

The Effects of the IMA Endorsed School Program on Student's Perceptions about  
Management Accounting

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Approval Page

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Management Accounting

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## Abstract

Students, upon graduating with a degree in accounting, are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting. This is true even though 80% of individuals employed as accountants within the United States (U.S.) do not work at Certified Public Accounting (CPA) firms, but rather work inside organizations as internal accountants, often as Certified Managerial Accountants (CMA's). This problem has negatively impacted accounting graduates as they enter the work-force because their perception may be that they can only get a job at a CPA firm upon graduating with an accounting degree or that they must obtain CPA licensure in order to have a successful career in accounting. In an effort to promote more awareness of careers in management accounting, the Institute of Management Accountants (IMA), which oversees the CMA exam, has developed a program entitled the Higher Education Endorsement. Universities can qualify for this endorsement by demonstrating that they meet curriculum requirements that teach and prepare students for careers in management accounting. The purpose of this qualitative phenomenological research study was to explore the lived experiences of ten accounting students, who attend an IMA endorsed university, in regards to their perceptions of managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting in light of the new endorsement program that the IMA has recently instituted. This phenomenological qualitative research study focused on ten students who are majoring in accounting and attending an IMA endorsed university located in the Southwestern part of the U.S. Data was obtained through in-depth interviews with accounting students in an effort to

ascertain the lived experiences of these students that are associated with an IMA endorsed school.

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## Chapter 1: Introduction

Accounting education should be expanded so that it better meets the needs of both the students that major in accounting and the future employers of these accounting graduates (Brewer, 2014; Cory, 2013; and Black, 2012). Currently, most colleges and universities have an accounting curriculum that focus primarily on preparing students to become Certified Public Accountants (CPA's) (Lechner, 2014; Cory, 2013). This has created a situation in which accounting graduates are not as aware of career opportunities available to them in the field of management accounting, or as Certified Management Accountants (CMA), as compared to the career opportunities available to them in financial accounting as a practicing CPA (Shuttleworth, 2014). This continues to be the case even though the majority of students who earn an accounting degree will eventually pursue a non-public accounting career (Lawson, 2014 and Hutaibat, 2012; Cory, 2013).

The Department of Labor has estimated that approximately 80% of all current accounting positions in the United States (U.S.) are within organizations, leaving only 20% of all accounting jobs at traditional CPA firms (Department of Labor, 2016). This means that four out of every five accounting graduates will end up working at non-CPA firms, where the focus of the job would likely be much more related to management accounting as compared to financial accounting (Lawson, 2014; Jiles, 2014). The gap between the skills that are taught during college and those expected by employers are especially problematic for those students seeking employment as managerial accountants (Brewer, 2014; McNally, 2016). Colleges and universities should consider developing a curriculum that has a heavier focus on developing accounting skills, job preparation and

career development related to internal, or management accounting, as opposed to such a heavy emphasis on the CPA designated career tracks (Weaver, 2013; Siegel, 2010).

In addition, accounting professors have been found to have a significant influence on accounting student career choices (Brnye, 2012; Quezada, 2013). Accounting professors are an important key to helping accounting education evolve and expand so that it better meets the needs of both the students that major in accounting and the future employers of these accounting graduates (Lawson, 2014). Accounting professors need to be aware that approximately 80% of all jobs in accounting in the U.S. are at non-CPA firms and utilize this information in an effort to promote the potential career opportunities in managerial accounting (Weaver, 2013; Siegel, 2010). Accounting professors are also the key to drive needed curriculum changes so that more emphasis is placed on managerial accounting curriculum (Lawson, 2014).

### **Background**

The Institute of Management Accountants (IMA) is a worldwide association of accountants and financial professionals working in business. The IMA oversees the Certified Management Accountant (CMA) credential. The CMA credential is a globally recognized, advanced level credential appropriate for accountants and financial professionals in business. Achieving the CMA designation demonstrates professional expertise in financial planning, analysis, control, decision support and professional ethics (Institute of Management Accountants, 2016).

The CMA credential is one of several credentials, or designations, that accounting professionals can pursue. The Certified Public Accountant (CPA) is currently the most popular professional designation for accountants in the U.S. Some of the other

designations that accounting professionals can pursue, include: Certified Fraud Examiner (CFE), Certified Financial Planner (CFP) and Certified Internal Auditor (CIA).

The CPA designation is currently the most recognizable accounting designation in the U.S. Obtaining the CPA credential is a requirement in the U.S. if an individual is going to perform assurance or audit services. For example, the Securities and Exchange Commission (SEC) requires that all publicly traded companies within the U.S. receive an annual audit and those audits must be conducted by a licensed CPA. Along with attorneys and Enrolled Agents, the Internal Revenue Service (IRS) will also allow a CPA to represent their clients in tax related matters. Virtually any other accounting function, besides providing assurance and audit services and representing a client in front of the IRS, can be performed by an accountant that does not have the CPA designation (Day, 2008; Jackling, 2014).

Because the CPA designation is the most popular designation currently in the U.S., most universities have geared its curriculum to prepare students to sit for the CPA exam (Lechner, 2014; Lawson, 2014; Jiles, 2014). However, the vast majority of individuals currently working as accountants do not work at CPA's firms. Of the approximately 1.2 million accounting professionals working in the U.S., approximately 80% work inside organizations (Weaver, 2013; Cory, 2013). Thus, the two primary reasons that a CPA designation is useful to accounting practitioners in the U.S. - being able to conduct annual audits and the ability to represent clients in front of the IRS - will likely be under-utilized by those working within organizations as internal accountants, controllers, and CFO's. As such, the argument has been made that there is a better designation for accounting professionals, particularly for the 80% working outside of

public accounting, and that designation is the Certified Management Accountant (CMA) (Lawson, 2014; Jiles, 2014; Lechner, 2014). The CMA was specifically designed for finance and management accounting professionals that focus on working inside businesses and organizations (Lechner, 2014).

The IMA developed the Higher Education Endorsement program in 2013 after reviewing the undergraduate curriculum of many universities and colleges across the U.S. and finding that the content being taught was more CPA oriented and that the actual managerial accounting content being taught at some universities was dwindling (Bramwall, 2013). One suggested reason why undergraduate accounting programs are offering less managerial accounting content is that schools, especially in the past few years, have been under financial duress and have been dropping courses or consolidating their curriculum (Lawson, 2014). A second reason is that universities have geared the accounting curriculum towards passing the CPA exam and this has been at the detriment of management accounting (Lawson, 2014).

The main purpose of the IMA's Higher Education Endorsement is to increase student awareness of accounting careers in management accounting and to promote the potential management accounting career path to students at universities (Institute of Management Accountants, 2016). This endorsement recognizes accounting and business curricula being taught at universities that meet the quality educational standards required to enable students to prepare for the CMA designation while in school. There are currently 35 universities that have qualified for the IMA's Higher Education Endorsement. Of the 35 universities that have qualified for the endorsement, 27 are located in the Americas, three in Asia, two in Europe and three in the Middle East. Each

university that earns the IMA's Higher Education Endorsement is required to have an IMA Campus Advocate. The campus advocate is typically an accounting professor that has agreed to disseminate IMA/CMA marketing materials and to promote the CMA credential and managerial accounting as a profession.

As part of the Higher Education Endorsement, the IMA has a CMA scholarship program. This scholarship is valued at approximately \$1,700 and allows students to take both sections of the CMA exam for free. The IMA instituted the Higher Education Endorsement and the CMA Scholarship program in an effort to promote the CMA credential and to expose students to the career opportunities that are available to them as a CMA. In addition, the IMA believes that the Higher Education Endorsement can be used as a vehicle to drive needed changes in accounting education; shifting the focus of curriculum away from CPA content orientation back to more focus on managerial accounting (Lechner, 2014).

### **Statement of the Problem**

Students that graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting (Shuttleworth, 2014; Hutaibat, 2012). In addition, the gap between the skills that are taught during college and those expected by employers is especially problematic for those students seeking employment as managerial accountants immediately upon graduation (Brewer 2014; Lawson, 2014). This is troubling because the vast majority of individuals employed as accountants within the U.S. do not work at CPA firms, but rather work inside organizations as internal accountants (Weaver, 2013; Corey, 2013). This problem has negatively impacted

accounting graduates as they enter the work-force in at least three ways. First, their initial perception may be that they can only get a job at a CPA firm upon graduating with an accounting degree (Lechner, 2014; Stanley, 2013). Second, students may have a misconception that they must obtain CPA licensure in order to have a successful career in accounting (Lechner, 2014; Wilson, 2011). Third, if students do pursue a career in management accounting immediately upon graduation, there is a good likelihood that they will be underprepared for the type of work that they will be asked to perform by their employers (Brewer, 2014; Lawson, 2014). A possible cause of this problem is that most universities gear the accounting curriculum towards preparing students for a career as a CPA as opposed to a career as a CMA (Singer, 2013; Cory, 2013; Lawson, 2014).

### **Purpose of the Study**

The purpose of this qualitative phenomenological research study was to explore the lives of students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting and their perceived career opportunities available to them in managerial accounting. This qualitative phenomenological study focused on ten students who are majoring in accounting at an IMA endorsed university located in the Southwestern part of the U.S. Data for the study was obtained through face-to-face interviews with each of the research participants. Each interview, on average, took approximately one hour.

The objective of the study was to collect data from a sample size of ten participants, or until data saturation occurred, by conducting interviews with accounting student's that were enrolled at an IMA endorsed university located in the Southwestern part of the U.S. Helpful insights and viewpoints of the study participants were obtained

during the interview process in relation to student's conceptions of managerial accounting. These interviews were focused on the lived experiences of accounting students at an IMA endorsed school with respect to managerial accounting and the perceived career opportunities available to these study participants in managerial accounting.

A qualitative phenomenological research method and design was appropriate for this study because the purpose of the study was to examine students' thoughts and feelings related to their lived experiences at an IMA endorsed school. This study contributes to the body of knowledge relating to accounting student perceptions of management accounting, specifically within the context of a university setting that has qualified for the IMA's Higher Education Endorsement, which has yet to be researched or explored. By extension, this study also provides insights to accounting educators at non-IMA endorsed schools that may be useful in the further design of university accounting curricula that places more focus on managerial accounting.

### **Theoretical Framework**

The theoretical framework used for this research study was the social constructivist view of learning theory. The social constructivist view of learning theory recognizes the relationship between how students perceive accounting and the impact that this perception has on how students learn about accounting (Lucas, 2014). The social constructivist theoretical framework has also been used to analyze the impact that student's perceptions have on learning outcomes within accounting classes (Turner, 2012) and has been used to measure the impact of student perceptions of accounting in



relation to the type of accounting careers that student's choose to pursue upon graduation with an accounting degree (Dalton, 2014; Porter, 2014).

The social constructivist view of learning served as the theoretical framework for this study. Implementing this theory allowed the examination of accounting students' behavioral, normative, and control beliefs, as well as their attitudes, efficacy, and subjective norms and how these components affect intentions for accounting students to pursue a career in managerial accounting. A qualitative phenomenological design allowed for a systematic study and discernment of students' perceptions that can often be difficult to measure through statistical means (Moustakas, 1994).

Analyzing student perceptions about accounting using the social constructivist view of learning theory as the framework for this study was suitable to allow for further research and investigation into student perceptions of managerial accounting as a profession and examining the factors that influence students' interest in managerial accounting. The study contributes to the body of knowledge relating to experiences of accounting student and their perceptions of management accounting, specifically within the context of a University setting that has qualified for the IMA's Higher Education Endorsement, which has yet to be researched or explored.

### **Nature of the Study**

A phenomenological qualitative research method and design was used for this study. A qualitative research approach, that properly aligns the purpose, problem and interview questions, can help the researcher explore subject perceptions surrounding a central research question (Yin, 2009). The aim of this study was to better understand the lived experiences and perceptions of ten accounting students that are attending an IMA

endorsed university in regards to managerial accounting and the career opportunities available to them in managerial accounting. The qualitative phenomenological research method is considered most appropriate because this study attempted to exam the lived experiences of accounting students that are enrolled in an IMA endorsed university and lived experiences are the starting point and the end point of phenomenological research (Van Manen, 1997).

A phenomenological qualitative design was used for this study as it: (a) allows for the studies of human experiences, (b) focuses on the wholeness of experience, (c) permits for the meanings and essences of experience, (d) obtains descriptions of experience through first person accounts in informal and formal conversations and interviews, (e) regards the data of experience as imperative in understanding human behavior and as evidence for scientific investigation, (f) allows for formulation of questions and problems that reflect the interest, involvement and personal commitment of the researcher and (g) allows for the viewing experience and behavior as in integrated and inseparable relationship of subject and object and parts and whole (Moustakas, 1994).

By contrast, a quantitative research method approach would consider an objective measure and then compare the dependent variables with an independent group. Quantitative research approaches work best for establishing relationships and analyzing differences between two, or more, variables (Babbie, 2012). Since there is no objective measure and comparison of dependent variables with the independent group in this study, a quantitative approach was not suited for this study.

Qualitative phenomenological research is helpful when exploring responses to questions in an effort to provide an understanding, or an in-depth, lived experience, of a

phenomenon via interviews in order to obtain insights and perceptions of the individuals engaged in the study (Moustakas, 1994). Qualitative researchers use open-ended questions in an effort to seek to better understand how participants view their experiences (Shank, 2006). The use of open-ended research questions in this qualitative phenomenological research study allowed latitude for participant responses so as to capture their lived experiences and perceptions that influenced them while avoiding yes or no responses (Bolderston, 2012).

In order to process the data, Moustakas's (1994) order of data analysis was used. Moustakas's order of data analysis consists of: (a) transcribing each participant's experience verbatim, (b) considering each statement with respect to significance for description of the experience, (c) recording all relevant statements, (d) relating and clustering the statements into topics, (e) synthesizing the statements and topics into a description of the textures of the experience and (f) integrating the individual descriptions into a universal description of the experience representing the group as a whole. This approach is aligned well with the research question, purpose and problem of the study.

### **Research Questions**

The research focused on student's experiences who are attending universities that are IMA higher education endorsed programs in regards to their perceptions about the career opportunities available to them in the field of management accounting. In order to address the problem and purpose of this study, the research topic was guided by a central research question (Moustakas, 1994). The main research question for the study was: What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career

opportunities available to them in managerial accounting according to the social constructivist view of learning?

Additional research questions were:

**Q2.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?

**Q3.** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a future career in managerial accounting because they attended an IMA endorsed university?

These research questions helped guide the identification of students' perceptions about their lived experiences as an accounting student at an IMA endorsed university and their perceptions of management accounting as a career. Prior to these questions being asked, a field test was conducted. As part of the field test, three subject matter experts were selected to review the interview questions from this study in an effort to ensure that the interview questions were properly designed to ensure credibility and dependability of the research that was conducted.

The social constructivist view of learning served as the theoretical framework for this study. Understanding how accounting majors conceive of their learning experience at an IMA endorsed school was based on a thorough understanding of the social construction of meaning. This process allowed the examination of accounting students' behavioral, normative and control beliefs, as well as their attitudes, values and subjective norms and how these components affect intentions for accounting students to pursue a career in managerial accounting.

### **Significance of the Study**

This study contributes to the body of knowledge relating to accounting student perceptions of management accounting (Jiles, 2014; Shuttleworth, 2014; Hutaibat, 2012). This study expands what is known about student perceptions of management accounting by exploring the lived experiences of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement. This type of study has yet to be researched or explored. By extension, this study provides insights to accounting educators at non-IMA endorsed schools that may be useful in the further design of university accounting curricula that places more focus on managerial accounting (Lawson, 2014).

Accounting students that are attending an IMA endorsed university may begin to have a competitive advantage over students attending non-IMA endorsed schools with respect to additional learning opportunities about the career opportunities in management accounting and as a CMA (Haragadon, 2015). While it is too early to tell what long-term effects may arise from the phenomena of student's attending an IMA endorsed versus a non-IMA endorsed school, this exploratory study adds to the body of research regarding student perceptions of management accounting (Jiles, 2014; Shuttleworth, 2014; Hutaibat, 2012). The study may also lead to additional universities electing to pursue the IMA's Endorsed School Program as a vehicle to further promote the career opportunities available in managerial accounting.

### **Definition of Key Terms**

**Accreditation Council for Business Schools and Programs (ACBSP).** The ACBSP was founded in 1989 and it promotes continuous improvement and recognizes

excellent in the accreditation of business education programs around the world. Currently there are over 1,100 educational institutions that are members of the ACBSP, of which approximately 600 schools have achieved accreditation and more than 500 schools that are in candidacy for accreditation (Accreditation Council for Business Schools and Programs, 2016)

**American Accounting Association (AAA).** The AAA is the largest community of accountants in academia. The AAA was founded in 1916 and its goal is to help shape the future of accounting through teaching and research (American Accounting Association, 2016).

**American Institute of Certified Public Accountants (AICPA).** The AICPA represents the CPA profession at a national level regarding rule-making and standard-setting. The AICPA serves as an advocate before legislative bodies and public interest groups. The AICPA also develops standards for the CPA profession and provides educational guidance to its members. (American Institute of Certified Public Accountants, 2016).

**Association to Advance Collegiate Schools of Business (AACSB).** The AACSB was established in 1916 and its purpose is to advance the quality management education worldwide through accreditation, leadership and value-added services. Currently there are 761 business schools, located in 52 countries that have earned the AACSB accreditation (Association to Advance Collegiate Schools of Business, 2016).

**Certified Management Accountant (CMA).** The CMA certification is a professional accounting credential that can be earned through work experience and passing a rigorous two-part exam. Once passed, the CMA designation requires thirty

hours of yearly continuing education in order to keep the credential active (Institute of Management Accountants, 2016).

**Certified Public Accountant (CPA).** The CPA certification is a professional accounting credential that can be earned through work experience and passing the Uniform Certified Public Accountant Examination (4 sections). Once passed, the CPA designation requires forty hours of yearly continuing education in order to keep the credential active (American Institute of Certified Public Accountants, 2016).

**Chartered Global Management Accountant (CGMA).** The CGMA is a professional management accounting designation that was developed by the AICPA, in conjunction with CIMA. The CGMA's mission is to promote the science of management accounting on global stages. The CGMA designation champions management accountants and the value they add to organizations (American Institute of Certified Public Accountants, 2016)

**Chartered Institute of Management Accountants (CIMA).** CIMA is based out of the U.K. of offers training and qualification in management accountancy. CIMA is the largest management accounting body in the world with more than 227,000 members in 179 countries (Chartered Institute of Management Accountants, 2016).

