

Examination of Pre-Certification Education: White Paper

By The Quality Enhancement Policy Committee

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EXECUTIVE SUMMARY

The New York State Society of Certified Public Accountants (“NYSSCPA”) Quality Enhancement Policy Committee (“QEPC”) is entrusted with the responsibility of advising on policy and overseeing the peer review, ethics, and education processes to meet the standards and challenges of the CPA profession.

This paper examines pre-certification education for Certified Public Accountants (“CPAs”) in light of the impending 150 hour pre-certification requirement to sit for the Uniform CPA Examination. With the additional 30 hour requirement, QEPC recognizes the unique opportunity to develop CPA candidates with broader and deeper skill sets. This will become even more important in an increasingly global economy where CPAs will be required to think critically, have appropriate communication skills and demonstrate proficiency with increasingly sophisticated concepts.

Committee members discussed the attributes of a quality CPA and explored the characteristics that accounting education should develop to further that goal. The Committee believes that the following attributes are essential for a successful CPA:

- The ability to think critically
- A keen analytical sense
- Effective communication skills, both written and oral
- A foundation of technical knowledge in accounting theory, auditing principles, finance, tax, business law and management principles
- Well developed research skills
- High ethical standards

QEPC has agreed that partnerships between practitioners and academics must be forged to result in a balance of theory, application, and critical-thinking skills throughout the accounting curriculum. The Committee explored the obligations and responsibilities of both accounting students and accounting faculty, as well as those of practitioners in public accounting, government, and private industry.

The most important recommendation of the Committee is that the expanded curriculum should culminate in a graduate degree.

The Committee reminds all CPAs that pre-certification education only provides a foundation of knowledge. In order to truly be an accounting professional, learning must be a lifelong pursuit. At the outset of their careers, CPAs must have a basic understanding of, among other things, accounting, auditing, tax, and business law. Accounting theory is evolving continually, resulting in fundamental changes in principles and application. This highlights the need for professionals to remain current. QEPC recognizes that, as a CPA's career progresses, he or she should build upon the foundation of knowledge obtained during the pre-certification education years. Knowing how to identify issues and continue the learning process is critical to a CPA's success. For many accounting professionals, this may mean acquiring additional knowledge and skills in the traditional services offered by CPAs, as well as in other emerging fields of expertise such as financial planning, valuations, and forensic accounting.

HISTORY

The issue of whether higher education in accounting should have a practical or conceptual focus was a question from the inception of professional licensing. On April 17, 1896, New York passed the first law providing for the issuance of a certificate conferring the right to individuals to use the title "certified public accountant" based on passing an examination, and prohibiting others from using that same title. By 1905,

there were 332 CPA certificates issued in New York, 155 by passing the examination and the remainder by waiver because they were already in practice at the time the law was passed. Student pass rates on this CPA licensing exam quickly became a measure of success for academic accounting programs.

With the advent of mass production and more complex business entities in the first decades of the 20th century, there was a need to supplement the curriculum to provide a broader focus that would enable accountants to understand the issues facing the management of a business. The American Accounting Association (AAA) struggled to find a balanced curriculum that would serve the needs of all types of accounting professionals. Eventually, cost accounting, which evolved into management accounting, found its place in accounting curricula.

Over the years, the issue of whether accounting was a social science or a profession arose. A 1954 report by the AAA widened the divide between academics and practitioners by encouraging colleges and universities to require career accounting professors to have doctoral degrees, as well as a strong research record, to qualify for promotion.

Historically, academic governance structures in liberal arts and science colleges wielded significant influence on the required curricula for accounting students. The majority of the total elective credits needed for the baccalaureate degree were consumed by general education courses. In fact, an effort to establish separate schools of accountancy was made in the 1960s so that accounting faculty might wrest control of the accounting curriculum away from liberal arts proponents and make it more relevant to the business/management aspects of the profession's needs. By the end of the 1960's, there was a marked state of confusion in accounting education as well as in practice.

