction entries of debits and credits in reporting transactions. The purpose was also to present employers' views of job preparedness based on the current curriculum and if additional training was necessary. The challenge of the current accounting curriculum to meet those needs is assessed through means of patterns in the views of employees and employers. This study reviewed the patterns in language of the participants and employers to determine adequacy of education in job readiness. The common themes were grouped and presented in the tables in this section to provide an explanation of the patterns found in the response verbiage provided by participants.

The driving force of the study was to add to the knowledge base that an improvement in curriculum will better prepare the undergraduate for an entry level job in accounting and business. Governing bodies of accounting curriculum development, as well as practitioners, claim a need for improvement in the syllabus which should include computerized literacy in the applications of the rules of debits and credits. This leads to the question of altering the training requirements and determining how curriculum changes may improve the profession. It also conveys the potential benefits accountants may financially gain from an updated technologically advanced curriculum. These primary concerns were the inspiration for this study, as well as need to apply the critical thinking elements associated with the manual and computerized

processes. The findings tables clearly prove how adding the technological applications in the classroom to model the modern office as presented in the analysis procedures address and align with the research questions, the remove the gap in knowledge of the problem and offer the reported views of the cases.

RQ1 – How may curriculum changes alter on-the-job training for employees new to the profession?

RQ2 – How might the accounting profession benefit from an updated technologically advanced curriculum?

Data Collection

By applying a measurement instrumentation of NVIVO Software, each case was assessed. The views of recent graduate students in their first job positions and the opinions of training requirements were expressed in the responses to the questions answered by each case. To provide a comprehensive outcome of the views of each group, the step by step process of data gathering and measurement in this comparative case study was conducted in a comprehensive order. The data gathering process began by contacting the participants of both groups via email and telephone to schedule the meetings for face-to-face or telephone interviews and to plan the questioning review. The requirements of the public accounting firm interviews were conducted after tax season (January – April 2018) to allow financial accountants an opportunity to participate after their busiest time of the year. Resistance was factored in due to time constraints and altered the schedule of the study. This schedule change requirement

was also conducive for undergraduate college classes which had adjourned for the summer, allowing students an opportunity to participate.

The reliability of data was more effective by providing questions in advance to conducting the interview. An opportunity for participants' views to be articulated clearly is allowed in a contemplative approach to their answers. By providing access to the questions prior to the interview, the researcher considered time constraints of the interview process are maintained thoroughly and accurately in the interview. The questions were consistent in both cases, the time frame for the data collection process was also in conjunction with the requirements of both cases, while not intentional, this added a layer of reliability to the data. An alternate view may have resulted in a situation where prior exposure to the interview questions had occurred and is worth consideration in the reliability of the study.

Data Analysis

The data from the participants answers were entered in the NVIVO software in a concise manner with an emphasis on exact verbiage and any interpretations reviewed back to the participants for verification. The actions of the researcher within the instrumentation procedures were consistent in the data gathering process discussed in chapter three. The triangulation of the cases of this emergent design were ensured by the offering financial aspects, distinction of two cases, and the division of managerial and financial firms within one of the cases for further reliability. For example, the same note taking techniques were implemented in all interviews. The data results include the expressed positions of the two cases in this study using coding of common

language. The interviewees included employees and employers inclusive of recent graduates in entry-level jobs in accounting, the managerial accountants' opinions, and the financial accountants' assessment of current accounting preparedness.

Results

The questions were open-ended to allow participants to express their opinion of the accounting rules used in daily transactions as a necessary component in critical thinking application or if the technical applications would be pertinent. The questions were identical for both cases; entry-level recent graduates and employers. This approach provides an applicable method to the findings using patterns in the language of both groups. The NVIVO software was then able to pinpoint with accuracy the responses of each case in all categories for ease in understanding the views.