**Higher Learning Commission (HLC).** The HLC was founded in 1895 as one of six regional institutional accreditors in the U.S. The HLC currently accredits degree-granting post-secondary educational institutions in the North Central region. (Higher Learning Commission, 2016).

**Institute of Management Accountants (IMA).** The IMA is one of the largest associations that focus exclusively on advancing the management accounting profession.

It current has more than 80,000 members in over 140 countries (Institute of Management Accountants, 2016).

**Institute of Certified Management Accountants (ICMA).** The ICMA is the certification affiliate of the IMA. The ICMA is responsible for developing, administering, and grading the CMA exam. It is also responsible for establishing the policies and procedures for the CMA program and ensuring the program's overall integrity (Institute of Certified Management Accountants, 2016).

### Summary

Students who graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting (career as a CMA) as compared to the career opportunities available to them in public accounting (career as a CPA) (Shuttleworth, 2014 and Hutaibat, 2012). A possible cause of this problem is that most universities gear the accounting curriculum towards preparing students for a career as a CPA, as opposed to a career as a CMA (Singer, 2013; Cory, 2013; Lawson, 2014). The IMA developed the Higher Education Endorsement program in 2013 after reviewing the undergraduate curriculum of many universities across the U.S. and finding that the content being taught was mostly CPA oriented (Bramwall, 2013). The IMA also found that the actual managerial accounting content being taught at some universities was dwindling (Bramwall, 2013).

The purpose of this qualitative phenomenological research study was to explore the lives of students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting and the perceived career opportunities available to them in managerial accounting. This study contributes to the body of knowledge relating



to accounting student perceptions of management accounting (Jiles, 2014; Shuttleworth, 2014; Hutaibat, 2012). This study expands what is known about student perceptions of management accounting by exploring the lived experiences of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement. This type of study has yet to be researched or explored.

Participants of the study included students that are majoring in accounting at an IMA endorsed university located in the Southwestern part of the U.S. A total of ten students that are majoring in accounting from an IMA endorsed university located in the Southwestern part of the U.S. participated in the study. Data was obtained through in-depth interviews in an effort to ascertain the lived experiences of these students that are attending an IMA endorsed school.

The remainder of this dissertation consists of Chapter 2, which provides a thorough review of the relevant literature, including a discussion of the social constructivist view of learning which is the theoretical framework that was selected for this study. Chapter 3 describes the research design, the study's population and sample, the research instrument and method of data collection, and study assumptions, limitations, delimitations and ethical assurances. Chapter 4 describes the results of the study and an evaluation of the findings. Chapter 5 discusses the implications from the study, including recommendations for application and for future research.

## **Chapter 2: Literature Review**

The literature review was based on the purpose of this study: to explore the lived experiences of accounting students that attend an IMA endorsed school. The theoretical framework that was used for this research study is the social constructivist view of learning. After discussing this theoretical framework, the literature review is then categorized based on eight subtopics of research that have been identified. These eight subtopics provide the overall understanding of what is known about the research topic and the related issues in literature. The eight subtopics are: the need to change accounting education, certifications available to accounting practitioners, the need to increase student's knowledge of managerial accounting, the steps universities need to take to become an IMA endorsed school, the influence that an accounting professor can have on students' career accounting, the skills and attributes needed for success in accounting, accounting functions within managerial accounting, and better alignment in accounting education and training.

### **Documentation**

The literature review includes information gathered from peer reviewed journals, books, dissertations, and relevant websites that pertain to the field of accounting and accounting education. The NCU library provided access to numerous peer-reviewed journal articles, reports and dissertations from multiple online databases, including: EBSCOhost, ProQuest, PowerSearch, ProQuest dissertations and NorthCentral University dissertations. Google Scholar was also used to find peer-reviewed journal articles, reports and documents that were helpful in completing this literature review.

These resources allowed the researcher to address the primary research phenomenon and the exploratory phenomenological study design.

### **Theoretical Framework**

The theory of the social constructivist view of learning is that students are individuals and that gaining knowledge is the outcome of these individuals as they attempt to make sense of the world in which they live (Blaikie, 2007). Within in the social constructivist learning theory, it is hypothesized that a student either takes new knowledge and assimilates that new information within their pre-existing knowledge framework or updates their existing knowledge framework in situations where the new information does not fit (Inhelder, 1958). Assimilating new information is generally an easier process as compared to accepting new information and, depending on the type of existing knowledge framework, accommodating new information can be difficult and challenging (Lucas, 2014). The social constructivist view of learning identifies this process of learning new information as sense-making (Wilson, 2014).

The social constructivist view of learning recognizes the relationship between how students perceive accounting and the impact that this perception has on how students learn about accounting (Lucas, 2014). The social constructivist view of learning has been used to analyze the impact that student's perceptions have on learning outcomes within accounting classes (Turner, 2012). It has also been used to measure the impact of student perceptions of accounting in relation to the type of accounting careers that student's choose to pursue upon graduation with an accounting degree (Dalton, 2014; Porter, 2014). The social constructivist view of learning was a suitable theoretical framework for

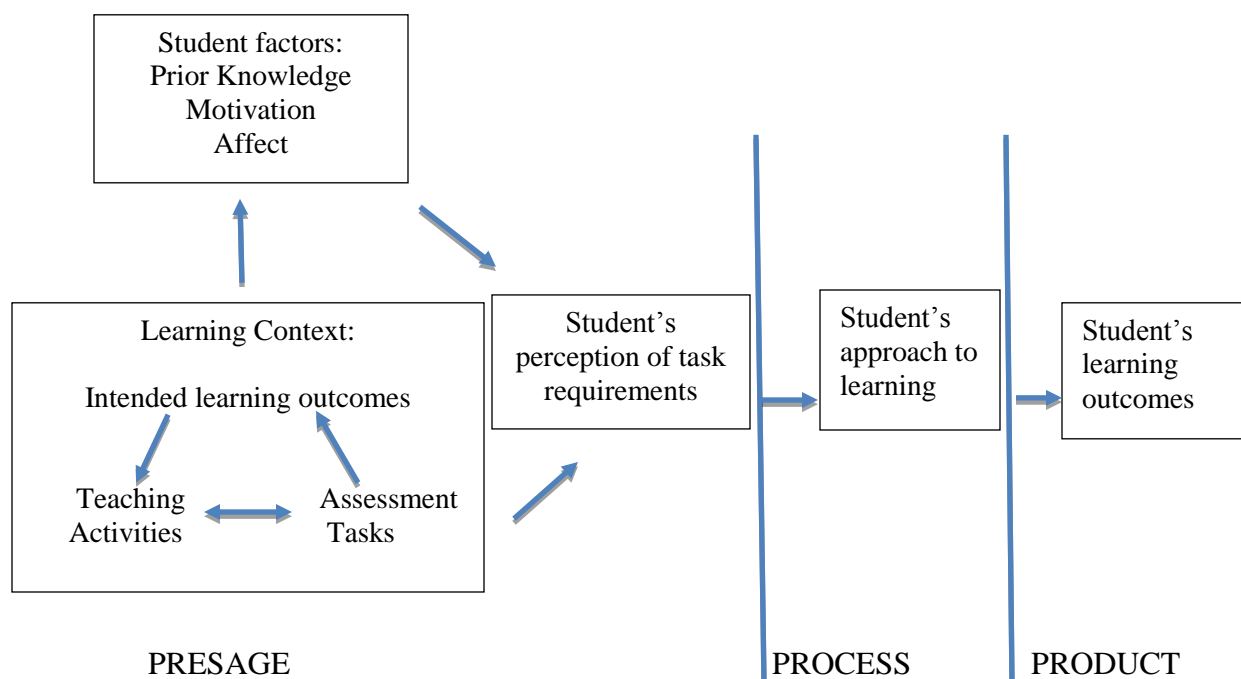
this study as it allowed for further research and investigation into student's lived experiences and perceptions of managerial accounting at an IMA endorsed school.

Accounting majors may complete their accounting degree based upon the perception that the best career opportunities available to them, upon graduation, is at Certified Public Accounting firms. Accounting students may also have perceptions that there aren't as many jobs available to them in managerial accounting relative to jobs at CPA firms, even though 80% of all jobs currently in accounting in the U.S. are at non-CPA firms. An accounting educator, with social constructivist view of learning, should acknowledge the importance of these perceptions and then attempt to identify new learning opportunities in which an accounting student can take what they already have learned about accounting and assimilate additional knowledge in order for those accounting students to come to a new understanding.

There is a large body of research that utilizes the social constructivist view of learning model in regards to students' approaches to learn (SAL) within higher education. The 3-P model is probably the best known constructivist model. The 3-P model consists of three elements: Presage, Process and Product (Biggs, 1993). These elements are defined as:

1. Presage is the stage before learning takes place. This can be thought of as the knowledge and information that each students brings with them into the classroom.
2. Process represents what happens during learning. This is commonly referred to as the student's approach to learning.
3. Product generally refers to the outcome of learning.

These three elements have formed the foundation for additional student learning models, such as Ramsden's model of student learning (Ramsden, 2003) and Duff and McKinstry's 3P-SLC model (2007). The Duff and McKinstry model draws from both the Biggs's model and Ramsden's model and is illustrated below (Duff, 2007):



Prior knowledge, listed above in the Presage section, includes a wide range of knowledge and has been defined as either explicit knowledge or tacit knowledge. Explicit knowledge would include knowledge from previous accounting courses that students have taken and tacit knowledge would include students' perceptions of accounting and their overall knowledge in general (Lucas, 2014).

Motivation has been defined as the student's overall goal and is often directly related to specific intentions that arise during each accounting course being taken. Motivation can be either intrinsic or extrinsic. Intrinsic motivation would include the

amount of enjoyment or interest in the specific task itself and extrinsic motivation would involve a focus on the actual learning outcome for each specific task (Lucas, 2014).

Affect would include the amount of emotion or feeling that each student brings into the learning environment. Emotions such as a fear of failure or enjoyment (Entwistle, 2002) can either impede or enrich student learning depending on the particular affect being felt by the student (Lucas, 2014).

In regards to Process, the central finding from a large body of research has been that there are two broad categories of student learning approaches: surface learning and deep learning (Prosser, 1999; Coffield, 2004; Entwistle, 2002). If a surface learning approach is adopted by a student learner, it is typically because of an extrinsic motivation (for example, to pass an upcoming accounting exam) so the learning process is often through a process of memorized, repetitive learning (Prosser, 1999). Deep learning is often characterized by an intrinsic motivation stemming from an interest and an intention to understand and to make personal sense of the material being studied (Prosser, 1999).

The 3P model can be a valuable tool for accounting educators to help conceptualize their pedagogical philosophy as the 3P model emphasizes the need to achieve constructive alignment in course design (Biggs, 2003). Once the learning outcomes for a course have been identified, these learning outcomes should then be aligned with learning activities that have been designed to support the achievement of the learning outcomes (Lucas, 2014).

With regards to accounting students perceptions of management accounting, the IMA's campus advocate program provides a platform for accounting educators to provide learning activities about career opportunities in management accounting. Combined with

the 3P model, these accounting educators could also take into account any presage factors within this context that students may have about the type of careers available to them upon graduation with an accounting degree.

The social constructivist view of learning is interested in analyzing student perceptions and beliefs in an effort to better understand how students' view the world around them and their lived experiences in relation to a particular subject (Lucas, 2014). Accessing these beliefs, or ways of perceiving the world, is not a straightforward process (Lucas, 2014). In order for researchers to have success in this type of research, they will often employ a phenomenological research approach. Phenomenological based research typically takes the form of interview-based research but can also use written accounts provided by students (Martin, 1994).

The overall goal of phenomenological research is to provide the student research participants an opportunity to express themselves, either verbally or in writing, so that their own lived experiences can be documented with focus given on the experiences as lived by the student, rather than on any identification of categories supplied by the researcher (Lucas, 2014). Using a phenomenological-based research approach provided an opportunity for this research study to access and investigate accounting student's perceptions and lived experiences with regards to managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting. Phenomenological research can be helpful when exploring responses to questions in an effort to provide an understanding, or an in-depth, lived experience, of a phenomenon via interviews in order to obtain insights and perceptions of the individuals engaged in the study (Moustakas, 1994).

Phenomenological researchers should use open-ended questions in an effort to seek to better understand how participants view their experiences (Shank, 2006).

Researches should strive to use questions such as how, what and why in an effort to examine issues without influencing the research participants responses (Babbie, 2012).

The use of open-ended research questions in this qualitative phenomenological research study allowed latitude for participant responses so as to capture their lived experiences with regards to their perceptions managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting.

### **The Need to Change Accounting Education**

There continues to be an urgent need to expand the scope of accounting education, and to improve the accounting education process, so that it better meets the needs of both the students that major in accounting and future employers of these accounting graduates (Brewer, 2014; Cory, 2013; and Stanley, 2013). The traditional view of an accounting professional has changed in such a way that accountants are now being regarded as professionals needing strong leadership skills; the ability to manage a team and be a decision maker; and the ability to exercise sound judgment and business acumen in varying business settings (Klibi, 2013; Bui, 2010).

The debate as to whether there is a need to change accounting education is not a new debate (Flood, 2014). Even though the debate surrounding the state of accounting education has been longstanding, it was significantly intensified in the 1980's (Black, 2012). This was largely due to the continued expansion of accounting education within higher education and the increasing demand for those with accounting knowledge and skills in the workplace (Black, 2012). Since the 1980's, the large accounting firms, public



accounting boards, and accounting academics have had significant debates in regards to the relevance of accounting education with respect to meeting the demands of future professional accountants in an ever-changing work environment (Flood, 2014).

There were two key accounting education reports that were issued in the 1980's that fueled the accounting education change debate within the U.S. (Flood, 2014). The first report, the Bedford Committee Report, was issued in 1986 by the American Accounting Association (AAA). In this report the critical problem of accounting education was described as the failure to keep pace with the changes in the accounting work environment, stating that "a growing gap exists between what accountants do and what accounting educators teach" (American Accounting Association (AAA), 1986, p. 172). The Bedford Committee Report also acknowledged that the emergence of such a gap between accounting education and accounting practice was not unique to the accounting profession and that this issue was evident at different times in different various professions.

The second significant report was issued in 1989 by the then Big 8 accounting firms titled "Perspectives on Education: Capabilities for Success in the Accounting Profession." This report also focused on the inadequate preparation for the workforce that was being provided by accounting education. In addition, this second report highlighted that the role of accounting professionals had been altered due to changes in the nature of organizational activities, increased globalization, advents in information technology (IT), and increased regulations and scrutiny of the accounting industry. The report also stated that accounting education had been altered very little over the past decade, despite the

changing demands that accountants were facing in the workplace and that accounting educators were failing the accounting profession.

Both the Bedford Committee Report and the Perspectives on Education Report identified a number of problems within accounting education. One issue identified was that traditional accounting programs had a content-focused orientation that was too focused on delivering accounting technical knowledge using chalk-and-talk lectures. A second issue identified was that accounting educators were failing to prioritize the development of a wide variety of skills that future accounting professions would be required to possess in order to have a successful career accounting.

In light of the problems that were identified, both reports recommended that significant changes take place within accounting education. One recommendation was that accounting education needed to do more to empower accounting students with the necessary skills that would be needed to deal with the changes that they would encounter within the accounting profession. The reports recommended that this process would involve doing a better job of developing a wide range of skills and attributes that would enable accounting students to learn independently as they move forward in their accounting careers.

The reports did acknowledge that it would be improbable for accounting education programs to equip accounting students with all the necessary knowledge and skills that they would need to enter the profession. With that being the case, the reports emphasized that accounting programs need to move away from memorized content learning and begin focusing more on the process of students' learning in an effort to better foster independent and lifelong learning. The reports also stated that these new

objectives would require a significant change in the teaching orientation and classroom activity.

In response to these reports, in 1989, the AAA, with the support of the Big 8 accounting firms, established the Accounting Education Change Commission (AECC) to act as a catalyst for change in accounting education (Flood, 2014). The AECC stated that the objective of accounting education programs should be to “prepare students to become professional accountants not be to be professional accountants at the time of entry to profession” (AECC, 1990, P. 307). This objective acknowledged that it would not be possible for accounting education programs to equip accounting students with all of the knowledge and skills that they would need during their professional careers (Flood, 2014). The AECC further suggested that the goal for accounting educators should be to prepare students by developing the foundations for lifelong learning, based on a wide knowledge base, a large set of skills and competencies, and a thorough understanding of the nature of professionalism needed in accounting (Flood, 2014).

The AECC initiative did drive some changes in accounting education in the U.S. as several universities received grants and re-aligned their accounting programs to reflect the AECC’s objectives (Flood, 2014). However, there was some significant criticism of the AECC and this criticism grew as the decade proceeded to the late 1990’s and into the twenty-first century. For example, the IMA released a study that indicated that there was still a mismatch between the knowledge and skill needed in the accounting industry and what was being taught in accounting education programs (IMA, 1999).

In the year 2000, a seminal report, titled, “Charting the Course through a Perilous Future” was issued that was very critical against accounting education and provided

recommendations for needed changes. The report was jointly commissioned by four major professional accounting groups, namely, the IMA, the AAA, the AICPA and the Big 5 accounting professional service firms. The report was written by Steve Albrecht and Robert Sack. This report stated that the problems with accounting education “cannot get much worse” (Albrecht & Sack, 2000, P. 1). The report also went so far as to suggest that accounting education may not survive in the future if drastic changes were not made. It also suggested that accounting education was plagued with many serious problems, which if not corrected, would lead to its demise. The study outlined that accounting practitioners described the model of accounting education as being broken and obsolete since it had failed to provide accounting students with the knowledge and skills that were relevant and necessary in order to have a successful accounting career in the twenty-first century.

The report also stated that the number and quality of students choosing to major in accounting was rapidly decreasing. It also pointed out that students, by their choice of major, were indicating that they do not perceive an accounting degree to hold the same value as it once did nor is it considered as valuable as other business degrees. In addition, the study found that a significant amount of accountants and accounting educators, if given the choice to do it over again, would not choose to major in accounting if pursuing their education today. The study also found that accounting faculty and accounting practitioners do not agree on the type of work that accounting graduates would be performing in the future.