In 1974, the American Institute of Certified Public Accountants (AICPA) created the Board on Standards for Programs and Schools of Accounting to develop standards that could be used to evaluate the quality of academic accounting programs from the profession's perspective. Due to the Board's accreditation-like focus, the Association to Advance Collegiate Schools of Business (AACSB), which was primarily comprised of deans of business schools and whose main purpose since 1918 had been to accredit business programs, felt threatened. As a result, the AACSB decided in 1978 to begin accrediting accounting programs. This organization recently has received some competition in the realm of accrediting business programs from the Association of Collegiate Business Schools and Programs (ACBSP), which was formed in 1988. Currently, the ACBSP is in the process of initiating an accounting program accreditation standard as well.

Prior to the 150 hour requirement, which takes effect in New York State in 2009, two paths have been acceptable for an individual to become eligible to sit for the CPA exam. The first, which will continue after the 150 requirement takes effect, states that 15 years of public accounting experience found acceptable to the State Board for Public Accountancy qualifies an individual to sit for the CPA exam. The second avenue requires a bachelor's degree (or higher degree) and a minimum of the following to sit for the CPA examination:

- 24 semester hours in accounting, with courses in accounting principles (including advanced financial accounting), cost accounting, United States federal taxation, and external auditing;
- 6 semester hours or 4 graduate credit hours in business law, including coverage of the Uniform Commercial Code;
- 6 semester hours in finance;

- 3 semester hours in business statistics;
- 21 semester hours in business and accounting electives; and
- 6 semester hours of economic principles

The majority of the remaining credits needed for the baccalaureate degree were consumed by general education courses.

The 150 hour requirement was instituted to meet the goal of developing professionals with stronger critical and analytical skills. The expected advantages of 150 hours of study include better preparation of accounting students for careers in public accounting through a well-rounded curriculum that places greater emphasis on issues that will be faced in practice. Additionally, the 150 hour requirement is also expected to attract more highly qualified students to accounting programs and, ultimately to the CPA profession.

APPLICATION AND THEORY

In order to enhance an entry level accountant's ability to perform, the additional curriculum hours should address the attributes of sufficient communication skills and proficiency in dealing with higher level concepts. Such attributes are most effectively addressed through graduate level study. Promoting critical thinking through graduate-level work that culminates in a graduate degree should be a requirement for all CPA programs. Combined with the benefits of work experience, graduate level CPA candidates will generally be better prepared than those who prescribed to the apprenticeship model (working for 15 years) or those who simply obtained a baccalaureate.

At least three approaches, each equally viable, are envisioned for completion of a graduate degree. First, a CPA candidate could combine an undergraduate accounting degree with a master's degree. Second, a candidate could combine an undergraduate

degree in a discipline other than accounting with a master's in accounting or an MBA with a concentration in accounting. Finally, a student could enroll in an integrated five-year accounting program leading to a master's degree in accounting.

Although multiple tracks exist, the goal is to have graduate level work promote critical thinking that would enhance the profession's ability to perform the complex activities that the public expects. The ability to draw connections through the study of the underlying concepts of accounting, auditing, business law, tax and information systems, and to thread them together through the use of communication skills, is of utmost importance.

We recognize that an appreciation of the technical application of theory learned in the classroom can sometimes be best achieved in the workplace. It has been suggested that linking practical experience, such as internships to formal education, students perceive real-world relevance to their academic work. It brings focus, increased understanding, and interest to subsequent academic courses. QEPC also recommends this approach as one of the ways to enhance learning.

REQUIRED SKILLS

A major concern of employers, across all professions, has been the level of professional literacy – suitable reading, writing, listening, and oral communication skills – among college graduates. It is hoped that the 150 hour requirement will provide students with additional study time to develop these skills within an integrated curriculum. QEPC believes that it is important that the curriculum emphasize the interrelationship of these skills with technical information in an accounting and general business context.