The questions of each section are categorized and alphabetized as A, B, and C; these are explained by the titles of each section in the tables and offer the views of each participant; undergraduates recently hired and practitioners from managerial and financial firms. The questions were arranged into three groups; the first section A provide the background information of each participant as employee and employer respectively. Section B address their graduation and education perspective of the rules of the debits and credits, and finally section C questions offer the views on the use of the rules of debits and credits used in the workplace and their opinions on techniques used, as well as the training and critical thinking elements. The first column tabbed as A included three questions with insights into the positions of the recently graduated and the views of pre-graduate students with respect to their employment. The daily

activities as junior accountants and the use of the rules of debits and credits are presented. The views on the practical application in processing daily business transaction in section A express participants' views applying the rules of debits and credits in the workplace to discover if those principles were used or if additional training was necessary. Section B questions cover the details of their undergraduate education, how prepared they are for their first jobs in accounting with the use of technology and employers' opinions. Section C involves the manual verses technological applications in business transactions, their views of collaboration between education and practice, and potential refresher courses regarding additional training.

The tables include data results of the multiple cases in a comparative format to demonstrate the expressed views of both entities to alleviate the specific gap in knowledge of employers' expectations and entry-level job preparedness. The first case results present the entry-level accounting graduates, the second results are those of managerial and financial accounting training managers per the Appendix J table. The data gathered for each question is grouped according to the two cases, the division of managerial and financial accountants are merged as one heading, while those of the graduates are specific to their group as entry-level recent graduates. Managerial accountants (CMA potential credentials) are those working in private offices while financial accountants are specific to those working in Certified Public Accounting (CPA certified public accountant potential credentials) offices. The division of these two entities (managerial and financial accounting) fall under one heading in the table results, titled as *Assessment Results of Managerial/Financial Accounts*, this section is

inclusive of the employer hiring and training manager grouping of questions. The first case in the table display the employees' recent graduates' views followed consecutively with those of the employers. The first table is titled *Assessment Results of Recent Graduates/Entry-level Accountants* as follows and is comprehensive of the cases of questions accordingly.

The data interpretation process is divided among themes with descriptions of interrelating themes compiled per commonalities. Beginning with theme selection, each piece of data is coded per topic A, B and C. Related theories or concept topics coded in this study include terms such as hands-on approach, training, needs for internships, collaboration needs of governance and practitioners, technology applications and the discussion of relevant knowledge in accounting rules of debits and credits from a manual entry approach, to those in the computerized applications.

Table 1
Assessment Results of Recent Graduates as Entry-level Accountants

Participant #	Questions Group A	Questions Group B	Questions Group C
<i>Assessment parameters</i>	<i>Background – entry level accountants</i>	<i>Background - education</i>	<i>Employee rules usage</i>
#1 Participant results coded per group A, B and C	Degree-BA, Staff accountant, uses principles daily, training obtained on the job	Education was very relevant to critical thinking in using rules of accounting	Interviewee was not involved in training other employees but uses rules consistently
#2 participant results coded per group A, B and C	Degree BA, Staff accountant, uses principles monthly, engages in training, after receiving training	Very prepared for entry level job through undergraduate education	Training through policy and quality control with self-evaluations on rules knowledge usage
#3 participant results coded per group A, B and C	Degree BBA, Staff accountant, uses principles monthly, training needed	Somewhat applicable due to lack of technology in education	Needed refresher and inability to apply critical thinking skills in rules usage without additional help
#4 participant results coded per group A, B and C	Accounting Internship occasionally uses rules, mostly clerk work, training needed	Stressed less theory, more application and technology needed not taught in undergraduate courses	Interviewee was not involved in training, rules were learned on the job
#5 participant results coded per group A, B and C	BA, Senior accountant, uses rules daily, monthly for accrual accounts, somewhat training needed	Working while in college gained both technology and manual application	Needed refresher after break from college and profession