The several criticisms outlined in the Albrecht and Sack report above echoed by other studies (Previts, 1991 and Davis, 1996) that were conducted over the intervening

fourteen years between 1986, when the initial Belmont Report was issued, and 2000, when the Albrecht and Sack report was issued. Thus, while some changes may have occurred in accounting education between the years of 1986 – 2000, the changes were not sufficient enough to sufficiently bridge the gap between accounting education and training (Flood, 2014).

In July 2012, the Pathways Commission on Accounting Higher Education, which was jointly commissioned by the American Accounting Association (AAA) and the American Institute of Certified Public Accountants (AICPA), issued a report that included recommendations for changes in accounting education in order to adequately prepare the next generation of accountants. The Pathways Commission's recommendations call for a greater interaction between teaching, research and practice; the provision of flexibility modes of entry to doctoral education; enhancing the recognition and rewards afforded to higher quality teaching in accounting; and changing the curricula models in accounting (Pathways Commission, 2016).

The Pathways report also included several detailed action items that discussed specific ways in which the Commission's suggested recommendations could be implemented. In addition, the report discussed several impediments that are halting the necessary changes that need to transpire in accounting education and discussed potential solutions to overcome those impediments. The recommendations suggested by the Pathways Commission should be strongly considered and implemented, where deemed applicable, by all University accounting faculty and programs within the U.S.

The Pathways Commission recommendations served as a backdrop for this doctoral research study. Also, it is not evident as to whether the changes recommended

by the Pathways Commission have been implemented in U.S. based accounting education, even though there is a substantial body of literature suggesting that changes need to be made to University accounting curriculum in order to meet the needs of future accounting students and the employers of accounting graduates (Stanley, 2013; Porter, 2014; Howieson, 2014).

One key recommendation from the Pathways Commission report was that the accounting education community and active accounting professionals should be better engaged together in a joint effort to define what accounting students need to learn while studying at school so that upon graduation they are adequately prepared for the demands of the accounting profession. As part of this process, the Pathways Commission recommended that accounting educators and the greater accounting community unite together in an effort to develop a shared vision for a body of knowledge for accounting to serve as the foundation for curriculum development. Another recommendation from the report was that pedagogy should be designed to engage accounting students to learn how to think critically, perform and make thoughtful decisions, and to act with integrity as professionals within the accounting profession.

Another recommendation made by the Pathways Commission report was that there needs to be a better connection made between the accounting body of knowledge to a map of core competencies related to performance levels and for alternative accounting career paths. The report acknowledged that there are differing accounting career paths that each require different perspectives and capabilities. Accounting educators need to do a better job of customizing the education process with the end-goal of producing more capable accountants who are better prepared to enter the marketplace, whether that be in

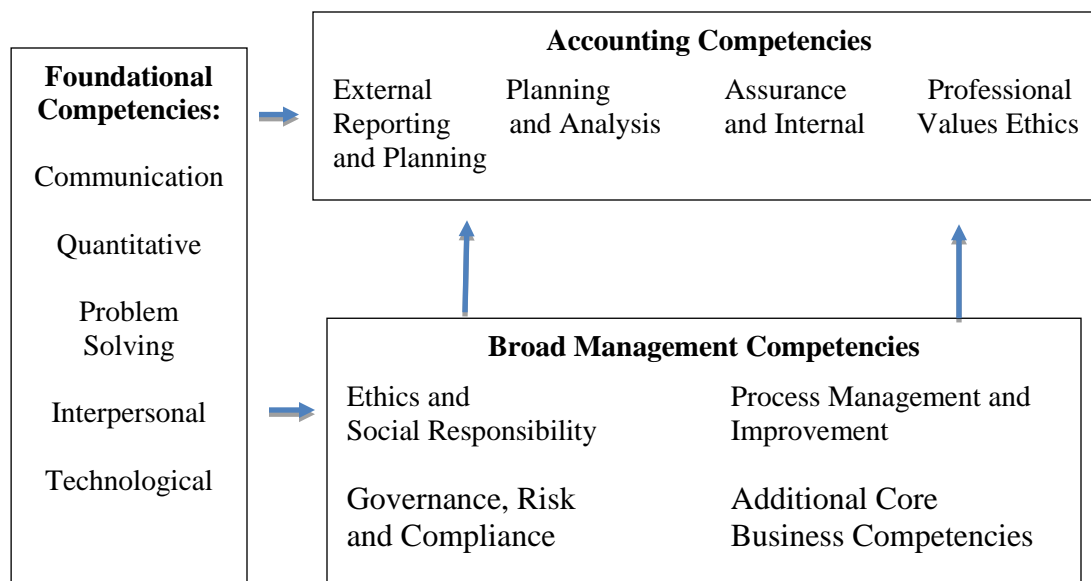
public accounting, management accounting or governmental accounting (Singer, 2013). A third recommendation made by the Pathways Commission report was that universities need to do a better job at creating mechanisms for collecting, analyzing and disseminating information about the current and future job markets for accounting professionals. This third recommendation of the Pathways Commission should now be fulfilled by the Campus Advocate, an accounting professor on campus that has agreed to the position, for each university that has qualified for the IMA's Endorsed School Provider designation.

Since the Pathway Commission report was issued, there have been other research studies conducted, and also multiple practical accounting articles written, that recommend that there needs to be an additional effort made to expand the scope of accounting education is that universities in the U.S. should revamp their accounting curriculum so that more focus is given in preparing students for a career as a CMA versus that of a CPA (Jiles, 2014; Lawson, 2014 and Singer, 2013). According to the most recent AICPA statistics, only 39% of current accounting graduates are starting their careers in public accounting. This means that over 60% of accounting graduates are entering management accounting or other fields upon graduation. Also, within five years of graduation, nearly 80% of all accounting graduates are working at non-CPA firms (Jiles, 2014).

In 2014 the joint task force between the Institute of Management Accountants (IMA) and the Management Accounting Section (MAS) produced a report that addressed the issue of defining the core competencies that should be required by all accounting students in an accounting curriculum that would maximize long-term success as an

accounting professional. The report identified nine key priorities in which accountants need to be prepared for, including: regulation; globalization; technology (especially IT); risk management; transformation (re-engineering to reduce costs or improve efficiency); stakeholder management; validation of corporate strategy; changes in financial reporting (to accommodate IFRS and embrace social and environmental metrics); and finding the right staff with the right skills.

The IMA/MAS report used the Pathways Commission's recommendation to develop a new model of accounting education as a springboard to develop a new framework for accounting education (Lawson, 2014). This framework focused on core competencies, not courses. The framework was designed to be a comprehensive framework, encompassing all accounting disciplines, including financial accounting, managerial accounting, taxation, assurance, and information systems, with a focus on the educational needs of accounting students to enhance their long-term careers (Lawson, 2014). The new framework for accounting education is listed below (Lawson, 2014):





The IMA/MAS proposed framework should be integrated in an effort to promote long-term career development, starting with the accounting education process. Utilizing this framework should provide a solid foundation for various career opportunities in accounting, not just in public accounting (Lawson, 2014).

The report also highlighted two recurring problems in accounting education that still continue despite prior efforts to effect change. The first issue is that most accounting curricula continues to focus on preparing students for entry-level positions in the field of accounting. The second issue is that accounting education remains largely focused on preparing students for careers in public accounting instead of the other responsibilities and demands of accounting practice. The IMA/MAS task force made four recommendations, including: accounting education should be redesigned to focus on long-term career demands and the scope of accounting education should be broadened to include organizational settings beyond public accounting.

Accounting educators and practicing accounting professionals have differing opinions as to what type of education and training is needed for accounting graduates to be successful in the ever-changing world of today (Kavanagh, 2008; Shaokun, 2013; and Cory, 2013). Some feel that accounting education has not changed enough to meet the needs of practicing accountants and that accounting education is too isolated from other business disciplines (Albrecht, 2000; Brewer, 2014).

There also continues to be a downward trend in which fewer, and less qualified, students are choosing accounting as a major, and consequently, as a career (Cernusca, 2015). There are a number of perceived reasons for this decline in the number of students majoring in accounting, including: lack of information, and considerable misinformation,

about what accounting is and what accountants actually do; more attractive career options than in the past for other types of business majors, other than accounting; the starting salaries for accounting majors has not kept pace with the starting salaries of other business majors; and the 150-hour rule in order to sit for the CPA exam has increased the opportunity costs to become a CPA (Corey, 2012).

In an attempt to reverse this downward trend in the number of students majoring in accounting, several recommendations for improving accounting education have been made, including: making significant changes in university accounting curricula and content; investing in accounting faculty development so that they are able to stay current in real-world accounting settings; updating the pedagogy and delivery methods for accounting courses so there is less memorization and more real-world application; and integrating technology (tax software, Excel and Word skills, QuickBooks training, etc.) into the classroom learning (Cory, 2012).

Additional calls for changes to accounting curriculum have included: a greater interaction between teaching, research and practice; the provision of flexible modes of entry to doctoral education; enhancing the recognition and rewards afforded to high quality teaching in accounting; and changing the curricula models in accounting (Behn, 2012, Black, 2012). One of the driving ideas behind this doctoral research study is that the curricula models in accounting education need to be broadened to include organizational settings beyond public accounting as 80% of all accounting jobs in the U.S. are at non-CPA firms. The IMA's Endorsed School program recognizes universities whose accounting curricula prepare their accounting students to sit for the CMA exam. In order to qualify for this endorsement, universities need to demonstrate how, and it what

classes, their curricula teaches to the CMA exam, which is a much broader accounting education as opposed to focusing solely on preparing students to sit for careers in public accounting and obtaining the CPA credential.

### **Certifications Available to Accounting Practitioners**

Today's accounting profession offers a variety of accounting certifications beyond the Certified Public Accounting (CPA) designation. The CPA designation remains the required entry ticket to the public accounting profession and is, by far, the most recognized accounting designation on college campuses (Cory, 2013; Brody, 2016.). While the CPA designation continues to be the most recognized accounting certification among accounting students, there may be other accounting designations that would be more beneficial for accounting students to pursue (Hutaibat, 2012; Jiles, 2014). Three additional designations that are available for accountants are the Certified Fraud Examiner (CFE), Certified Internal Auditor (CIA) and Certified Management Accountant (CMA).

Given that many future professionals make decisions about their career path while completing their degree in college, student's impressions about these four certifications may determine the accounting workforce of the future (Brody, 2016). It is important that students know about, and understand, each of these accounting certifications (Weaver, 2013; Brody, 2016). It is clear that accounting students have a good understanding of the CPA designation (Brody, 2016). Students are not nearly as aware of the other certifications available to them or what the advantage of these additional certifications can do for them to advance their careers in accounting (Weaver, 2013; Cory, 2013; Brody, 2016). Presented below is some information regarding the four professional

organizations that offer the CPA, CMA, CIA and CFE certifications, namely: the American Institute of Public Accountants (AICPA), the Institute of Management Accountants (IMA), the Institute of Internal Auditors (IIA) and the Association of Certified Fraud Examiners (CFE).

**American Institute of Certified Public Accountants (AICPA).** The AICPA started in 1887 and is currently the world's largest accounting professional association. It current has members in 144 countries and its website ([www.aicpa.org](http://www.aicpa.org)) states that there are over 40,000 members worldwide, of which over 90% have passed the Certified Public Accountant (CPA) examination. Its website also states that the AICPA develops standards for audits of private companies and other services provided by CPA's. In addition, the AICPA provides educational guidance materials to its members, monitors and enforces compliance with the profession's technical and ethical standards and develops and grades the Uniform CPA Examination.

Most states require 150 hours of education, including a bachelor's degree in accounting, in order to be eligible for the CPA designation. In order to sit for the CPA exam, each exam candidate must submit their transcripts to the state in which they desire to take the exam. Each state has its own set of requirements for CPA licensure, so it is important for exam candidates to work closely with the state in which they desire to take the CPA exam. The AICPA has developed a website to assist exam candidates in this process. The CPA requirements for each state can be found on this site (American Institute of Certified Public Accountants, 2016).

There are four exam sections that need to be passed in order to become a CPA. The sections are: Audit and Attestation (AUD), Business Environment and Concepts

(BEC), Financial Accounting and Reporting (FAR) and Regulation (REG). The exam sections can be taken in any order and each exam candidate has an 18-month revolving window to pass the exams, which means once an exam candidate passes their first section, they have 18 months to pass the remaining three sections. If an exam candidate does not pass the remaining three sections in the 18-month window, they stand to lose the first section that was passed and would need to take, and pass, it again. All four exams need to be successfully passed within the 18-month revolving window.

The AICPA actively promotes the CPA credential on college campuses in a variety of ways, including developing a website ([www.thiswaytocpa.com](http://www.thiswaytocpa.com)) that encourages students to compete in the AICPA Accounting Competition, developing a professional skills video series and increasing the funding of scholarships to students who plan to become CPA's (Nilsen, 2015).

**Institute of Management Accountants (IMA).** The IMA was established in 1919. The IMA created the Certified Management Accountant (CMA) program in 1972. The IMA currently has over 75,000 members in 140 countries and has awarded over 47,000 CMA certificates (Institute of Management Accountants, 2016). The IMA is a worldwide association of accountants and financial professionals working in business. The CMA credential is a globally recognized, advanced level credential appropriate for accountants and financial professionals in business. Achieving the CMA designation demonstrates professional expertise in financial planning, analysis, control, decision support and professional ethics (Institute of Management Accountants, 2016).

The IMA requires individuals to have a bachelor's degree in accounting, finance or economics in order to become a CMA. Students can sit for the CMA exam while they

are a student but cannot be awarded the CMA designation until they provide evidence of their diploma to the IMA. There are two sections of the CMA exam. Part one is titled “Financial Reporting, Planning, Performance and Control” and Part two is titled “Financial Decision Making”. The exam sections can be taken in any order and candidates have three years from the date they pass the first section to get the second section passed.

The IMA works to promote itself to accounting students by encouraging college campuses to establish student IMA chapters and student membership to the IMA. The IMA has also established the Campus Advocate Program that is designed to empower accounting professors to act as ambassadors to promote the career value of management accounting and the CMA credential to students. In addition, the IMA Higher Education Endorsement Program was developed and is focused on making resources available to students and to educate them about the CMA credential and career opportunities available in managerial accounting.

**Institute of Internal Auditors (IIA).** The IIA was formed in 1941. It currently has over 180,000 members that are located in more than 170 countries. The Certified Internal Auditor (CIA) program was developed in 1973 currently has certified over 129,000 individuals as CIA’s (<https://na.theiia.org>). The IIA’s mission includes advocating and promoting the value that internal audit professionals add to their organizations; providing professional education and development opportunities to its members; researching, disseminating and promoting knowledge regarding internal auditing and its role in control, risk management and governance; and an organization

that brings internal auditors together from all countries to share information and experiences (Institute of Internal Auditors, 2017).

Individuals that earn the CIA designation demonstrate their competency and professionalism in the internal audit field. In order to become a CIA, an individual must pass a three-part exam that is administered by the IIA. In addition, individuals must have a bachelor's degree and two years of internal auditing experience in order to sit for the exam. The exam also may be taken with a master's degree and one year of work experience. Content areas on the exam include risk and control, business analysis, information technology, business management skills, the internal audit's role in governance and proper procedures on how to conduct an internal audit engagement.

The IIA has developed a program called the "Internal Auditing Education Partnership" in which it works with higher education programs to attempt to mold the future of the internal audit profession. In addition, the IIA has established the Internal Auditing Academic Advancement Fund in an effort to support awareness and teaching of internal auditing across college campuses. The IIA has published that individuals with the CIA credential tend to earn 43 percent more than their non-certified peers (IIA, 2014b).

**Association of Certified Fraud Examiners (ACFE).** The ACFE was founded in 1988 by Joseph Wells. The association's primary mission is to reduce fraud and white-collar crimes. According to the 2015 Report to Members (ACFE, 2016), the ACFE has over 75,000 members in more than 150 countries. The ACFE offers the Certified Fraud Examiner (CFE) credential. The ACFE does require references attesting to one's moral character before granting the CFE certificate (Association of Certified Fraud Examiners, 2017).

The ACFE also requires that each member adheres to a code of ethics, which require: a commitment to professionalism and diligence in work duties; to not engage in any illegal or unethical conduct; to exhibit the highest level of integrity in the performance of all professional assignments; to comply with lawful orders of the courts and to testify to matters truthfully and without bias; and to not reveal any confidential information without proper authorization (Association of Certified Fraud Examiners, 2017).

Applicants for CFE certification generally must have a bachelor's degree but two years of professional experience related to fraud can be substituted for one year of college. The CFE exam consists of 500 questions that are divided into four sections: Fraud Examination and Investigation, Criminology and Ethics, Financial Transactions, and Legal Elements of Fraud. Each question has a time limit of 75 seconds and each section contains 125 questions.

The ACFE focuses on providing benefits to both accounting faculty and accounting students. The ACFE has an Anti-Fraud Education Partnership that provides accounting educators with a sample syllabus, teaching aids, ACFE reference materials and a suggested textbook to be used to help educate students in the classroom. In addition, the ACFE has a scholarship program to help students interested in pursuing a career in fraud examination. Individuals that are credentialed as CFE's can earned 23% more than their non-certified peers. (Association of Fraud Examiners, 2015).

The CPA designation is the most recognized accounting certification among accounting students (Brody, 2016). Accounting student awareness of the CMA and CIA designations have declined relative to the CPA designation over the past fifteen years



(Brody, 2016). In addition, their awareness of the CFE designation has surpassed that of the CMA and CIA designation, yet is still much lower than the CPA designation (Brody, 2016).

Accounting faculty may want to incorporate more information about the CMA, CFE and CIA certifications into the accounting courses being taught in an effort to help students' explore more career options that are available in accounting (Brody, 2016). This research project was focused on the lived experiences and perceptions of students regarding managerial accounting, careers in managerial accounting and the CMA designation, but it is important to recognize that there are other accounting designations that students should be aware of beyond the CPA designation.

### **The Need to Increase Students' Knowledge of Managerial Accounting**

Accounting education needs to be broadened to include organizational settings beyond public accounting (Seigel, 2010 and Jiles, 2014, Lawson, 2014). Most accounting departments at U.S. universities today focus large portions of their 4-year accounting bachelor degree program, or certainly large portions of it, in an effort to prepare its students for a career in public accounting and obtaining the CPA credential even though the majority of accounting graduates subsequently pursue non-public accounting careers (Cory, 2013 and Hutaibat, 2012; Jiles, 2014). This should not necessarily be the trend because approximately 80% of all accounting professionals in the U.S. work inside organizations.