Table 2
Assessment Results of Managerial/Financial Accountants

Participant #	Questions Group A	Questions Group B	Questions Group C
<i>Assessment parameters</i>	<i>Background -financial managerial employer</i>	<i>Background education</i>	<i>Assessment Employer rules usage</i>
#6 participant results coded per group A, B and C	BBA degree, partner in CPA firm, supervision of entry-level accountant in rules	Need entry-level accountants in tax and accounting interaction in technology	More collaboration, hands-on training and measurable production reports
#7 participant results coded per group A, B and C	BS degree, partner in CPA firm, financial review client data, uses rules daily, prefers experience	Necessity for a bridge between technical and real-life applications regarding rules of debits and credits	Engagement performance evaluations annually and continuing professional education
#8 participant results coded Per group A, B and C	Non-degree, managerial accountant in mid-size business, technology driven application of accounting rules	Reinforces that entry-level accountants benefit by understanding manual rules in addition to technology	Evaluation by conducting payroll knowledge, prefers education level of bachelor's degree
#9 participant results coded Per group A, B and C	AA degree, managerial accountant uses manual processes	Computerized applications learned from hands-on use	No evaluations performed in entry-level accountants
#10 participant results coded per group A, B and C	AA degree managerial accountant applies technical approach	Learned from hands-on applications	Does not evaluate but performs self-assessments

Chapter Summary

The significance of these findings represents the areas collaboration for preparing future accountants with the opinions of entry-level and seasoned accountants. By offering their views on preparedness, training elements, critical thinking, collaboration of governance, and fulfillment of knowledge needs, this study provides a

solid foundation of triangulation for this issue and allows room for unaddressed opportunities for future studies. The importance of these findings provides a broadened approach of assessment for practitioners' who may not have linked the significance of their expenditures on training needs and ways to alleviate these costs through involvement in curriculum development.

Through the perspective of an entry level accountant, a heightened outlook in education is presented in positions as accountants and leaders in their profession. The effectiveness of the financial investment in higher education is also demonstrated through their opinions, by assessing this solid need for their involvement in higher education. The results from both cases include social implication of involvement and open the door for future studies is discussed in chapter five.

Chapter 5

Conclusions and Recommendations

An important recommendation is concluded in this chapter to solve the delinquency in accounting education and business preparedness involving the corroboration of various theories supporting resolution of the governing entities of accounting which seek to improve the curriculum in higher education. These governance entities include practitioners and curriculum developers who express the need for a better prepared entry-level accountant, capable of meeting the demands of a global economy in leadership and social preparedness. These entities also express the need for collaborative efforts of practitioners and scholars in improving education. Critical thinking abilities are also an important component necessary to appropriately apply accounting applications using both the manual versus technology processing in every day operations of business. Novice accounting professionals grasp both techniques easily and apply the transactions in great rigor. The problem however displayed gaps in knowledge in terms of assessment of the training requirements to fulfill those aptitudes through an inclusive need for collaboration efforts of higher education and practitioners. More specifically, the results conveyed the needs of the employer are not being met based on curriculum in its current state of manual entry instruction, change is needed as determined by the study results.

Discussion of Findings

The purpose of the study was to offer a paradigm of knowledge on the larger meaning of the problem by contributing the views of those closest to the issues; users. Knowledge in manual, computerized, critical thinking, and training aptitudes of daily

transactions can be derived from the data analysis presented in this results section. The recommended need for both applications were questioned and found worthy of inclusion in meeting employers expectations using the rules of debits and credits, also referred to as the principles of accounting in undergraduate accounting college courses and processing normal business transactions. The purpose was also to offer views on the need to collaborate efforts of those involved with the potential improvement through collaborative exertions, this proved to be a necessary approach for the profession.

Limitations of Findings

Limitations were visible through the assertion of the importance of the grade point averages (GPA) of the participants in meeting expectations of employers and potential training issues of employers. Additional limitations in results include issues in alignment of the data interpretation due to lag times and time constraints from establishment of the study to this data collection and analysis process. Consideration of the tax filing season placed an effect on time constraints limitations, however this proved to be beneficial in both cases. Students had graduated, and tax filing season ended, freeing up time for interviews.

Minimizing any prior expectations and potential biased views on the part of the researcher including assumptions and omissions are factored in as well, and possible limitations on the study are expressed to alleviate such issues within this study. The researcher presented no opinion in either findings, rather depended on solid evidence from the open-ended approach of the participants to present the views of each case. No additional limitations were found.

The intent of these conclusions is to elaborate on the findings and present an interpretative view on behalf of this researcher in greater detail. An assessment of the inferences about the findings, a review of the lessons learned, as well as the ethical considerations, while also assessing the personal views of each case is presented in this study. Therefore, to ensure the best approach presenting the views of those involved, required this qualitative comparative case methodology approach as needed. Views of those new to the profession with an undergraduate accounting degree and recently hired, in contrast to those who train those individuals were collected, analyzed with coded results and are presented here. This broad approach of case selections, entry-level and experienced accountants resolved by this research that the qualitative comparative of each case offered the best tactic to attain these conclusions.

Research Questions/Hypothesis

The framework in this study is contingent on the descriptive narrative, using a top-down methodology where the suppositions of the results are dependent on participants' statements to conclude a logical certainty. This approach is based on an if-then application. In such a scenario, these results are founded on the claims that the need for additional training are due to disadvantages in curriculum as required for the entry-level accounting professionals. Additional consideration in the need for additional training was assessed per the graduating accounting students' grade point average and their level of education consistent with the 3.8 grade point range or higher. Further consideration involves the ability of an entry-level professional capable of using critical thinking skills to determine debit and credit rules in applications of daily business transactions. While these results are associated with the characteristics or attributes of an

individual or organization that conducts annual performance reviews, their views expressed a logical response to improve the profession. The researcher also observed accordingly, the assessment of training needs responses of entry-level accountant's data agreed with the practitioner participants' in the question responses.

Transformative theory addressed issues in change of practitioners and professors to align the needs of advancing the profession and save valuable expenses related to additional training for entry-level accountants. The entry-level accountant offers their experiences in transforming from student to practitioner to meet those needs. While their education lacked the technological skills was affirmed, they expressed the ability to use critical thinking to perform the daily transaction processes from a hands-on approach. They expressed their desire to implement the technology in the classroom and transform their experiences to be better prepared for their first position in the profession. They conveyed from their experiences this may have eased the need for additional training and provided greater relevance to their undergraduate courses in job preparedness.

The transformational approach was shown as a necessary theory to the results of this study as outcomes confirmed the need for computerized innovations in curriculum classroom use. Additional results of the data supported the need for incorporating critical thinking components in decision making and ways to better prepare future leaders in accounting and business in a global driven economy. The rules of generally accepted accounting principles which guide the use of the rules of debits and credits will continue to be applied nationally and globally. This requires a transformation in curriculum, offering greater access to training in internship positions and lowering the cost of training by improving the investment of students in higher education.

The usage gap theory was relevant to this study due to the focus on the limits and constraints in financial burdens which resolved the question of technology uses in the classroom and workplace. Gap analysis involve the technology uses of the cases of the two groups through contrast and comparison if actual performance and potential for desired performance needs were addressed in these evaluations. It proved conclusive, if accountancy educators do not make use of technological resources, or forgoes the investment in technology in the classroom, it may produce accountants who perform below their potential and struggle to catch up with the advancing profession in the global markets. The results of the participants agree, usage of computerized technology, in addition to the manual procedures will improve confidence and better prepare entering accountants as they ease into the profession. The opinions of the study participants offered a solution to the gaps in usage consistent with both cases in this study, their findings provide an inclusive approach of technology in the classroom while maintaining manual processes.

The relational theory emphasizes the relationships of student and professor, employee and employer, as well as junior level and advanced levels of practitioners' results. The relationship subject was an important consideration in the study due to the hierarchy of the advanced professional and the entry-level professional representing the two cases in the interviewing process. The inclusion of this theory ensured a framework in the study to address positions of power that were removed in the interview process. Therefore, this theory was incorporated to safeguard against any potential issues of relationship which might alter the discourse in the interview process. Relation theory is

included to ensure protection of all involved as stated in the agreement forms thereby guaranteeing an unbiased collection of data process with these findings.

Disruptive theory conveys problems in which an issue was not addressed, and an innovation may occur to disrupt the current position or delivery of technology in the classroom. This is likely to occur in accounting higher education as it relates to meeting the expectation of employers' needs for a better prepared entry-level professional. The components of this analysis found when viewing and synthesizing the distinctive patterns found in the results of the interview responses, a disruption in the current applications is imminent and necessary. The patterns were consistent in both cases in relation to needs of employee preparedness and employers' expectations. The assertion that current accounting curriculum using manual processes of applying debits and credits versus computerized applications needs a collaborative improvement effort must occur. The results were conclusive, a disruption in deliveries is a necessary change for the current curriculum to apply the rules of debits and credits, both manual and technological processes should be taught.