As a consequence of these accounting labor statistics that 80% of all accounting jobs are in non-public accounting, there have been a series of questions raised, and calls made, for further research and discussion as to whether there is an appropriate balance

between financial and managerial accounting in the typical undergraduate program (Siegel, 2010, Jiles, 2014;). Proposals have been made that the accounting undergraduate coursework should be more directly targeted to the skill set needed to pass the CMA exam, and leaving the CPA exam for graduate coursework (Jiles, 2014; Lawson, 2014)).

Accounting students are also unsure about the role and status of managerial accountants within organizations and they do not believe the compensation of a managerial accountant compares favorably to that of other accounting professionals (Shuttleworth, 2014). Students also have a perception that the usefulness of the accounting concepts taught in managerial accounting are not as useful as compared to the accounting concepts taught in financial accounting and fiscal reporting (Grosu, 2014). Accounting students also have been found to prefer the fields of tax accounting and auditing versus that of managerial accounting (Hejazi, 2013) and accounting students prefer public accounting versus managerial accounting as their first choice of career (Hutaibat, 2012). In addition, students believe that the job opportunities and income as a managerial accountant are not as plentiful as compared to that of a financial accountant and this is leading to them to prefer a career in financial accounting as opposed to a career in managerial accounting (Hutaibat, 2012).

All of these findings mentioned above suggest that there is more work that can be, and needs to be, done by universities to promote the career opportunities that are available to accounting students in managerial accounting. Universities that are focusing too exclusively on CPA preparation should take steps to revise its curriculum to be more centered on the CMA certification and promotion of managerial accounting as a career

and these steps should include: mapping current curriculum to the CMA exam and identifying gaps in the curriculum and modify curriculum to close gaps (Jiles, 2014).

The IMA should also provide more support and information to students in regards to the possible career opportunities within the management accounting industry (Hejazi, 2013). The IMA's new Higher Education Endorsement, that is available to all universities that qualify for it, could certainly be a vehicle to disseminate the information regarding career opportunities in management accounting that appears to currently be lacking. This research study explored the lived experiences of ten accounting students who attend an IMA endorsed university in regards to their perceptions of managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting.

### **Steps Universities Need to Take to Become an IMA Endorsed School**

The IMA conducted a review of the undergraduate accounting curriculum at many colleges and universities from across the U.S. and found that the content being taught at most higher-education institutions was more CPA content oriented and this was at the detriment of managerial accounting content (Bramwell, 2013). In an effort to combat this trend, the IMA launched the Higher Education Endorsement Program in 2013. The main purpose of the IMA's Higher Education Endorsement Program is to endorse university business and accounting programs that provide needed managerial accounting skills for students (Lawson, 2014). In addition, the IMA committed to help higher-education institutions develop programs within their curriculum that will enable students to achieve the CMA designation (Bramwall, 2013).

The endorsement by the IMA offers universities a measurement process that is based on self-evaluation, peer review and external evaluation by the IMA. There are no fees involved in the endorsement process. The criteria that higher education institutions need to meet in order to qualify for the endorsement include the following (Bramwall, 2013):

1. The program must substantially cover the CMA exam content. Specifically, this means that a program must cover at least 70 percent of the CMA body of knowledge at Level C, the most rigorous level.
2. The program must have adequate faculty resources to deliver this content.
3. The program must be accredited by a recognized accreditation organization, such as the Association to Advance Collegiate Schools of Business (AACSB), Accreditation Council for Business Schools and Programs (ACBSP) or the European Quality Improvement System.
4. A faculty member must be designated as an IMA campus advocate.

The IMA offers two different tiers of endorsement. Full endorsement is available for those university programs that meet all four endorsement criteria listed above. Provisional endorsement is also available for programs with some shortcomings in meeting all of the criteria for the full endorsement. The undergraduate accounting programs at Penn State University and Washington State University were the first universities to be recognized for the IMA's endorsement (Bramwall, 2013). There are currently 35 universities that have qualified for the IMA's Higher Education Endorsement. Of the 35 universities that have qualified for the endorsement, 27 are located in the Americas, three in Asia, two in Europe and three in the Middle East. A

complete list of the current accounting programs that have qualified for the endorsement in presented below (<http://www.imanet.org/educators/higher-education-endorsement-program>):

#### The Americas

Athens State University	Baylor University	Brigham Young University	Central Michigan University
Cleary University	Clemson University	Dixie State University	Eastern Oregon University
Grand Valley State University	Humboldt State University	Johnson & Wales – Charlotte Campus	Kent State University
Loyola University Maryland	Metropolitan State University	Michigan State University	Niagara University
Penn State Behrend	Pennsylvania State University	Rutgers Business School	St. John’ University
Temple University	The University of Findlay	University of Alabama	University of Sao Paulo
University of Utah	Washington State University	Walsh College	

#### Asia

Asia Pacific Institute of Management	Nanyang Business School	Singapore Management University
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#### Europe

EBS – European Business School	University of Strathclyde
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#### Middle East

King Fahd University of Petroleum & Minerals	Prince Sultan University	The American University in Cairo
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The IMA’s intent of the endorsement program is not to produce a standardized accounting or business curriculum, but rather to encourage a diversity of approaches for

course design and delivery (Bramwall, 2013). The program was designed to help ensure that new accounting graduates are trained in the CMA body of knowledge and have an adequate educational background to ensure that students are prepared for their lifelong careers in accounting (Lawson, 2013). As part of the Higher Education Endorsement, the IMA has a CMA Scholarship Program where it will allow the top 5% of students at the endorsed schools to take the CMA exam at no cost. This scholarship is valued at approximately \$1,200. The IMA instituted the Higher Education Endorsement and the CMA Scholarship program in an effort to promote the CMA credential and to expose students to the career opportunities that are available to them as a CMA.

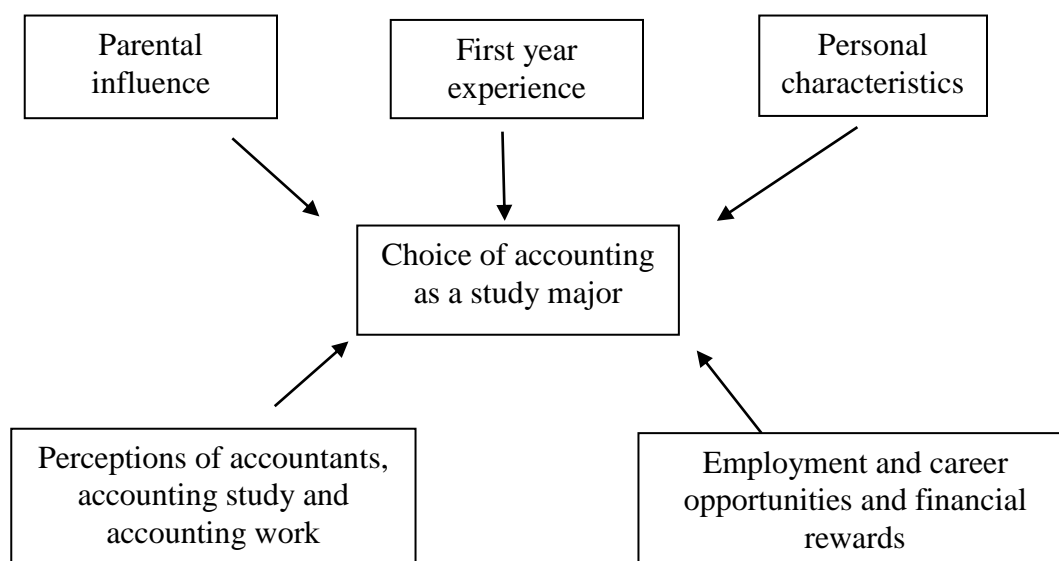
### **The Influence Accounting Professors Can Have on Student Career Choices**

Accounting professors have been found to have a significant influence on students' decision to major in accounting (Mauldin, 2000; Quezada, 2013). Of all individuals that are involved in the university recruiting process to major in accounting, the accounting professor was the most significant factor in a student's decision to decide to major in accounting (Mauldin, 2000; Hashim, 2015). In addition, students who had previously not elected a degree major, decided to major in accounting during their first accounting course, suggesting that accounting professors are in a unique position to be able to encourage, and possibly persuade, students to major in accounting (Mauldin, 2000).

Parents and accounting professors have been found to be the only two people that influenced a students' decision to major in accounting (Byrne, 2012). Friends, other relatives besides parents, guest speakers and school guidance counselors had little to no impact on the decision to pursue a degree in accounting based on a set of twenty-six

factors that were analyzed in an effort to determine which, if any, of the factors lead to students choosing the accounting profession as a career (Byrne, 2012). This again shows the unique role that an accounting professor can have in helping students decide to major in accounting.

There are other factors, outside of the accounting professor, that have also been found to influence a students' decision to major in accounting (Uyar, 2011). Some of the additional factors include: parental and other influence; first year experience at a university; perceptions of accountants, accounting study and accounting work, personal characteristics and interests, and employment and career opportunities and financial rewards (Laswad, 2014). A diagram of these factors is presented below:



Factors with a negative correlation have been found to include the success students' experienced in their beginning accounting class and the factors: difficulty in accounting, stressful nature of accounting and the inadequate numerical abilities of students (Uyar, 2011).

Students enrolling in a university essentially fall into two groups: those who have already decided upon a major and those who have not. Those students who have already decided upon a major, and if their major wasn't accounting, may have already considered the various factors mentioned above before deciding not to major in accounting. Other students may have not considered those factors but considered other factors, such as, I don't like boring subjects and accounting is boring, or I don't like dealing with numbers (Laswad, 2014). However, even though some students may have made up their minds to not major in accounting prior to enrolling, they may still change their mind after taking their first accounting class. There have been documented instances in which an accounting professor has been able to persuade certain business students to decide to major in accounting and can also help retain talented students that have already decided to major in accounting (Quezada, 2013).

The IMA's Campus Advocate Program, which is an extension of the IMA's Higher Education Endorsement Program, requires that each university that is IMA endorsed to have an accounting professor on campus that will act as the link between the IMA and their university. These campus advocates are to advise students about the career opportunities available to them in managerial accounting and to promote the CMA credential to students. While there is no current research that has been conducted as to the effect that an accounting professor, acting in the role as an IMA Campus Advocate, has on students, it would certainly be plausible that these campus advocates could have a positive role in helping students learn more about the career options available to them as a managerial accountant.



## **The Skills and Attributes Needed for Success in Accounting**

There has been a significant amount of research that has been conducted in regards to the competencies that accounting graduates will need in order to be successful as practicing accountants (Singer, 2013; Pan, 2012; Howeison, 2014). It is no longer considered enough for accounting students to master the technical skills in order to process accounting data for financial statement and tax preparation (Yu, 2013). In order for accounting students to be properly prepared, accounting programs at the University level should be centered on learning that stresses group dynamics, strategic analysis, written and verbal communication skills, and developing a student's ability to figure out alternative solutions to difficult problems (Singer, 2013).

Employers are seeking accounting graduates that can communicate, interact, and relate well with other professionals (Singer, 2013). Employers are also seeking accounting graduates that can motivate and help direct others toward problem resolution (Yu, 2013). Education literature has referred to these skills as generic skill sets (Singer, 2013; Daff, 2012). These generic skill sets have been further divided into two to broad categories: cognitive skills and behavioral skills. The cognitive skill category is made up of three sub categories: routine, analytic/design, and appreciative. The behavioral category contains two subsets: personal and interpersonal (Daff, 2012).

Examples of routine skills included writing reports and essays, as well as computer literacy. Analytic/design skills included reasoning and conceptualization as well as identification, evaluation and management information and evidence. The appreciative subset included the student's ability to receive, evaluate, and make sound judgments and the ability to think critically (Daff, 2012). Students that are majoring in

accounting need to be acquiring these various skill sets and accounting curriculum at universities should be retooled to ensure that these skill sets are being properly developed in accounting graduates (Singer, 2013).

The Institute of Management Accountants (IMA) identified important information about the knowledge, skills and abilities (KSA's) that accounting graduates need to possess in order to have successful accounting careers. The KSA's include: writing, speaking, presenting, listening, negotiating, persuading, influencing, and the ability to work in teams while using sound logic, diagnostic and reasoned approaches in an effort to solve problems. In order for accounting students to be able to develop these KSA's, colleges and universities need to consider curriculum changes to their accounting programs (Siegel, 2010; Singer, 2013). From these KSA's

Eight skills have been identified, and have been deemed to be critical, for accounting graduates to acquire in order for them to be successful as a practicing accountant. These skills included: Excel skills, Word skills, creativity in problem solving, Windows skills, awareness of ethical issues, research skills, Power Point skills and Access skills (Cory, 2012). Employers are also expecting accounting graduates to have a solid understanding of accounting and analytical skills, but they have also reported that they need students that have a strong business awareness and real world knowledge (Weaver, 2013).

There is a mismatch between the accounting skills and competencies that accounting employers expect versus what they perceive graduate accounting students possess and this difference in perception has been referred to as the "expectation-performance gap in accounting education" (Bui, 2010). Various professional accounting

bodies throughout the world have sponsored studies that have been designed to determine what the desired competencies should be for accounting graduates (ICAEW, 2006; AICPA, 2013). The AICPA study concluded that there are three broad categories or competencies that accountants need to possess in order to be successful in the accounting industry. The competencies include: functional competencies (technical accounting proficiencies), business competencies (general business skills and a wide-ranging business prospective) and personal competencies (communication, leadership skills, interpersonal skills, and the ability to quickly adapt to rapid changes in the marketplace).

### **Accounting Functions within Managerial Accounting**

Management accountants need to utilize a full toolbox of core competencies in order to be successful. Management accountants are serving in a critical role to assist with decision making, execution and accountability processes (McNally, 2016).

Management accountants are being asked to collect, analyze and interpret data in an effort to provide useful information to decision makers. The efforts of a management accountant should be centered on creating and enhancing stake holder value. This can be accomplished by helping internal and external stakeholders understand and influence drivers of performance in an effort to ensure that the organizations in which management accountants' work are making the best decisions and achieving their objectives (McNally, 2016).

The IMA has defined a list of core competencies that individuals need to acquire in order to pass the CMA exam and to be a successful management accountant (Institute of Management Accountants, 2016). These core competencies include: Investment Decisions; Planning, Budgeting and Forecasting; Decision Analysis; Cost Management;

Corporate Finance; Performance Management; External Financial Reporting Decisions; and Financial Statement Analysis.

**Investment Decisions.** This core competency encompasses cash-flow estimates; discounted cash-flow concepts; net present value; internal rate of return; discounted payback; income tax implications for investment decisions; risk analysis' and real options.

**Planning, Budgeting and Forecasting.** The core competency includes strategic planning; budgeting; computing the annual profit plans and supporting schedules; various types of budgeting, including: activity-based budgeting, project budgeting, and flexible budgeting; top-level planning and analysis; and forecasting, including: quantitative methods such as regression analysis and learning-curve analysis.

**Decision Analysis.** This competency involves relevant data concepts; cost-volume-profit analysis; marginal analysis; make versus buy decision analysis; income tax implications for operational decision analysis; pricing methodologies, including: market comparables, cost-based approaches, and value-based approaches.

**Cost Management.** This competency addresses cost concepts, flows and terminology; alternative cost objectives; cost measurement concepts; cost accumulation systems, including: job-order costing, process costing, and activity-based costing; overhead cost allocation; supply chain management and business process performance topics such as lean manufacturing, enterprise resource planning, Theory of Constraints, value chain analysis, activity-based management, continuous improvement, and efficient accounting processes.

**Corporate Finance.** This competency encompasses types of risk, including: credit, foreign exchange, interest rate, market, and political risk; capital investments for long-term financing; initial and secondary public offerings; dividend policy; cost of capital; working capital management; raising capital; managing and financing working capital; mergers and acquisitions; and international finance.

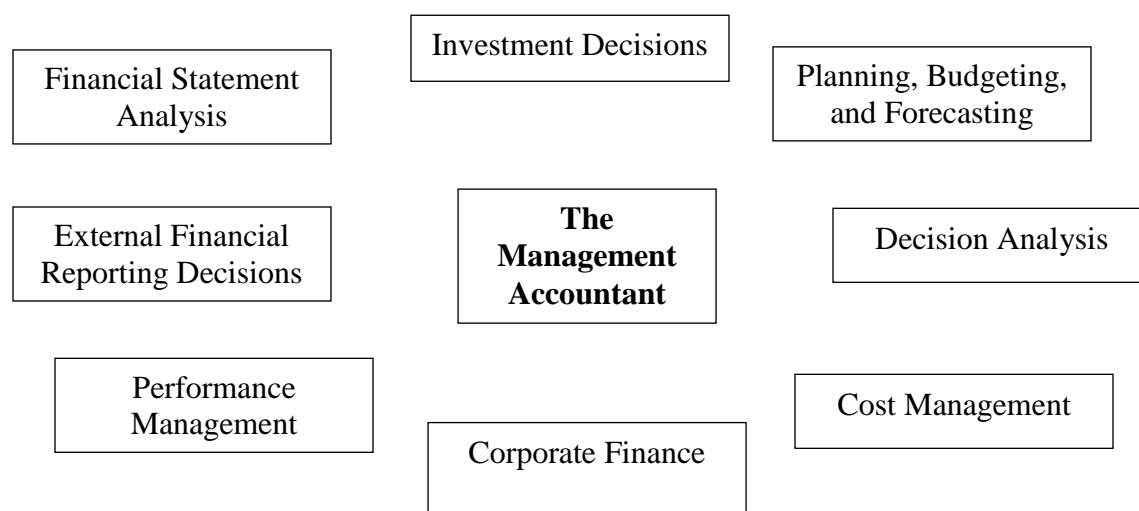
**Performance Management.** This competency addresses the factors to be analyzed for control and performance evaluation, including: revenues, costs, profits, and investment in assets; variance analysis based on flexible budgets and standard costs; responsibility accounting for revenue, cost, contribution, and profit centers; key performance indicators; and the balanced scorecard.

**External Financial Reporting Decisions.** This competency covers the preparation of financial statements (balance sheet, income statement, statement of changes in equity, and statement of cash flows); valuation of assets and liabilities; operating and capital leases; impact of equity transactions; revenue recognition; income measurement; and major differences between U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).