Recommendations for Leaders and Practitioners

The implications results is related to the broader social significance which links the data analysis to leadership. The inferences of the study findings to leadership in the accounting profession narrows the gap in knowledge that the potential for a better prepared accounting professional capable of leadership globally is imperative. In the undergraduate college courses, more rigor is an important component to meet the demands of leadership capabilities in a global economy as the past few years have clearly

shown. The accountant is an intricate part of the business world, the results of this study stress the allegations that preparedness is crucial for the profession to meet the increasing demands of the profession as globalization continue to become the norm for practitioners.

Recommendations for Future Research

To ensure the recommendations of those who are at greatest risk for action are met to improve accounting curriculum, the expectations of key stakeholders in business, private and public firms, along with the developers of the accounting syllabus must adopt their recommendations to those of the Pathways Commission report for improvement. Any inconsistencies and delays in updating the curriculum may significantly affect those in various ways, especially as the dynamics of business move into the broader spectrum of globalization. While the specifics of globalization in relation to international employers' expectations was not fully addressed in this study, recommendations for further study may offer appropriate results. The study filled a gap unseen in prior studies due to the methodology, this approach using two cases in a qualitative multiple study offered an important aspect, it incorporated those closest to the issue, diverse practitioners from managerial and financial firms and entry-level accountants. It is appropriate to recommend that this study be replicated using different study methodologies, samples and/or populations and expand beyond the demographic of Georgia. It is further suggested future studies be expanded to include bachelor and master level accounting curriculum and seek implications for doctoral level competencies in accounting curriculum and practice. Note additional questions raised by the results offer further research such as lower grade point averages, critical thinking aptitudes, and

behavioral issues in relation to employers' expectations should be explored. The leadership qualities of an accountant educated in advanced curriculum may influence professionals to seek solid answers these questions.

Summary

Centuries after the development of the rules of debits and credits to record business transactions, little has changed in presenting the process to students in undergraduate accounting courses, yet the world has changed significantly. Many have expressed a need for change, some suggest removing the outdated methods and replacing it with the computer driven applications of the modern business and accounting office. The outcome of this study presents the view that the call for change is important, but inclusiveness of both methods is suggested from the opinions of this study. By incorporating the results of the two cases, integrating training as a measurement of preparedness, and including the aspects of critical thinking in applying the rules of debit and credit entries to process business transactions broadens those within the confines of this study. Questions designed in an open-ended style allow an opportunity for expression of the participants and provides the key to how well employers expectations are being met. The conclusions are consistent, as represented in the data from the study participants' views in meeting expectations that to achieve an accountant fully knowledgeable of professional expectations, curriculum change is necessary. The desire to better prepare entry-level professionals according to the governance of curriculum development, technology must be included in undergraduate accounting college courses.

To transform the curriculum to better align with the claims of technology inclusiveness, the change from both cases agree that technology will solidify a fully prepared entry-level accountant. Ultimately, the governing entities of curriculum that stress an improvement is necessary are indeed correct, but the historical application remains a crucial knowledge factor. To ensure the expectations of employers are met, the manual applications of the rules of debits and credits remain a necessary component in undergraduate curriculum. However, incorporation of computer applications should also be merged with manual applications in the syllabus to ensure the integrity of the entry-level accounting professional.

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Appendix A

Governing Bodies in Accountancy

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Association to Advance Collegiate Schools of Business (AACSB)

American Institute of Certified Public Accountants, (AICPA)

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American Institute of Certified Management Accountants (IMA).

Retrieved from <http://www.ima.org>

Appendix B

Data Access and Use Permission

The principal investigator must complete this form, and have it signed by the individual who owns the data, or a representative from the organization that owns the data.