**Financial Statement Analysis.** This competency involves the calculation and interpretation of financial ratios; performance evaluation utilizing multiple ratios; market value versus book value; profitability analysis; analytical issues, including: the impact of foreign operations, the effects of changing prices and inflation, off-balance sheet financing and earnings quality.

Each of these core competencies focuses on empowering management accountants to use implement sound decision making in an effort to mitigate and manage

risks. The IMA has also identified three overarching competencies that are fundamental and integral to all of the other competencies described above. The three overarching competencies are: Professional Ethics, Risk Management and Internal Control. Thus, risk management is both implicit throughout the management accountant's core technical competencies and it is also explicitly identified as an overarching competency. Listed below is a visual representation of the management accountant's core competency framework as by the IMA (Institute of Management Accountants, 2016):



Management accountants have a variety of job titles, including: staff accountant, cost accountant, internal auditor, budget analyst, financial analyst, senior accountant, finance manager, controller, vice president of finance, treasurer, chief financial officer, and chief executive officer.

Earning the CMA credential can have many benefits, including job advancement, job promotions, better career opportunities, developing core accounting competencies, developing inner confidence and additional compensation opportunities. According to the IMA's U.S. salary survey, individuals will earn, on average, approximately 31% higher

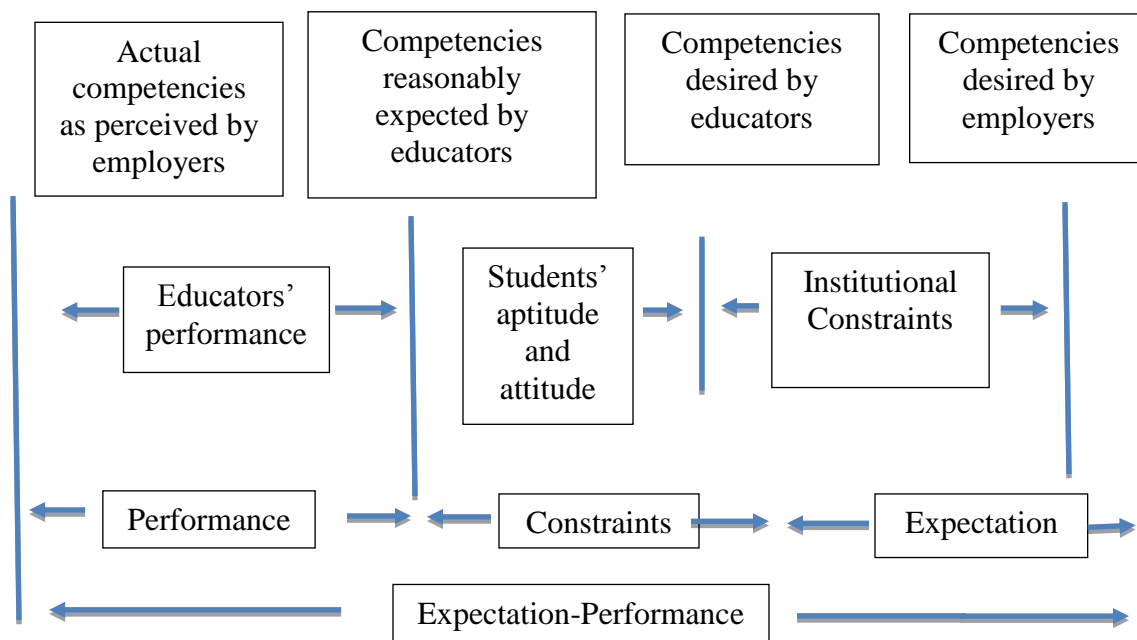
total compensation as a CMA as compared to noncertified peers (Institute of Management Accountants, 2016). Over a course of a career, this can add up to more than \$500,000 (Krippel, 2014).

### **Better Alignment between Accounting Education and Training**

There has been considerable debate between universities, accounting practitioners and accounting bodies with respect to the different roles each plays in the development of an accounting professional (Wilson, 2011 and Stanley, 2013). One researcher has argued that accounting instruction taught at universities should be about learning through knowing and preparing to become an accountant and that professional accountancy training should come after graduation by learning through doing and preparing to become an accountant. (Wilson, 2011). Other researchers have argued that training to become an accountant should be integrated into the accounting curriculum at universities (Corey, 2012; Stanley, 2013).

There also continues to be an increasing gap between accounting education and accounting practice (Abayadeera, 2014 and Majzoub, 2015). This gap is attributed to the fact that the work that accountants are doing within the accounting profession has evolved due to its changing business environment while accounting education has not followed suite (Majzoub, 2015). As a result, there is still a predominantly narrow accounting education that has yet to fulfill the needs of the new business environment (Parker, 2011). Other factors that have been shown in research to contribute to the gap in accounting education include: outdated accounting curriculum (Donovan, 2005); accounting educators focusing too much on accounting theory rather than the practical attributes of accounting (Chua, 2000) and University rank and tenure structures that place

too much emphasis on accounting research rather than on accounting education (Bui, 2010). A model was developed by Binh Bui and Brenda Porter that visually represents the structure of the accounting education's expectation-performance gap, as follows (Bui, 2010):



There is also a gap between students' perceptions and employers' expectations in regards to the skills and attributes that are deemed necessary to develop in order to have a successful accounting career (Klibi, 2013). In addition to employers wanting accounting graduates that have developed the right mix of accounting technical skills, employers are searching for accounting graduates that have a wide range of non-technical abilities (Klibi, 2013). However, some accounting students have come to believe that it is only the technical skills that will determine whether or not they will be successful in pursuing a career in accounting. In effect, a combination of both technical skills, and non-technical abilities (communication skills, problem-solving ability and critical thinking skills) need



to be developed during the accounting education process so that accounting graduates are prepared for life as a practicing accountant (Klibi, 2013).

Prior research has identified several reasons as to why accounting education is failing to provide accounting graduates with the proper amount of preparation in order to be adequately prepared for a career in accounting. These preparation-gap reasons have been summarized into four broad categories (Bui, 2010):

1. Differences in the expectations of accounting academics and employers
2. Students' perceptions of accounting programs and the profession, and their ability and aptitude
3. institutional constraints
4. The ineffectiveness of university teaching

In addition, the Higher Learning Commission (HLC), the Accreditation Council for Business Schools and Programs (ACBSP) and the Association to Advance Collegiate Schools of Business (AACSB) have implored universities to implement changes to accounting curriculum that emphasize student development of critical thinking, writing, research and people skills (Singer, 2013). The AACSB specifically recommends that any accounting undergraduate curriculum include the following areas of general knowledge and skill: communication, ethical understanding and reasoning, analytical skills, proper use of information technology, diversity understanding, and reflective thinking skills (Singer, 2013). Since accounting programs at universities within the U.S. have to be accredited, and the AACSB and the ACBSP are the two major accrediting bodies, the suggestions made by the AACSB and the ACBSP should be considered important and

these suggestions could be a driving force toward implementing some of the structural changes that are needed to close the preparation gap in accounting education.

There has also been much contention recently regarding the need for better integration and alignment between accounting educators, accounting practitioners and the Professional Accounting Bodies (PABs) (Kaplan, 2011; Pan, 2012; Evans, 2012). There continue to be unresolved issues that are contributing to the tension between accounting educators, PABs and accounting practitioners (Evans, 2012). One of the biggest issues is that accounting education, professional licensing and accounting in the workplace have largely been operating out of three separate silos (Wilson, 2014). This has caused several negative ramifications, including (Evans, 2014):

1. Accounting practitioners not reading academic accounting research
2. Accounting educators focusing too much on technical material
3. Accounting students not given sufficient exposure to accounting research
4. Gaps in the links between research and practice, practice and education, and education and research

The nature of the work that accountants are performing has evolved over the past several decades, and it continues to change as accountants are moving away from counters of wealth and compliance cops to creators of wealth and influencers of strategy (Siegel, 2010). There is evidence that suggests that two-thirds of accounting graduates will begin their careers in industry and other various nonpublic accounting areas of work (Corkern, 2013). There is a concern that the current accounting curriculum at most U.S.-based universities are not providing an appropriate education for these students that are pursuing other nonpublic accounting career paths (Siegel, 2010; Cory, 2012, Singer,

2013). This preparation gap in accounting education needs to be remedied (Siegel, 2010; Singer, 2013).

### **Summary**

The purpose of this qualitative phenomenological research study was to explore the lives of students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting, and then consider the implications of these conceptions in regards to the perceived career opportunities available to them in managerial accounting. The literature review discussed the social constructivist view of learning, which is the theoretical framework that was used in this study. In addition, the following seven subtopics were explored in this literature review: the need to change accounting education, the need to increase student's knowledge of managerial accounting, the steps universities need to take to become an IMA endorsed school, the influence that an accounting professor can have on students' career accounting, the skills and attributes needed for success in accounting, accounting functions within managerial accounting, and better alignment in accounting education and training. Each of these seven subtopics provide varying perspectives, layers, and insight into the phenomenon of this research study. Chapter 3 summarizes the elements of the research design that was used to study the research questions.

### Chapter 3: Research Method

Students who graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting (Shuttleworth, 2014 and Hutaibat, 2012). In addition, the gap between the skills that are taught during college and those expected by employers is especially problematic for those students seeking employment as managerial accountants immediately upon graduation (Brewer; Lawson, 2014). This is troubling because the vast majority of individuals employed as accountants within the U.S. do not work at CPA firms, but rather work inside organizations as internal accountants (Weaver, 2013; Corey, 2013). This problem has negatively impacted accounting graduates as they enter the work-force in at least three ways. First, their initial perception may be that they can only get a job at a CPA firm upon graduating with an accounting degree (Lechner, 2014; Stanley, 2013). Second, students may have a misconception that they must obtain CPA licensure in order to have a successful career in accounting (Lechner, 2014; Wilson, 2011). Third, if students do pursue a career in management accounting immediately upon graduation, there is a good likelihood that they will be underprepared for the type of work that they will be asked to perform by their employers (Brewer, 2014; Lawson, 2014). A possible cause of this problem is that most universities gear the accounting curriculum towards preparing students for a career as a CPA as opposed to a career as a CMA (Singer, 2013; Cory, 2013; Lawson, 2014).

The purpose of this qualitative phenomenological research study was to explore the lives of students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting and their perceived career opportunities available

to them in managerial accounting. This qualitative phenomenological study focused on ten students who are majoring in accounting at an IMA endorsed university located in the Southwestern part of the U.S. Data for the study was obtained through face-to-face interviews with each of the research participants. Each interview, on average, took approximately one hour.

The objective of the study was to collect data from a sample size of ten participants, or until data saturation occurred, by conducting interviews with accounting student's that are enrolled at an IMA endorsed university located in the Southwestern part of the U.S. Helpful insights and viewpoints of the study participants were obtained during the interview process in relation to student's conceptions of managerial accounting. These interviews were focused on the lived experiences of accounting students at an IMA endorsed school with respect to managerial accounting and the perceived career opportunities available to these study participants in managerial accounting.

A qualitative phenomenological research method and design was appropriate for this study because the purpose of the study was to examine students' thoughts and feelings related to their lived experiences at an IMA endorsed school. This study contributes to the body of knowledge relating to accounting student perceptions of management accounting, specifically within the context of a university setting that has qualified for the IMA's Higher Education Endorsement, which has yet to be researched or explored. By extension, this study may also provide insights to accounting educators at non-IMA endorsed schools that may be useful in the further design of university accounting curricula that places more focus on managerial accounting.

## **Research Methodology and Design**

This qualitative phenomenological research study explored the lived experiences of ten accounting students that are attending an IMA Endorsed School in regards to their perceptions of managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting. A qualitative phenomenological research design was selected over a quantitative research design because a qualitative phenomenological research design better enabled an exploration of the lived experiences of the research participants (Moustakas, 1994). In addition, qualitative data, as opposed to quantitative data, was needed in order to sufficiently answer the research questions. Phenomenological research, which often includes up to ten research participants, should explore, often via face-to-face interviews, the understandings and lived experiences of the research participants in an effort to provide insights that are useful and relevant (Moustakas, 1994; Bolderston, 2012).

There were other qualitative designs that were considered for this study, including grounded theory, ethnography and case study. Grounded theory is an approach that is uses field interviews with individuals regarding an aspect of human or social experience to generate theory using inductive data analysis (Soklaridis, 2009). A case study approach focuses on a single site, program, or event that multiple people have experienced using interviews and observations of the phenomena (Marshall & Rossman, 2011). An ethnographic approach focuses on a single site of individuals that share a similar culture, value system and beliefs (Schram, 2006).

After reviewing the various qualitative approaches, a phenomenological design was chosen for this study because it is a suitable method for investigating peoples' lived

experiences and it can be used to identify conceptions that people have of a phenomenon of interest collectively (Moustakas, 1994). From the individual descriptions provided by the accounting students that are attending an IMA endorsed school, general or universal meanings can be derived from the essences of their experiences (Moustakas, 1994).

Furthermore, a phenomenological qualitative design was utilized as it: (a) allows for the studies of human experiences, (b) focuses on the wholeness of experience, (c) permits for the meanings and essences of experience, (d) obtains descriptions of experience through first person accounts in informal and formal conversations and interviews, (e) regards the data of experience as imperative in understanding human behavior and as evidence for scientific investigation, (f) allows for formulation of questions and problems that reflect the interest, involvement and personal commitment of the researcher and (g) allows for the viewing experience and behavior as in integrated and inseparable relationship of subject and object and parts and whole (Moustakas, 1994). In addition, qualitative research methods are exploratory in nature and are useful for advancing extant knowledge on topics where little research is available (Bolderston, 2012).

A phenomenological research design encompasses three main steps: (a) identifying what and who will be studied, (b) collecting data through interviews or observations, and (c) analyzing the data by identifying major themes that surface during the study (Sanders, 1982). This study includes in-depth interviews with ten accounting majors that are attending an IMA endorsed university located in the Southwestern part of the U.S. As suggested by Moustakas (1994), open-ended questions were used to engage

the research participants in a wide-ranging discussion and encouraged participants to provide an exhaustive description of their experience.

Each interview were audio-recorded with the research participant's permission and then transcribed verbatim using a software product called Dragon Naturally Speaking 13. The transcribed interview transcripts were then entered into HyperRESEARCH qualitative software, which better facilitated data analysis by allowing the researcher to organize the interview data and capture common themes that emerged during the research study (Groenewald, 2004).

### **Population and Sample**

The population for this study was comprised of accounting majors that are attending an IMA endorsed university located in the Southwestern part of the U.S. One inclusion criteria item is that the population was limited to accounting majors that are in their junior or senior year. Declared accounting majors that are not in their junior or senior year were excluded from the study. The sample of students selected for the study fairly and accurately represents the total population of accounting students at the school, based on the selection criteria that all research participants were declared accounting majors in their junior or senior year.

This research study examined the lived experiences of ten accounting students from an IMA endorsed university located in the Southwestern part of the U.S.

Phenomenological research studies typically include up to ten research participants in order to ensure that data saturation has occurred (Moustakas, 1994; Bolderston, 2012).

Participants for the study were recruited using a purposive sampling technique to ensure that both the inclusion and exclusion criteria mentioned above are being met. With



purposive sampling, as few as three to six individuals could provide sufficient information for a phenomenological study, but the number of study participants will vary based on the topic (Sanders, 1982). Purposive sampling allowed for identification and selection of qualified research participants that were a rich information source for the study (Patton, 2002).

Research participants were drawn from referrals from the accounting faculty and the IMA campus advocate at the IMA endorsed university that has been selected for this study. Students that participated in this study were declared accounting majors that are currently attending an IMA endorsed university located in the Southwestern part of the U.S. Permission from the IMA endorsed university was obtained prior to interviewing any students. All individuals who agreed to participate in the study were required to sign an informed consent form prior to the interviews being conducted.

Once permission to proceed with the study was granted by NCU's Internal Review Board (IRB) and from the IMA endorsed university, potential study members were contacted by phone and sent a formal invitation letter (see Appendix A). Individuals who agreed to participate in the study were required to sign an informed consent form before the interviews took place. The interviews were conducted at the IMA endorsed university's campus. All ten interviews were conducted during a two-week timeframe.

### **Materials/Instruments**

Data for the study was collected using face-to-interviews as the unit of analysis is the individual and his or her experiences. A copy of the interview transcript is included in Appendix B. The interview guide in Appendix B was followed to ensure that all study participants were asked the same questions during the interviews. As suggested by

Moustakas (1994), less structured follow-up questions were used to probe for additional insights. Each interview took approximately one hour and a total of ten accounting students were interviewed. The interviews were recorded verbatim using a software product called Dragon Naturally Speaking 13. The transcribed interview transcripts were then entered into HyperRESEARCH qualitative software, which better facilitated data analysis by allowing the researcher to organize the interview data and capture common themes that emerge during the research study (Groenewald, 2004).

Prior to any interview questions being asked, a field test was conducted. As part of the field test, three subject matter experts were selected to review the interview questions from this study to ensure that the interview questions have been properly designed to ensure both reliability of the survey instrument and credibility and dependability of the research that was conducted. Feedback from the subject matter experts, was incorporated into the final interview guide before the main study commenced.

Proper instrument reliability and validity are critical to ensure that qualitative studies are producing credible descriptions of the social world (Perakyla, 2004). The process of respondent validation, which calls for taking findings back to the research subjects so they can verify the findings (Moustakas, 1994) was implemented in order to help ensure the validity of this research study. In addition, the qualitative interviews were converted to transcripts and each research participant reviewed their transcripts for any errors, misinterpretations or to clarify any point as needed. This process helped to ensure that the data collected was reliable and accurately reflects the research participants lived experiences of the phenomenon that was investigated (Moustakas, 1994).

## **Study Procedures**

This research study received approval from NCU's Institutional Review Board (IRB) prior to data collection. Confidentiality of the research participants was maintained to the fullest extent possible. The research participant's names were not used for the study, instead, each research participant was assigned a number. The researcher is also the only person that has access to interview recording and interview transcripts.

All data was collected via face-to-face interviews. These interviews took place on the campus of the IMA endorsed university. The participants of the research study were declared accounting majors that were in either junior or seniors at the school. Participants for the study were recruited using a purposive sampling technique. Permission from the IMA endorsed university was also obtained prior to interviewing any students. All research data that has been collected is securely stored in accordance with IRB requirements.