Project Title:	
Principal Investigator:	Affiliation: <i>Choose Affiliation</i>
Name of Organization or Individual that Owns the Data:	
Name of Representative Providing Permissions:	Title of Representative:
Address of Organization or Individual Providing Data:	URL for Organization:
Email Address of Representative:	Phone Number of Representative:

Data Permissions

Describe data that will be provided to the researcher for this study: Entry-level Accountants and recent graduates

Yes	No	Answer the following questions about the data and permissions.
<input type="checkbox"/>	<input type="checkbox"/>	In granting this permission, I am providing the researcher with the specific data described above. Will the data provided include individual identifiers (i.e. names, email addresses, or any other item or a collection of demographic items that may make the data individually identifiable)?
<input type="checkbox"/>	<input type="checkbox"/>	In granting this permission, I am aware that the study's findings may be published. May the source of the data be identified in the reporting and/or publication of study results?
<input type="checkbox"/>	<input type="checkbox"/>	If the xxxx researcher is a student, can relevant information associated with this data be available to the faculty or school administrators working with this student, such as the dissertation chair and dissertation committee for educational purposes?
<input type="checkbox"/>	<input type="checkbox"/>	Are there any other stipulations about how the data must be maintained?

In granting this permission, I also understand the data will be maintained in a secure and confidential manner and that all reporting will be done in the aggregate or in a manner to protect the privacy of any identifiable individual.

In granting this permission, I am aware that the researcher will obtain an IRB review and approval or exempt determination to conduct the study listed above before being given access to any data for research purposes.

Signature of Organizational Representative or Data Owner:	<i>Select Date</i>
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Appendix C

Solicitation / Recruitment E-Mail

August 25, 2018

<<*Name of potential participant*>>

<<*Address*>>

<<*City, State, Zip*>>

Re: Study Participant in Accountancy Preparedness

Dear <<*insert name/participant*>>:

I am writing to let you know about an opportunity to participate in a research study about the potential for entry level accounting job preparedness based on the current accounting principles taught in undergraduate accounting college courses. This study is being conducted by xxxx at xxxx. This study will contribute to knowledge in the need assessment of job preparedness and the training requirements of the entry level accountant.

As a recent graduate, your name was obtained from the list of graduates at <<*insert University name*>>. Your views offer an important contribution to research in accounting and if selected for this study you will be contacted further for this opportunity.

Agreement to be contacted or a request for more information does not obligate you to participate in any study. If you would like additional information about this study, please call _____.

Thank you again for considering this research opportunity.

_____ – e-signature

Appendix D

Informed Consent

INFORMED CONSENT: PARTICIPANTS 18 YEARS OF AGE AND OLDER

Dear Participant,

My name is xxxx and I am a student at xxxx working on a doctoral degree. I am doing a research study entitled Technology Applications: Collaboration Efforts to Improve Accounting Curriculum. The purpose of the research of this qualitative multiple comparative case study explores the claims that a lack of technologically driven classroom techniques exists with respect to the employers' computerized requirements and expectations of practitioners. The purpose is to learn about potential curriculum problems in the accounting profession in relation to job needs and academic preparedness.

Your participation will involve discussion of your views of job preparedness in relation to your undergraduate accounting curriculum, specifically application of the rules of debit and credits in daily transaction processing. Your time involvement should be confined to approximately 30 minutes and you can decide to be a part of this study or not. Once you start, you can withdraw from the study at any time without any penalty or loss of benefits. The results of the research study may be published but your identity will remain confidential and your name will not be made known to any outside party.

In this research, there are no foreseeable risks to you and any negative aspects of your job will not be discussed.

Although there may be no direct benefit to you, a possible benefit from you being part of this study is to help advance the accounting profession and assess undergraduate accounting curriculum.

If you have any questions about the research study, please call me at xxxx and email address at xxxx. For questions about your rights as a study participant, or any concerns or complaints, please contact xxxx via email at xxxx.

As a participant in this study, you should understand the following:

1. You may decide not to be part of this study or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems. To withdraw simply contact me via email and state that you no longer wish to be a participant in this study.
2. Your identity will be kept anonymous.
3. Xxxx, the researcher, has fully explained the nature of the research study and has answered all your questions and concerns.
4. If interviews are done, they may be recorded. If they are recorded, you must give permission for the researcher, xxxx, to record the interviews. You understand that

the information from the recorded interviews may be transcribed. The data will be coded to assure that your identity is protected.