## **Data Collection and Analysis**

In accordance with Northcentral University's (NCU) guidelines, data collection did not take place until after the Institutional Review Board (IRB) approved this research project. Thereafter, the evidence for this phenomenological method of research relied on first-person accounts of the lived experiences of accounting students attending an IMA endorsed university. These first-person accounts were collected and analyzed in an effort to ascertain the answers to the three research questions that this research study investigated. In addition, another purpose of analyzing the data was to identify qualitatively different conceptions of the phenomenon of interest that emerged from the

overall data, rather than on the individual conceptions of each individual participant (Moustakas, 1994).

The transcendental approach to phenomenology described by Moustakas (1994) was used for this study. This approach focuses on collecting rich, thick descriptions of the study participants' experiences in regards to the phenomenon being investigated. This approach requires researchers to bracket, or set aside, their experiences so they can view the phenomenon with a fresh outlook (Moustakas, 1994). This bracketing process is referred to as *epoche*, which requires the researcher to engage in self-examination prior to conducting the interviews so the researcher can be open and receptive while listening to the research participants describe their experiences (Moustakas, 1994).

During the study, data was collected using one-on-one interviews that explore what the participants lived experiences and perceptions are of managerial accounting and the perceived career opportunities available to them in managerial accounting. Each research participant was scheduled for a one hour interview with the researcher. Interviews were audio-recorded with the participant's permission, and transcribed verbatim using a software product called Dragon Naturally Speaking 13. The transcribed interview transcripts were then entered into HyperRESEARCH qualitative software, which helped facilitate data analysis by allowing the researcher to organize the interview data and capture common themes that emerge during the research study (Groenewald, 2004).

A modified Stevick-Colaizzi-Keen method of data analysis presented by Moustakas (2002) was used and includes the following steps:

1. The researcher's personal experiences, biases, and past connotations to the phenomenon were set aside using epoche. The researcher engaged in quiet reflection before each interview and set aside his own experiences so he could listen attentively, without judgment, as study participants described their experiences.
2. Each interview transcript was reviewed and a list of all relevant statements was developed that described how the participants experienced the phenomenon.
3. Each non-repetitive, non-overlapping statement was listed and these become the invariant horizons, or meaning units, of the experience.
4. These significant statements were then grouped into larger unit, or themes.
5. Textural descriptions, including specific examples of what the participants experienced, were then written. Structural descriptions that focused on how participants experienced the phenomenon and the context within which the experience occurred was also written.
6. A final composite description that describes the essence of what the research participants experienced and how they experienced it was then written.

To aid in this data analysis, the interview transcripts were entered into HyperRESEARCH qualitative research software. This software helped to facilitate coding, organizing, and proper analysis of the large volume of data that was collected during the study. Reducing the interview data into significant themes allows researchers to combine statements into broad categories and assign codes to identify common themes (Marshall and Rossman, 2011). Field notes and analytic memos were also written during

the data collection process. The process of writing analytic memos helped the researcher capture thoughts about possible data clusters, themes, and patterns that emerged during data collection (Marshall and Rossman, 2011). This process also helped facilitate the developing of a coding scheme for data analysis (Marshall and Rossman, 2011).

Following the presentation and analysis of the data, the study was then summarized and any limitations of the study were addressed. In addition, suggestions for future research have been outlined.

### **Assumptions**

One assumption in this research proposal is that each research participant provided honest answers and feedback to the interview questions. The research participants were advised that they do not have to answer any question that they are not comfortable answering. The participants were also advised that there are no right or wrong answers to any of the research questions. A second assumption is that the researcher will accurately report the information that is collected during the research process from the research participants. The researcher did not eliminate themes or try to enhance answers provided by the research participants.

A potential threat to external validity is the situational specifics of the research project. Because the study was limited to only one IMA endorsed university, the study may not be generalizable to other college campuses. Details of the how the study was conducted, including the field-tested research interview questions, have been provided so that the study may be recalibrated and reused in a second population to help ensure that the study results are indeed generalizable across all college campuses.

A potential threat to internal validity is confirmation bias, which is the tendency for researchers to search for and favor information in such a way that it confirms a pre-disposed belief or hypothesis (Luippold, 2015). One way to overcome this potential threat to internal validity was to treat the initial data-gathering stage as a fact-finding mission without trying to understand the specific causes of the phenomenon. It was important to treat the data-gathering stage as a fact-finding mission in order to ensure that a complete information set was gathered in this research study before any conclusions were drawn in regards to the research.

### **Limitations**

One limitation, and potential threat to external validity, to this research study is that the research was limited to one IMA endorsed university located in the Southwestern part of the U.S. Therefore, the findings from the data may have a regional bias and may not pertain to other parts of the U.S. A second limitation of the study, referred to as interpretation validity, may be the researcher's inaccurate narrating of the participant's lived experiences. In an effort to overcome this potential threat to validity, all interviews were recorded and the findings were presented in a manner that most accurately describes the lived experiences of each research participant that were involved in the study.

### **Delimitations**

The population that is included in the research study are accounting majors at an IMA endorsed university located in the Southwestern part of the U.S. The intent of the study was to interview students who could provide a rich and thorough description of their lived experiences at an IMA endorsed university. Because this study has such a narrow scope, the results of the study may not be applicable to a wider population of

accounting students at different universities across the U.S. However, the purpose of a phenomenological qualitative study, unlike quantitative studies, is not to seek results that can be generalized in a statistical sense to a larger population (Englander, 2012).

### **Ethical Assurances**

According to North Central University's (NCU) policies and procedures, International Review Board (IRB) approval must be granted prior to any data begin collected from research participants. Ethical guidelines for conducting research have been established to ensure that all human subjects are treated with respect, beneficence and justice (The Belmont Report, 1979). The researcher in this study followed NCU's IRB approval process before data collection began and treated all research participants ethically per the Belmont Report.

All research participants received, and signed, an informed consent document that contained information related to the nature of the study, the amount of time required to participate in the study and any potential risks involved with participating in the study. The informed consent documents were signed by each research participant before proceeding with the interviews. The informed consent document also contained detailed information in regards to the purpose of the study, potential risks and benefits of the study. It also contained a statement that informed the research participants that they are agreeing to participate in this research voluntarily, without compensation, and they can choose to withdraw from the research study at any time they deem necessary.

Confidentiality of the research participants was maintained to the fullest extent possible. The research participants' names were not used for the study, instead, each



research participant was assigned a research participant number. The researcher is also the only person that has access to interview recording and interview transcripts.

### **Summary**

The purpose of this phenomenological qualitative research study was to explore the lived experiences of ten students from IMA endorsed schools in regards to their perceptions of managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting. Data was gathered utilizing a phenomenological qualitative study design in which face-to-face interviews were conducted. This study contributes to the body of knowledge relating to accounting student perceptions of management accounting, specifically within the context of a university setting that has qualified for the IMA's Higher Education Endorsement, which has yet to be researched or explored.

## Chapter 4: Findings

The purpose of this qualitative phenomenological research study was to investigate the lived experiences of accounting students that are attending an IMA endorsed school. This chapter presents the findings of the research study by systematically outlining the results to allow each research question to be answered and explored individually. The study findings are then evaluated in regards to the research questions as well as the literature that was used during the theoretical phase of the study.

The main research question for the study was; What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning?

Additional research questions were:

**Q2.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?

**Q3.** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may in a future career in managerial accounting because they attended an IMA endorsed university?

These research questions helped guide the identification of students' perceptions about their lived experiences as an accounting student at an IMA endorsed university and their perceptions of management accounting as a career. The study interviewed accounting students that are attending an IMA endorsed school to gain in-depth knowledge of students' lived experiences with managerial accounting and their

perceptions of career opportunities in managerial accounting. The sample population for this study was comprised of accounting majors that are attending an IMA endorsed university located in the Southwestern part of the U.S.

The social constructivist view of learning served as the theoretical framework for this study. Understanding how accounting majors conceive their learning experience at an IMA endorsed school was based on a thorough understanding of the social construction of meaning. This process allowed the examination of accounting students' behavioral, normative and control beliefs, as well as their attitudes, values and subjective norms. In addition this student examined how these components affect intentions for accounting students to pursue a career in managerial accounting.

A field test was conducted prior to any research questions being asked. As part of the field test, three subject matter experts were selected to review the interview questions from this study in an effort to ensure that the interview questions were properly designed to ensure credibility and dependability of the research that was conducted. The results of the field test indicated that three of the questions were confusing and needed to be reworded in order to make them more suitable for the study.

To answer the research questions, ten participants, six male and four female, were recruited and participated in the study. Participants for the study were recruited using a purposive sampling technique. Purposive sampling was selected because it allowed the data to be gathered from a specific group of individuals (Patton, 2002). Specifically, the individuals for this purposive sample were declared accounting majors in their junior or senior year that were currently attending the IMA endorsed university located in the Southwestern part of the U.S.

Chapter four presents the detailed analysis of the interview questions from the ten interviews with accounting students who are attending an IMA endorsed university. Each interview was recorded using Dragon Naturally Speaking Software. The data was then analyzed using HyperRESEARCH qualitative software, which helped facilitate data analysis and to develop emerging themes to describe and decipher the vast lived experiences that accounting students had while attending an IMA endorsed university. Chapter four also addresses the results of the phenomenological study and evaluation of the findings.

### **Trustworthiness of the Data**

There were several steps and processes involved to help to ensure that the data that was collected was trustworthy, credible, dependable, and generalizable so that the data can be transferred to other situations. In regards to credibility, proper instrument reliability and validity are critical to ensure that qualitative studies are producing credible descriptions of the social world (Perakyla, 2004). The process of respondent validation, which called for taking findings back to the research subjects so they can verify the findings (Moustakas, 1994) was implemented in order to help ensure the credibility and validity of this research study. In addition, the qualitative interviews were converted to transcripts and each research participant reviewed their transcripts for any errors, misinterpretations or to clarify any point as needed. This process helped to ensure that the data collected was reliable, credible, and accurately reflected the research participants lived experiences of the phenomenon that was investigated (Moustakas, 1994).

Transferability was addressed by selecting multiple accounting majors with varying backgrounds and training in an effort to allow for more generalizability of the

study results. The sample of students selected for the study fairly and accurately represents the total population of accounting students at the school, based on the selection criteria that all research participants were declared accounting majors in their junior or senior year. The use of a field tested interview protocol was used to support the dependability of the research design. The interview protocol assisted with keeping each interview within the scope of the research and to help ensure that all of the appropriate information regarding the research questions were addressed (Turner, 2010). Confirmability was adhered to throughout the research by documenting the processes and procedures while continuously checking the data.

## **Results**

The purpose of this qualitative phenomenological research study was to investigate the lived experiences of accounting students that are attending an IMA endorsed school. The main research question for the study was: What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning?

Additional research questions were:

**Q2.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?

**Q3.** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may in a future career in managerial accounting because they attended an IMA endorsed university?

To answer the research questions, ten participants, six male and four female, were recruited and participated in the study. The lengths of the interviews ranged from 40 to 60 minutes. An interview protocol was used to guide the interviews and to ensure that similar information was collected from each of the research participants. Each interview protocol questions were designed to address at least one of the key research questions and every research participant answered all interview protocol questions. Each interview was recorded and transcribed using Dragon Naturally Speaking 13 software. The transcribed interview transcripts were then entered into HyperRESEARCH qualitative software, which helped facilitate data analysis by allowing the researcher to organize the interview data and capture common themes that emerge during the research study (Groenewald, 2004).

Six main themes were identified from the data found in the interview transcripts. These six themes addressed the three research questions and included the following areas of investigation:

- A: Perceptions of Accounting Career Paths
- B: Perceptions of Career Opportunities in Managerial Accounting
- C: Perceptions of Accounting Certifications
- D: Benefits of Attending an IMA Endorsed School
- E: Accounting Professor's Influence on Student Perceptions of Accounting
- F: Overall Experience at an IMA Endorsed School

The alignment of the interview questions for each of the above themes is outlined in Tables 1-6 below.

Table 1

*Alignment of Responses to Interview Questions on Theme A: Perceptions of Accounting Career Paths*

Question number	Question text
4	There are four main career paths in accounting: audit, tax accounting, managerial accounting and governmental accounting. Please rank these four career paths in the order in which you would be interested pursuing them as a career choice.
5	What are some of the reasons why you are drawn to the #1 career path that you have selected?
6	What are some of the reasons why you are drawn to the #2 career path that you selected?
7	What are some of the reasons why you are not as drawn to the #3 career path, relative to your first and second choice?
8	What are some of the reasons why you are not as drawn to the #4 career path, relative to your first second or third choice?

Table 2

*Alignment of Responses to Interview Questions on Theme B: Perceptions of Career Opportunities in Managerial Accounting*

Question number	Question text
3	What experiences did you have that led to you deciding to major in accounting?
22	What possible career opportunities do you believe are available to you in managerial accounting?
23	Do you believe there are more career opportunities in managerial accounting or financial accounting? Please explain.

Table 3

*Alignment of Responses to Interview Questions on Theme C: Perceptions of Accounting Certifications*

Question number	Question text
15	Do you currently hold any professional accounting certifications?
16	Are you currently pursuing any professional accounting designations?
17	What was your experience like preparing for that exam?
19	Are you interested in pursuing any accounting designations in the future?
20	What professional accounting designation would you deem most beneficial in your future accounting career? Why?

Table 4

*Alignment of Responses to Interview Questions on Theme D: Benefits of Attending an IMA Endorsed School*

Question number	Question text
9	Are you aware that your school is an IMA endorsed school?
10	How did you become aware that your school is an IMA endorsed school?
11	What are the benefits of attending an IMA endorsed school in your opinion?
12	Upon graduation, do you feel that there will be any competitive advantages associated with attending an IMA endorsed school versus attending a school that was not endorsed by the IMA? If so, please explain.
13	Are you aware of any opportunities that were afforded to you because you attended an IMA endorsed school that may not have been available to you if you had not attended an IMA endorsed school? If yes, please explain.
14	Are you aware of any opportunities that were afforded to other accounting majors (your classmates) at your university because your school was an IMA endorsed school? If yes, please explain.



Table 5

*Alignment of Responses to Interview Questions on Theme E: Accounting Professors Influence on Student Perceptions of Accounting*

Question number	Question text
3	What experiences did you have that led to you deciding to major in accounting?
5	What are some of the reasons you are drawn to the #1 career path that you have selected?
6	What are some of the reasons why you are drawn to the #2 career path that you selected?
7	What are some of the reasons why you are not as drawn to the #3 career path, relative to your first and second choice?

Table 6

*Alignment of Responses to Interview Questions on Theme F: Overall Experience at an IMA Endorsed School*

Question number	Question text
2	What experiences did you have that led to you deciding to attend this university?
3	What experiences did you have that led you to deciding to major in accounting?
11	What are the benefits of attending an IMA endorsed school in your opinion?
12	Upon graduation, do you feel that there will be any competitive advantages associated with attending an IMA endorsed school versus attending a school that was not endorsed by the IMA? If so, please explain.
13	Are you aware of any opportunities that were afforded to you because you attended an IMA endorsed school that may not have been available to you if you had not attended an IMA endorsed school? If yes, please explain.

**Research Question 1.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning?

The first research question was concerned with the lived experiences and perceptions of accounting students that are attending an IMA endorsed school in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning. Themes that arose from this research question were: Theme A: Perceptions of Accounting Career Paths and Theme B: Perceptions of Career Opportunities in Managerial Accounting.

**Theme A: Perceptions of Accounting Career Paths.** Research participants were asked to rank four main career paths in accounting based on the order in which they would be interested in pursuing them as a career. The four main career paths in accounting that participants were asked to rank were: auditing (A), tax accounting (T), managerial accounting (M) and governmental accounting (G). The results for each research participant's rankings is summarized in Table 7 below:

Table 7

*Evidence for Study Results for Theme A: Perceptions of Accounting Career Paths*

Participant Number	Career Path Ranking
1	M, T, G, A
2	T, A, M, G
3	M, T, A, G
4	M, T, A, G

Table 7 (continued)

*Evidence for Study Results for Theme A: Perceptions of Accounting Career Paths*

Participant Number	Career Path Ranking
5	M, G, T, A
6	M, T, A, G
7	T, M, G, A
8	T, M, A, G
9	A, T, M, G
10	T, A, M, G

Five of the participants ranked managerial accounting (M) as their top career choice. Four of the participants ranked tax accounting (T) as their top career choice. All research participants ranked managerial accounting and tax accounting as one of their top three career choices. Seven of the participants ranked governmental accounting (G) as their last career choice with the other three participants ranking auditing as their last career choice. The evidence of results from Theme A listed below are related to Research Question 1 in that these perceptions were experienced by participants attending an IMA endorsed university with respect to student perceptions of management accounting as a potential career option.

Table 8

*Participant Interview Quotes for Study Results for Theme A: Perceptions of Accounting Career Paths*

Participant Number	Participant interview evidence (directly quoted)
1	I like managerial accounting because it is more like looking at the inside of a business. I also like the client interaction with tax accounting. Audit just doesn't seem like a good fit for me and I don't know too much about governmental accounting but what I know about it doesn't seem to interesting to me.
3	I think managerial accounting helps people make sound decisions more and looks deeper into accounting numbers. Tax accounting is important to everybody. Auditing and governmental I would rank lower because my interest in accounting is more on the tax law side and the ability to look at numbers and internal controls to be able to make decisions.
5	I feel managerial accounting provides a constant challenge to look for continuous improvement and this is why I am most interested in managerial accounting. Tax accounting seems too repetitive. Filing tax returns over and over. Auditing seems like you'd be perceived as the guy that is looking for problems or trying to get people in trouble.
6	I am interested in owning my own business someday so managerial accounting would be ranked #1. I didn't think I'd like tax accounting but I actually really enjoyed my tax accounting classes. Being able to help other people with their taxes seems rewarding. I also liked learning about tax law and applying it to the real world. I don't feel like I have as good of grasp of auditing as I do managerial accounting or tax accounting. It didn't come as easy for me. Also, with auditing, you are going around auditing other people's companies and I'd rather be doing work for a company that I am employed with or that I own.
10	I like research. I like that tax is challenging and complex. I liked doing tax research and being able to find answers to tax questions. I liked being able to research a tax problem and find the answer. I like the idea of being able to learn the ins and outs of many different businesses and auditing would allow that to take place because you'd be auditing many different companies. With managerial accounting, you'd likely be working for only one company and that doesn't interest me as much as working with many clients and companies.