5. Data will be kept secure in a desktop computer with backup on a detachable portable file. The data will be kept for three years, and then destroyed by fire to ensure complete autonomy.
6. The results of this study may be published.

“By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential and anonymous. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.”

____ I accept the above terms. ____ I do not accept the above terms. (CHECK ONE)

Signature of the research participant _____ email _____

Date _____

Signature of the researcher _____ Date _____

Appendix F
Interview Protocol

Participant Recent Graduate Interview Protocol

Employer: _____

Interviewee (Title and Name): _____

Interviewer: xxxx _____

Question Section Used:

_____ A: Interview Background

_____ B: Graduation Perspective

_____ C: Assessment – Employer/employee

_____ D: Demographics (no specific questions) - Georgia

Other Topics Discussed _____

Documents Obtained: _____

Post Interview Comments or Leads:

Appendix G

Employment and Assessment Interviews

Introductory Protocol

To facilitate our note-taking, I would like to audio tape our conversations today. Please sign the release form. For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In addition, you must sign a form devised to meet our human subject requirements.

Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary, and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm. Thank you for your agreeing to participate.

We have planned this interview to last no longer than one-hour, minimum time of 30 minutes. During this time, we have several questions that we would like to cover. If time begins to run over the allotted time, it may be necessary to interrupt you in order to push ahead and complete this line of questioning.

Participant Authorization: _____

Researcher Agreement: _____

Appendix H

Consent to Record Interview Sessions

I, _____, hereby give consent to researcher

(Participant's name)

_____, in conducting this Qualitative Comparative

(Researcher's name)

Multiple Case Study to:

audiotape _____ (initial if Yes)

our interview sessions. These recordings will be used to aid the research process and to gain further understanding of important aspects of the study titled "Technology Applications: Collaboration Efforts to Improve Accounting Curriculum".

I have discussed this procedure with the researcher, _____ including the consent form on confidentiality.

I understand that I may refuse to sign this form which will not affect my participation in the study, if I chose. The researcher will only be granted permission by me to take notes in this interview process by refusing to sign this form.

Researcher further states that audio recordings will be destroyed by means of incineration of tapes once the study has been completed and published.

Participant Signed _____ Date ____/____/____

Researcher _____ Date ____/____/____

Appendix I

Interview Questions Rationale

You have been selected to speak with me today because you have been identified as someone who has a great deal to share about accounting, accounting entry level jobs and to assess job preparedness based on undergraduate accounting education lived experiences.

Specific questions will apply to the relationship of undergraduate education, training requirements, and applicability of manual transaction processes used in the accounting profession. This research project focuses on assessing employers' expectations and if claims for the potential improvement of accounting entry level job preparedness is needed. Specific interest in understanding how the rules of debits and credits taught in undergraduate education influenced the ability of entry level accountants to process daily business transactions and how that knowledge meets employers' expectations of job preparedness.

This study does not aim to evaluate job techniques, rather the rationale for the questions seek to offer insight into how undergraduate education may or may not meet employer expectations. Discussions of your lived experiences are valuable, and we offer an opportunity to assess professional preparedness based on accounting education.

Appendix J

Interview Questions/Questionnaire

A. Interviewee Background

How long have you been employed years/months?

_____ in your present position?

_____ at this employer?

Interesting background information on interviewee:

What is your highest degree?

1. Briefly describe your role (entry level accountant, staff accountant, controller etc.) as it relates to accounting and assessment (if appropriate).

Probes: How are you involved in daily accounting transactions? Please explain.

How did you get involved?

2. What opportunities do you have to use the accounting principles taught in undergraduate accounting courses?

Probes: Why do you or not use accounting principles; specifically, the rules of debits and credits in your daily activities? Please explain why you may or may not use the principles.

3. What is your job position?

Probes: Do you engage in providing training for entry level jobs? Have you engaged/participated in training?

B. Graduation/Education Perspective

1. How applicable has your undergraduate accounting courses been in preparing you for your entry level job?

Probes: Is it working – why or why not?

2. What resources do you believe should be made available to improve teaching and assessment techniques in accounting courses?

Probe: How might computers, laptops, handheld devices and other instruments be useful in accounting education? Please elaborate why or why not you feel this is applicable.