**Theme B: Perceptions of Career Opportunities in Managerial Accounting.**

The results from Theme B below are related to Research Question 1 in regards to student perceptions about career opportunities in managerial accounting that were experienced by participants attending an IMA endorsed university. Eight research participants reported a

positive perception of the career opportunities in managerial accounting. Two participants stated that they did not believe they were suited to work in managerial accounting, yet both of those participants still ranked managerial accounting above governmental accounting (see table 7) with respect to their interest in pursuing managerial accounting as a career option. Both of these participants also stated they believe there is a lot of career opportunities in managerial accounting but that managerial accounting wasn't a career suited for them. Supporting narrative from the participant's interviews on Theme B: Perceptions of Career Opportunities in Managerial Accounting is presented in Table 9 below.

Table 9

*Participant Interview Quotes for Study Results for Theme B: Perceptions of Career Opportunities in Managerial Accounting*

Participant Number	Participant interview evidence (directly quoted)
1	If you are working in the accounting industry for a company you are going to be working on the managerial side of accounting. Probably 90% of the time you are working on this aspect and 10% on taxes. So within industry, the CMA designation would be better outside a CPA firm.
2	I believe there are a lot of possible career opportunities in managerial accounting. Companies are always looking for ways to improve and save money and managerial accountants play a vital role in both of those processes.
4	In the accounting field in general I feel there is a lot more jobs in managerial accounting because there is a lot more companies that need that managerial accounting position to control what is going on underneath the CEO.
6	I have realized that all business decisions are based on accounting. You have to know the numbers before you can manage or run a business. I have always wanted to be a CEO or CFO and I found that the majority of CFO's have an accounting degree with a background in managerial accounting so that is a big reason why I am interested in managerial accounting as a career choice.
7	There are a lot of companies out there that are doing their own thing in the industry and those companies understand that they can hire their own in-house accountant to take care of their accounting needs. This can avoid a lot of the overhead costs that a CPA would charge and allocate to the bill.

Table 9 (continued)

*Participant Interview Quotes for Study Results for Theme B: Perceptions of Career Opportunities in Managerial Accounting*

Participant Number	Participant interview evidence (directly quoted)
8	I have heard a lot of people say that there are more jobs in accounting in private industry than there are in public accounting.
9	I see managerial accounting as helping in industry and there are probably a lot more industry related accounting jobs as compared to accounting jobs in public practice.

**Research Question 2.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?

The next research question investigated the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation. For this question, one major theme emerged, which was Theme C: Perceptions of Accounting Certifications.

**Theme C: Perceptions of Accounting Certifications.** The results from Theme C below are related to Research Question 2 in regards to the lived experience and perceptions of accounting students attending an IMA endorsed university and whether or not they will attain the CMA designation. Research participants were asked to rank four of the main accounting designations in the order in which they are interested in obtaining them. There are four main career designations that the research participants were asked to rank were: Certified Public Accountant (CPA), Certified Management Accountant

(CMA), Certified Fraud Auditor (CFE) and Certified Internal Auditor (CIA). The results for each research participant's rankings is summarized in Table 10 below:

Table 10

*Evidence for Study Results for Theme C: Perceptions of Accounting Certifications*

Participant Number	Certification Ranking
1	CPA, CMA, CFE, CIA
2	CPA, CMA, CFE, CIA
3	CMA, CPA, CIA, CFE
4	CPA, CMA, CIA, CFE
5	CMA, CPA, CFE, CIA
6	CMA, CPA, CIA, CFE
7	CPA, CFE, CMA, CIA
8	CPA, CMA, CFE, CIA
9	CPA, CFE, CMA, CIA
10	CPA, CMA, CIA, CFE

Seven of the participants ranked the CPA designation as their top choice of accounting designation that they are interested in pursuing. The other three research participants ranked the CMA designation as their top choice of accounting designation that they are interested in pursuing. The CPA and CMA designation were either ranked as the #1 or #2 choice on nine of the ten participant's lists. The CFE was ranked as the #2 choice on one participant's list. Other than that, the CFE and CIA were ranked #3 or #4 on all other participant's lists. The CIA was ranked the last choice by six research

participants. The CFE was ranked the last choice by the other four research participants. Table 11 below provides some of the participant's explanations as to their reasoning for their rankings:

Table 11

*Participant Interview Quotes for Study Results for Theme C: Perceptions of Accounting Certifications*

Participant Number    Participant interview evidence (directly quoted)

1	I feel like the CPA designation is more recognizable. When I was interviewing for a recent job I had to explain what the CMA was and they already knew what the CPA was.
2	I am getting the CPA designation for sure. I also want to be seen as versatile so the CMA designation is also on my mind but it isn't on my to-do list right way.
3	I am really interested in the CMA designation because I feel like it is more catered to what I'll be doing in my career.
4	I think the CPA designation is the most important designation, followed by the CMA designation. I really haven't heard and don't know very much about the CIA or CFE designations.
5	I am looking at working for an organization where a lot of their accounting staff only get their CMA designation. They said they want to get their CPA as well but most only get their CMA because their job has a lot to do with managerial accounting. I could see it being a huge benefit to me to get the CMA designation for this position plus the CPA would help me stand out even more.
6	When it comes down to it, employers in accounting want employees with technical skills and ability. For jobs in internal accounting, which is what I want to do, the CMA designation will help you either land a job or promote into another position.
8	I feel like the CPA is the most well-known accounting designation. It looks good to anything that you want to do, whether in public accounting or in industry if you have your CPA employers know you know accounting.
10	CPA first. I feel that it is the most recognizable certification. Then CMA. I would like to get both of those certifications if possible. The other two I don't think I am interested in getting.

**Research Question 3.** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a



future career in managerial accounting because they attended an IMA endorsed university?

The third research question explored the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a future career in managerial accounting because they attended an IMA endorsed university. This inquiry promoted the discussion of three themes, including: Theme D: Benefits of Attending an IMA Endorsed School; Theme E: Accounting Professors' Influence on Student Perceptions of Accounting and Theme F: Overall Experience at an IMA Endorsed School.

**Theme D: Benefits of Attending an IMA Endorsed School.** The results from Theme D below are related to Research Question 3 in regards to student perceptions of competitive advantages they feel they may have in a future career in managerial accounting because they attended an IMA endorsed university. Research participants were asked what they perceive the benefits of attending an IMA endorsed school were. In addition, they were also asked if they believe there will be any competitive advantages associated with attending an IMA endorsed school versus attending a school that was not endorsed by the IMA. Table 12 below provides some of the participant's explanations in regards to Research Question 3:

Table 12

*Participant Interview Quotes for Study Results for Theme D: Benefits of Attending an IMA Endorsed University*

Participant Number	Participant interview evidence (directly quoted)
1	Because I attended an IMA endorsed university I had the opportunity to be awarded a scholarship to sit for the CMA exam for free. I have already passed the first section of the CMA exam. I feel like this shows initiative that I am sitting for these exams as a student. I think employers see that and it gives me an edge over students that don't have this opportunity.
3	There is a lot of benefit to becoming a CMA. Attending an IMA endorsed University provided me an opportunity to get connected with the IMA. This allowed me to learn about the CMA designation and now I am planning on taking both CMA exams before I attend grad school.
4	One of the biggest benefits of attending an IMA endorsed school is that you can earn a scholarship to sit for both sections of the CMA exam. Doing allows you to have earn an accounting certification while you are getting your bachelors' degree in accounting. Having a certification will set you apart from other students once you graduate.
5	I feel like it is definitely an advantage. It seems like most students have a goal to get their CPA. I know a lot of classmates have said that getting the CMA isn't worth it for them because getting the CPA would trump it anyways. But for me, taking a class that was geared towards passing the CMA exam helped me see the value in the CMA. I've been on the IMA's website a lot and there are IMA posters here on the school that I feel have helped raise awareness about the CMA. Attending a school that was not endorsed by the IMA might not have provided the same promotions of the CMA credential.
6	When it comes down to it, employers in accounting want employees with technical skills and ability. For jobs in internal accounting, which is what I want to do, the CMA designation will help you either land a job or promote into another position.

### **Theme E: Accounting Professor's Influence on Student Perceptions of**

**Accounting.** The results from Theme E below relate to the influence that an accounting professor can have on student perceptions of accounting and whether or not to major in accounting. Accounting professors have been found to have a significant influence on students' decision to major in accounting (Quezada, 2013; Hashim, 2015). The IMA's

endorsed school program also provides a platform for accounting educators to provide learning activities about career opportunities in managerial accounting.

The social constructivist view of learning served as the theoretical framework for this study. Understanding how accounting majors conceive their learning experience at an IMA endorsed school was based on a thorough understanding of the social constructivist view of learning. Research participants were asked why they decided to major in accounting and some of their responses are presented below in Table 13:

Table 13

*Participant Interview Quotes for Study Results for Theme E: Accounting Professors Influence on Student Perceptions of Accounting*

Participant Number	Participant interview evidence (directly quoted)
2	I came in as a history major and in my freshman year I took financial accounting and really liked it and decided to change my major. I really enjoyed the accounting professor that taught the class and accounting came easy to me.
5	I was initially a finance major but I took that first accounting class and absolutely loved it. It was challenging for me but I enjoyed it so that semester I went into the counselor and told her that I wanted to switch my degree to accounting.
7	At first I wanted to major in Biology but then I switched to accounting. I was taking general classes and took my first accounting class. The professor said that there were a lot of good jobs in accounting and I found that I really enjoyed what I was learning so I decided to switch my major to accounting.
8	I initially wanted to get my degree in business administration. The professor in my first accounting class really peaked my interest in accounting. I realized that accounting is the language of business and that really anything you can do with a business admin degree you can do with an accounting degree. It's a super versatile degree and that's what I really liked about it. I switched my major to accounting after taking the accounting 2010 course
9	I didn't know what major I wanted to do but I took some business classes first. I took accounting 2010 and really liked it so that is when I decided to major in accounting. The professor that I had in accounting made it sound like there was a lot of demand for accountants.

Table 13 (continued)

*Participant Interview Quotes for Study Results for Theme E: Accounting Professors Influence on Student Perceptions of Accounting*

Participant Number Participant interview evidence (directly quoted)

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10	I really liked the first accounting class that I had. The professor was great and the class was really easy for me. I loved the class so after talking and listening to a couple of accounting professors I figured it would be more beneficial to major in accounting as opposed to just business administration.
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**Theme F: Overall Experience at an IMA Endorsed School.** The overall

experiences reported by the research participants in regards to attending an IMA endorsed school were very positive in nature. Supporting narrative from the participants' interviews for Theme F: Overall Experience at an IMA Endorsed School are presented in table 14 below:

Table 14

*Participant Interview Quotes for Study Results for Theme F: Overall Experience at an IMA Endorsed School*

Participant Number Participant interview evidence (directly quoted)

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2	There are many accounting certifications beyond the CPA that most students probably don't know about that can help them in their career. Going to a school that is recognized by the IMA you get to know about the CMA certification and how the IMA supports the school and its students.
3	Attending an IMA endorsed University provided me an opportunity to get connected with the IMA. This allowed me to learn about the CMA designation and now I am planning on taking both CMA exams before I attend grad school.
5	I learned about the CMA exam in my cost accounting class. In the class we studied from the Gleim test prep book and that helped me prepared to site for the CMA exam. I was also able to earn a scholarship from the IMA to sit for the CMA exam and that is a huge benefit to attending an IMA endorsed school.
8	I saw the posters in class about getting the CMA and how the CMA can help students advance their careers and earn additional money salary wise. I think that this is the biggest advantage to attending an IMA endorsed school.

Table 14 (continued)

*Participant Interview Quotes for Study Results for Theme F: Overall Experience at an IMA Endorsed School*

Participant Number    Participant interview evidence (directly quoted)

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9	It seemed like we were really connected with the IMA. We got great discounts on the books and study materials to prepare for the CMA exam. The cost of the CMA exam is pretty expensive and that might hold some people back from taking the exam. Now many students have the opportunity to take the CMA exam without worrying about the financial aspect of the exam.
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**Evaluation of Findings**

This study contributes to the body of knowledge relating to accounting student perceptions of management accounting (Jiles, 2014; Shuttleworth, 2014; Hutaibat, 2012).

This study expands what is known about student perceptions of management accounting by exploring the lived experiences of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement. Research Question 1 explored the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning.

The social constructivist view of learning theory recognizes the relationship between how students perceive accounting and the impact that this perception has on how students learn about accounting (Lucas, 2014). The social constructivist theoretical framework has also been use to analyze the impact that student's perceptions have on learning outcomes within accounting classes (Turner, 2012) and has been used to measure the impact of student perceptions of accounting in relation to the type of

accounting careers that student's choose to pursue upon graduation with an accounting degree (Dalton, 2014; Porter, 2014).

In order for researchers to have success in this type of research, they will often employ a phenomenological research approach (Martin, 1994). Using a phenomenological-based research approach provided an opportunity for this research study to access and investigate accounting student's perceptions and lived experiences with regards to managerial accounting and what they perceive as the potential career opportunities available to them in managerial accounting.

In regards to Research Question 1: Each research participant was asked to rank four main career paths in accounting based on the order in which they would be interested in pursuing them as a career. The four main career paths in accounting that participants were asked to rank were: auditing, tax accounting, managerial accounting and governmental accounting. Five of the research participants ranked managerial accounting as their top career choice and all ten research participants ranked managerial accounting as one of their top three career choices. These results differ from previous research that suggest that accounting students prefer tax accounting and auditing to managerial accounting (Hutaibat, 2012; Hejazi, 2013; Grosu, 2014).

Research Question 2 explored the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation. Research participants were asked to rank four of the main accounting designations in the order in which they are interested in obtaining the certifications. The four main accounting designations that the research participants were

asked to rank were: Certified Public Accountant (CPA), Certified Management Accountant (CMA), Certified Fraud Auditor (CFE) and Certified Internal Auditor (CIA).

Seven of the research participants ranked the CPA designation as their top choice of accounting designation that they are interested in pursuing. The other three research participants ranked the CMA designation as their top choice of accounting designation that they are interested in pursuing. The CPA and CMA designation were either ranked as the #1 or #2 choice by nine of the ten participant's that were interviewed. The CFE was ranked as the #2 choice by one participant. Other than that, the CFE and CIA were ranked #3 or #4 on all other participant's lists. The CIA was ranked the last choice by six research participants. The CFE was ranked the last choice by the other four research participants. These results are consistent with existing research and literature that suggest that the CPA designation is the most recognized and sought after accounting designation on college campuses (Cory, 2013; Brody, 2016).

Research Question 3 explored the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a future career in managerial accounting because they attended an IMA endorsed university. Research participants were asked what they perceive the benefits of attending an IMA endorsed school were. In addition, they were also asked if they believe there will be any competitive advantages associated with attending an IMA endorsed school versus attending a school that was not endorsed by the IMA.

A common response among the research participants was that the biggest benefit of attending an IMA endorsed school is that student's can earn a scholarship to sit for both sections of the CMA exam. As part of the Higher Education Endorsement, the IMA

has a CMA Scholarship Program where it will allow the top 5% of students at the endorsed schools to take the CMA exam at no cost. This scholarship is valued at approximately \$1,200 (Institute of Management Accountants, 2016). In addition, research participants stated that they felt a strong connection with the IMA because of the endorsement program.

### **Summary**

This qualitative phenomenological study explored the lives of accounting students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting and the perceived career opportunities available to them in managerial accounting according to the social constructivist view of learning. This study expands what is known about student perceptions of management accounting by exploring the lived experiences of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement.

The main research question for the study was: What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning?

Additional research questions were:

**Q2.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?



**Q3.** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may in a future career in managerial accounting because they attended an IMA endorsed university?

To answer the research questions, ten participants, six male and four female, were recruited and participated in the study. The collected data revealed six themes:

perceptions of accounting career paths; perceptions of career opportunities in managerial accounting; perceptions of accounting certifications; benefits of attending an IMA Endorsed School; accounting professor's influence on student perceptions of accounting; and overall experience at an IMA Endorsed School. The research allowed for an in-depth and personal interview of the individual participants. As such, the results delivered insights into the actual lived experiences of accounting majors that are attending an IMA endorsed school.

Following this chapter is chapter 5, which discuss the results and implications of the study, including the accompanying research themes that have been identified.

Limitations are discussed. Recommendations are given for future accounting research. A general conclusion for the study then follows, with reasons for these conclusions as derived from the total analysis of the lived experiences shared by the participants of this research study.

## Chapter 5: Implications, Recommendations, and Conclusions

The specific problem addressed in this study was that students that graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting (Shuttleworth, 2014; Hutaibat, 2012). In an effort to promote more awareness of careers in management accounting, the Institute of Management Accountants (IMA) has developed a program entitled the “Higher Education Endorsement.” Universities can qualify for this endorsement by demonstrating that they meet curriculum requirements that teach and prepare students for careers in management accounting. The purpose of this qualitative phenomenological research study was to explore the lives of accounting students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting and the perceived career opportunities available to them in managerial accounting.

To accomplish this goal, the researcher conducted interviews that were guided by an interview protocol consisting of open-ended questions that elicited helpful insights and viewpoints from study participants in regards to student’s conceptions of managerial accounting and perceived career opportunities available in management accounting. This study contributes to the body of knowledge relating to accounting student perceptions of management accounting, specifically within the context of a university setting that has qualified for the IMA’s Higher Education Endorsement, which had yet to be researched or explored.

To fill this gap in the literature, the research was guided by a central research question (Moustakas, 1994). The main research question for the study was: What are the

lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning?

Additional research questions were:

**Q2.** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?

**Q3.** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a future career in managerial accounting because they attended an IMA endorsed university?

The social constructivist view of learning served as the theoretical framework for this study. Understanding how accounting majors conceive of their learning experience at an IMA endorsed school was based on a thorough understanding of the social construction of meaning. This process allowed the examination of accounting students' behavioral, normative and control beliefs, as well as their attitudes, values and subjective norms and how these components affect intentions for accounting students to pursue a career in managerial accounting. Applying a modified Stevick-Colaizzi-Keen method of data analysis presented by Moustakas (2002) allowed the researcher to derive the essence of the participants' memories of their experience. The use of open-ended questions allowed the participants to express their personal lived experiences in their own words. The researcher asked additional probing questions when necessary to gain deeper

answers to constructs presented in the questions and this information is presented in the following sections.