3. How might the profession engage in innovative teaching/learning and assessment strategies to improve job preparedness?

Probe: Do you see a collaboration effort between accounting practitioners and undergraduate education as a future endeavor? Why or why not, please explain your position.

4. What is changing about accounting practices?

Probe: What is being accomplished in the accounting profession that should be shared in undergraduate accounting courses? Express your position.

5. What kinds of networks do you see that might enhance a collaboration effort in accounting practice and undergraduate accounting?

Probe: Have you encountered resistance to reforms in your accounting department? . . . on while you were in college? Express your experience concerning classroom technology in accounting education.

C. Assessment-Employer/employee

1. How do you go about assessing whether job training adequately prepared entry level accountants for the position and how prepared were employees for the entry level accounting job?

Probe: Did you/employees, need a refresher on the principles of the rules or debits and credits taught in undergraduate accounting? Why?

2. What kinds of assessment techniques tell you; employer/employees the most about job preparedness?

Probe: Was additional training necessary? Why do you feel this was necessary or why not?

3. Are you involved in evaluations, are self-evaluations conducted? How is this achieved?

4. How might collaboration efforts in accounting education and practice improve training in your department?

Probe: In your future position as an accountant, why or why not might a collaboration improve entry level training?

D. Demographics - xxxx

Employer

Employee

Post Interview Comments and/or Observations:

School of Advanced Studies

Certificate of Originality Statement

I certify that the attached paper is my original work. I am familiar with, and acknowledge my responsibilities which are part of, the University of Phoenix Student Code of Academic Integrity. I affirm that any section of the paper which has been submitted previously is attributed and cited as such, and that this paper has not been submitted by anyone else. I have identified the sources of all information whether quoted verbatim or paraphrased, all images, and all quotations with citations and reference listings. Along with citations and reference listings, I have used quotation marks to identify quotations of fewer than 40 words and have used block indentation for quotations of 40 or more words. Nothing in this assignment violates copyright, trademark, or other intellectual property laws. I further agree that my name typed on the line below is intended to have, and shall have, the same validity as my handwritten signature.

Student Name: Shirley Ann Moore

(Ink or Electronically Typed Signature)

Date: 05/14/2019

Author Biography

Dr. Shirley Ann Moore

As an accounting professional, I began my career in accounting in the pre-computer days where manual entries of the daily business transactions were the norm. Transactions were posted using a pencil, calculations were double checked with a calculator and accounting was a tedious task that required extensive concentration to ensure accurate entries. However, as technology replaced the manual applications and accounting became computerized, it was important to advance my knowledge as well. My proficiency in accounting was enhanced by technology and I developed a talent for full accounting services. I started my own business soon after, which paved the way for the practitioner approach in my accounting credentials.

What came next were the educational credentials to back that knowledge. I worked hard to move up through the scholarly degree programs as an accountant and I made my way to the Masters' level, I also found work in higher education. This changed my life, the scholarly aptitude helped me discover a passion for teaching and preparing students to be the leaders of tomorrow in the profession of accountancy and business. While continuing to work as a practitioner, my teaching skills as an accountant professor offered a circular approach to my position.

I discovered that to fulfill my dream in the classroom, I would need the doctoral qualifications to teach advanced programs in accounting and business college courses. I also discovered several issues in the profession I want to be instrumental in improving, curriculum in undergraduate courses became the focus which led to the development of

this study. This brought an additional added layer to my biography, a leader in my profession. As a doctorate, I meet the highest level of expertise in accounting which opens numerous doors to use my scholarly, practitioner and leadership expertise. I soon embraced the University of Phoenix model for myself as I realized that I encompassed all components in the SPL model (scholar, practitioner and leader).

Since that discovery, I have found great joy in my professional life, this has flowed over into my personal life and established my destiny as a college professor preparing tomorrow's leaders in my profession, as well as satisfying the financial reporting needs in my client work. The time I have dedicated as a life-long learner has provided the ultimate satisfaction in all aspects of my life. I have set an example for my children and grandchildren, made my family proud as the only doctor in the family and established myself a certainty of leadership within my community.

I am truly humbled by this experience!

Dr. Shirley Ann Moore