Six main themes were identified from the data found in the interview transcripts. These six themes addressed the three research questions and included the following areas of investigation:

- A: Perceptions of Accounting Career Paths
- B: Perceptions of Career Opportunities in Managerial Accounting
- C: Perceptions of Accounting Certifications
- D: Benefits of Attending an IMA Endorsed School
- E: Accounting Professor's Influence on Student Perceptions of Accounting
- F: Overall Experience at an IMA Endorsed School

### **Implications**

This study contributes to the body of knowledge relating to accounting student perceptions of management accounting (Jiles, 2014; Shuttleworth, 2014; Hutaibat, 2012). This study expands what is known about student perceptions of management accounting by exploring the lived experiences of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement.

**Research Question 1.** The main research question for the study was: What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning?

This first research question investigated the lived experiences and perceptions of accounting students attending an IMA endorsed school in regards to learning about managerial accounting and the career opportunities available to them in managerial accounting according to the social constructivist view of learning. Themes that arose from the discussion of these aspects were: Theme A: Perceptions of Accounting Career Paths and Theme B: Perceptions of Career Opportunities in Managerial Accounting. The implication of these findings is that universities and accounting professors will benefit from having a better understanding of accounting student's perspectives about managerial accounting as a career choice.

As part of this study, research participants were asked to rank four main career paths in accounting based on the order in which they would be interested in pursuing them as a career. The four main career paths in accounting that participants were asked to rank were: auditing, tax accounting, managerial accounting and governmental accounting. The results of the study found that five of the participants ranked managerial accounting as their top career choice. Four of the participants ranked tax accounting as their top career choice. All research participants ranked managerial accounting and tax accounting as one of their top three career choices. Seven of the participants ranked governmental accounting as their last career choice with the other three participants ranking auditing as their last career choice.

The results of the accounting career path rankings in this study differed slightly from expectations based on the results found in the literature review. Accounting students have been found to prefer the fields of tax accounting and auditing versus that of managerial accounting (Hejazi, 2013). In addition, accounting students have also reported

that they prefer public accounting versus managerial accounting as their first choice of career in accounting (Hutaibat, 2012). A possible cause for managerial accounting ranking higher in career preference in this study, relative to that of previous studies identified in the literature review, may be attributable to the fact that the accounting students that participated in this study attended an IMA endorsed school. The main purpose of the IMA's Higher Education Endorsement is to increase student awareness of accounting careers in management accounting and to promote the potential management accounting career path to students at universities (Institute of Management Accountants, 2016).

This focus on increasing student awareness in regards managerial accounting at this IMA endorsed school appears to be leading to accounting students being more interested in managerial accounting as a career choice relative to auditing or governmental accounting. The IMA endorsement program also appears to be helping to solve the main problem addressed in this research study, which was that students that graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting (Shuttleworth, 2014; Hutaibat, 2012).

In addition, the students that participated in this study consistently ranked tax accounting and managerial accounting as their #1 and #2 career choice and auditing and governmental accounting as their #3 and #4 career choice. Several of the research participants stated that they did not feel they knew much about governmental accounting or the types of careers available to them in governmental accounting. This finding

suggests that the university in which this study was conducted could do a better job of informing students about careers in governmental accounting. It also supports previous findings that suggest that universities, and accounting professors, can and do play a role in shaping student perceptions of accounting in relation to the type of accounting careers that student's choose to pursue upon graduation with an accounting degree (Quezada, 2013).

**Research Question 2:** What are the lived experiences and perceptions of accounting students attending an IMA endorsed university in regards to whether or not they will attain the CMA designation?

This second research question investigated the lived experiences and perceptions of accounting students attending an IMA endorsed school in regards to whether or not they will attain the CMA designation. Theme C: Perceptions of Accounting Certifications; arose from this research question. The study results related to this research question suggest that the students that participated in this study have a perception that they are more interested in pursuing the CMA designation relative to the CFE and CIA designations. In addition, the CPA designation was the top choice with respect to the accounting designation that the research participants are most interested in pursuing. The finding that the research participants are most interested in the CPA designation was expected based on the literature review (Cory, 2013; Brody, 2016).

Research participants were asked to rank four of the main accounting designations in the order in which they are interested in obtaining them. Seven of the participants ranked the CPA designation as their top choice of accounting designation that they are interested in pursuing. The other three research participants ranked the CMA designation

as their top choice of accounting designation that they are interested in pursuing. The CPA and CMA designation were either ranked as the #1 or #2 choice on nine of the ten participant's lists. The CFE was ranked as the #2 choice on one participant's list. Other than that, the CFE and CIA were ranked #3 or #4 on all other participant's lists. The CIA was ranked the last choice by six research participants. The CFE was ranked the last choice by the other four research participants.

The finding that the CPA designation continues to be the most desired accounting certification among accounting students was consistent with the literature review (Cory, 2013; Brody, 2016). One research participant stated that they believed the CPA designation was the most recognizable designation within the accounting industry. Another participant stated that the CPA designation was the most well-known accounting designation. A third research participant stated that the CPA was the most important designation in order to have a successful career in accounting.

The finding that the CMA designation ranked higher than the CFE and CIA designations in this study differed from previous findings noted in the literature review that suggested that accounting students were more aware of the CFE designation relative to the CMA and CIA designations (Brody, 2016). The higher ranking of the CMA designation, relative to the CFE and CIA designations, in this study appears to be attributable to the IMA Higher Education Endorsement program. As part of the IMA Higher Education Endorsement program, each university is required to have an IMA campus advocate. The IMA campus advocate at the university in which this study was conducted was an accounting professor that had been disseminating IMA/CMA



marketing materials and promoting the CMA credential and managerial accounting as a profession.

Several research participants noted that they initially learned about the CMA designation through the accounting professor that was serving as the campus advocate. Some of the research participants also stated that they became interested in the CMA designation because of their interactions with the IMA campus advocate. Research participants also noted that information about the CFE and CIA designations was not as readily available to them. This finding may be a contributing factor as to why the accounting students in this study ranked the CPA and CMA designation as the #1 and #2 designation that they are interested in pursuing.

In addition, all full-time accounting faculty at the university in which this research was conducted held the CPA designation. One faculty member, only the IMA campus advocate, held the CMA designation. No accounting faculty member held either the CFE or CIA designations. Some of the students that participated in this study noted that their professors often spoke about the CPA credential but little was ever mentioned about the CFE or CIA designations. This finding may also be a factor as to why students ranked the CPA and CMA designations ahead of the CFE and CIA designations in this study.

**Research Question 3:** What are the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a future career in managerial accounting because they attended an IMA endorsed university?

The third research question explored the lived experiences and perceptions of accounting students in regards to competitive advantages they feel they may have in a

future career in managerial accounting because they attended an IMA endorsed university. This inquiry promoted the discussion of three themes, including: Theme D: Benefits of Attending an IMA Endorsed School; Theme E: Accounting Professors' Influence on Student Perceptions of Accounting and Theme F: Overall Experience at an IMA Endorsed School.

Research participants were asked what they perceive the benefits of attending an IMA endorsed school were. In addition, they were also asked if they believe there will be any competitive advantages associated with attending an IMA endorsed school versus attending a school that was not endorsed by the IMA. The most common benefit that research participants reported in regards to attending an IMA endorsed school was the ability to earn a scholarship to sit for both sections of the CMA exam. As noted in the literature review, the IMA has a CMA Scholarship Program where it will allow the top 5% of students at the endorsed schools to take the CMA exam at no cost. This scholarship is valued at approximately \$1,200. The IMA instituted the Higher Education Endorsement and the CMA Scholarship program in an effort to promote the CMA credential and to expose students to the career opportunities that are available to them as a CMA. Research participants also stated that they felt a strong connection with the IMA because of the endorsement program.

Another implication of the research findings suggests that the IMA's endorsed school program provides a platform for accounting educators to provide learning activities about career opportunities in managerial accounting. Several research participants indicated that they learned about, and became interested in, the CMA credential through their interactions with the accounting professor who was serving as the

IMA campus advocate. These results are consistent with existing research that suggests that accounting professors can have a significant influence on accounting student career choices (Mauldin, 2000; Quezada, 2013; Hashim, 2015). While there is no current research that has been conducted as to the effect that an accounting professor, acting in the role as an IMA campus advocate, has on student career choices, it would certainly be plausible that these campus advocates could have a positive role in helping students learn more about the career options available to them as a managerial accountant.

### **Recommendations for Practice**

**Research Question 1.** An implication for practice from the findings of the first research question suggests that the IMA's Higher Education Endorsement does provide opportunities for accounting students to become more aware of career opportunities available to them in managerial accounting. This focus on increasing student awareness in regards to managerial accounting can help overcome the problem addressed in this study that students that graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting (Shuttleworth, 2014; Hutaibat, 2012). As such, one recommendation for application would be that interested universities seek to obtain the IMA's Higher Education endorsement. The IMA offers two different tiers of endorsement. Full endorsement is available for those university programs that meet all four endorsement criteria listed below:

1. The program must substantially cover the CMA exam content. Specifically, this means that a program must cover at least 70 percent of the CMA body of knowledge at Level C, the most rigorous level.
2. The program must have adequate faculty resources to deliver this content.
3. The program must be accredited by a recognized accreditation organization, such as the Association to Advance Collegiate Schools of Business (AACSB), Accreditation Council for Business Schools and Programs (ACBSP) or the European Quality Improvement System.
4. A faculty member must be designated as an IMA campus advocate

Provisional endorsement is also available for programs with some shortcomings in meeting all of the criteria for the full endorsement.

**Research Question 2.** An implication for practice from the findings of the second research question suggests that the IMA's Higher Education Endorsement does generate student interest in regards to whether or not they will attain the CMA designation. In addition, the students that participated in this study expressed a greater interest in the CMA designation relative to the CFE and CIA designations. This finding also suggests that the IMA Higher Education Endorsement program is generating student interest in the CMA designation. With that being the case, one recommendation for application would be for accounting educators at non-IMA endorsed schools to consider taking the necessary steps to qualify their university for the IMA endorsement. Doing so appears to be leading to more student interest in the CMA designation.

**Research Question 3.** An implication for practice from the findings of the third research question suggests that accounting students attending an IMA endorsed school

feel that they have a competitive advantage over students that did not attend an IMA endorsed school. A common response among the research participants was that the biggest benefit of attending an IMA endorsed school is that students can earn a scholarship to sit for both sections of the CMA exam. As part of the Higher Education Endorsement, the IMA has a CMA Scholarship Program where it will allow the top 5% of students at the endorsed schools to take the CMA exam at no cost. This scholarship is valued at approximately \$1,200 (Institute of Management Accountants, 2016). As such, an application for practice would for universities to consider qualifying for the IMA Higher Education Endorsement so that its accounting students can qualify for the scholarship to sit for both sections of the CMA exam for free.

### **Recommendations for Future Research**

This qualitative phenomenological study was conducted using a single university as the population. While this study expands what is known about student perceptions of management accounting by exploring the lives of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement, the body of knowledge would also benefit from a study that considers multiple universities in order to offer a wider breadth of research results. In addition, because this study has such a narrow scope, the results of the study may not be applicable to a wider population of accounting students at different universities across the U.S. However, the purpose of a phenomenological qualitative study, unlike quantitative studies, is not to seek results that can be generalized in a statistical sense to a larger population (Englander, 2012).

Another recommendation for future research would be to explore the impact that an IMA campus advocate has on accounting student career choices, which has yet to be

fully researched or explored. Previous research suggests that accounting professors can have a significant influence on accounting student career choices (Mauldin, 2000; Quezada, 2013; Hashim, 2015) so it would certainly be plausible that an IMA campus advocates could also have a positive impact in regards to helping students learn more about the career options available to them as a managerial accountant. A final recommendation for research would be the utilization of a mixed method for the study. The impact of the findings of this study may be enhanced with quantitative data that compares student interest in careers in managerial accounting at IMA endorsed schools versus student interest in careers managerial accounting at non-IMA endorsed schools.

### **Conclusions**

This qualitative phenomenological study explored the lives of accounting students that are attending an IMA endorsed school with respect to their conceptions of managerial accounting and the perceived career opportunities available to them in managerial accounting according to the social constructivist view of learning. This qualitative phenomenological study focused on ten students who are majoring in accounting at an IMA endorsed university located in the Southwestern part of the U.S. Data for the study was obtained through face-to-face interviews with each of the research participants. This study contributes to the body of knowledge relating to accounting student perceptions of management accounting (Jiles, 2014; Shuttleworth, 2014; Hutaibat, 2012). This study expands what is known about student perceptions of management accounting by exploring the lived experiences of accounting student's that are attending a university that has qualified for the IMA's Higher Education Endorsement. By extension, this study provides insights to accounting educators at non-

IMA endorsed schools that may be useful in the further design of university accounting curricula that places more focus on managerial accounting (Lawson, 2014).

Key findings from the study suggest that the IMA endorsement program is providing opportunities for accounting students to become more aware of career opportunities available to them in managerial accounting. This increased student awareness in regards to managerial accounting can help overcome the problem addressed in this study that students that graduate with a degree in accounting are not as aware of the career opportunities available to them in the field of management accounting as compared to the career opportunities available to them in public accounting. This study also found that the CMA Scholarship Program, which allows the top 5% of students attending the IMA endorsed schools to take the CMA exam at no cost, is generating some genuine excitement among accounting students that are interested in sitting for the CMA exam and pursuing a career in managerial accounting.

In addition, accounting students that are attending an IMA endorsed university may begin to have a competitive advantage over students attending non-IMA endorsed schools with respect to additional learning opportunities about the career opportunities in management accounting and as a CMA. While it is too early to tell what long-term effects may arise from the phenomena of student's attending an IMA endorsed versus a non-IMA endorsed school, this exploratory study adds to the body of research regarding student perceptions of management accounting. The study may also lead to additional universities electing to pursue the IMA's Endorsed School Program as a vehicle to further promote the career opportunities available in managerial accounting.

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## Appendix



## Appendix A: Introductory Letter

Derrick Esplin  
1652 Boulder Springs Road  
St. George, UT 84790

[Date]

To Whom it May Concern:

My name is Derrick Esplin and I am conducting a research study on the lived experiences of accounting students who are attending an IMA endorsed school with respect to their perceptions of managerial accounting and the potential career opportunities available to them in managerial accounting. Your participation in this study will be important to providing a unique perspective regarding student perceptions of managerial accounting, specifically within the context of a university setting that has qualified for the IMA's Higher Education Endorsement, which has yet to be research or explored.

The research will involve a personal interview that will take approximately 60 minutes. The interview would be conducted at a date, time and location that is convenient to you. Your information will remain confidential and anonymous. There is no compensation for participating in the study.

In order to be considered for participation, you must meet the following qualifications:

1. You are currently enrolled at the University that has been selected for this study.
2. You are an accounting major in your junior or senior year.

If these qualifications do not match your experience, I invite you to pass this letter to other students who fit the qualifications and might be have an interest in participating in this study. If you meet the qualifications and are interested in participating, please e-mail me your name, contact information, and best time to contact you.

Sincerely,

Derrick Esplin  
derrickesplin@yahoo.com

## Appendix B: Interview Instrument

### Interview Questions for Participants in Study

1. Are you an accounting major in either your junior or senior year of school?

**If “yes” - continue with questions – if answer is “no” – research participant does not meet established criteria for study).**

2. What experiences did you have that led to you deciding to attend this university?
3. What experiences did you have that led to you deciding to major in accounting?
4. There are four main career paths in accounting: audit, tax accounting, managerial accounting and governmental accounting. Please rank these four career paths in the order in which you would be interested pursuing them as a career choice ( enter #1 for top career choice, #2 for second career choice, #3 for third choice/ #4 for fourth choice):

\_\_\_\_\_ Audit \_\_\_\_\_ Tax \_\_\_\_\_ Managerial \_\_\_\_\_ Governmental

5. What are some of the reasons why you are drawn to the #1 career path that you have selected?
6. What are some of the reasons why you are drawn to the #2 career path that you selected?
7. What are some of the reasons why you are not as drawn to the #3 career path, relative to your first and second choice?
8. What are some of the reasons why you are not as drawn to the #4 career path, relative to your first, second and third choice?

9. Are you aware that your school is an IMA endorsed school?

**If the answer to question 9 is “yes”, ask questions 10-14. If the answer to question 9 is “no”, skip to question 15.**

10. How did you become aware that your school is an IMA endorsed school?

11. What are the benefits of attending an IMA endorsed school in your opinion?

12. Upon graduation, do you feel that there will be any competitive advantages associated with attending an IMA endorsed school versus attending a school that was not endorsed by the IMA? Please explain.

13. Are you aware of any opportunities that were afforded to you because you attended an IMA endorsed school that may not have been available to you if you had not attended an IMA endorsed school? If yes, please explain.

14. Are you aware of any opportunities that were afforded to other accounting majors (your classmates) at your university because your school was an IMA endorsed school? If yes, please explain.

15. Do you currently hold any professional accounting designations? If “yes”: ask which ones: \_\_\_\_\_CPA \_\_\_\_\_CMA \_\_\_\_\_CIA \_\_\_\_\_CFE \_\_\_\_\_Enrolled Agent \_\_\_\_\_Other (list)

16. Are you currently pursuing any professional accounting designations? If “yes”: ask which ones: \_\_\_\_\_CPA \_\_\_\_\_CMA \_\_\_\_\_CIA \_\_\_\_\_CFE \_\_\_\_\_Enrolled Agent \_\_\_\_\_Other (list)

**If the answer to question 16 is “yes”, ask questions 17-18. If the answer to question 16 is “no”, skip to question 19.**

17. What was your experience like preparing for that exam?

18. What was your experience like on the day you took that exam?
19. Are you interested in pursuing any accounting designations in the future?  
\_\_\_ CPA \_\_\_ CMA \_\_\_ CIA \_\_\_ CFE  
\_\_\_ Enrolled Agent \_\_\_\_\_ Other (list)
20. What professional accounting designation would you deem to be most beneficial in your future accounting career? Why?
21. What experiences did you have that effected your decision of whether or not to attain the CMA designation?
22. What possible career opportunities to you believe are available to you in managerial accounting?
23. Do you believe there are more career opportunities in managerial accounting or financial accounting? Please explain.
24. Do you currently work, or do you have any past work experience, in the accounting profession? If yes – what has been your work experience?