Accounting education should provide a sufficient knowledge base to allow students to identify what they don't know, recognize potential problems, and provide a

framework for identifying potential solutions. To accomplish this objective, the accounting discipline should be appropriately linked with other business and social science disciplines within the college. A basic foundation should be established by exposure to a core curriculum of liberal arts and science courses integrated with broad business concepts and greater writing and speaking exercises, similar to what will be encountered in the business world. Greater access to comprehensive case studies may allow educators to integrate communication and critical-thinking skills within the fabric of more technical classes. Case studies can also foster research skills, teach students where to look for relevant sources of information, and apply new knowledge to unfamiliar situations.

A deeper understanding of the technical aspects of accounting is becoming increasingly important due to the expanding body of knowledge and heightened expectations for CPAs. The requirements under Sarbanes-Oxley significantly redefined the standards for and responsibilities of auditors of publicly held companies, as well as for the companies themselves, their boards of directors, and management. A look at the changing global landscape of accounting provides additional evidence of the continuing developments in both the accounting profession and its regulatory environment. Future CPAs may be expected to be as conversant in international standards as they currently are in U.S. GAAP. The 150 hour requirement provides both a challenge and an opportunity to shape accounting curricula to address these emerging trends.

FACULTY CONSIDERATIONS AND PROFESSION'S COMMITMENT

Practical applications are important to accounting because such applications expand upon the theoretical foundation established through academic scholarship. It is widely recognized that research and publication are integral components of the scholarly efforts necessary to further the profession. It has been asserted that the AACSB's

criteria for accounting program accreditation implicitly equates scholarship with an academic degree, namely the doctoral degree. Doctoral training is beneficial in enhancing research skills, but it is not the only element of good teaching. QEPC suggests that professors with significant work experience can convey practical examples of the application of accounting theory and auditing procedures and thereby enrich a student's educational experience.

QEPC believes ideally that the doctoral training of academics combined with the "real world" experience of practitioners would provide the most effective learning environment for accounting students. However due to the need for both scholarship and practical work experience by faculty, that expectation leads to the question of how to achieve an appropriate balance. QEPC recommends that criteria should be set for both practitioners and academics alike. Acknowledging the importance of practical experience, those holding doctoral degrees should be required to have two years of relevant work experience prior to tenure. The relevancy of the work experience to the subject taught is paramount to how recent work experience is obtained. Conversely, practitioners who wish to teach should hold a master's degree with a minimum of five years of relevant work experience.

The discussion of accounting faculty considerations would not be complete without addressing the issue of the number of doctoral level accounting professors. An American Accounting Association committee recently estimated the cumulative national shortage of doctoral level accounting faculty at 471. Another study shows that accounting is the only business school discipline in which the number of faculty declined between 1990 and 2004. Clearly, other options must be explored to address the shortage of qualified doctoral candidates in addition to accelerating efforts to expand doctoral preparation programs and recruit increased numbers of candidates.

Currently many professors lack the “hands on” experience needed to successfully merge theory with practical application in the classroom. However, a mix of academic and practical experience is an advantage for an accounting program. Accrediting organizations should acknowledge the importance of significant practical experience by encouraging academic institutions to afford these individuals full faculty membership regardless of whether or not they possess a doctoral degree. Those with the requisite practical accounting experience, but without a doctoral degree, should not find their choices in academe limited to the role of an adjunct professor.

The unique attributes practitioners contribute to an accounting faculty need to be fully appreciated and acknowledged. Those who wish to participate as full-time faculty members need to be accepted completely into the faculty’s ranks with tenure tracks open to them. There should be no “glass ceiling” limiting these individuals’ participation in all of the responsibilities and rewards of a full-time faculty member. Acceptance of professors who do not have doctoral degrees, but possess significant work experience, will also help the discipline to deal with the declining numbers of accounting doctoral candidates. Nevertheless, all members of the faculty should be expected to contribute to scholarly research and writing.

It is also impractical to expect those professors with a doctoral degree to have significant practical work experience after expending many years studying to earn their doctoral degree. The time commitment to obtain both may preclude one from pursuing a career in higher education until very late in one’s professional life. Understanding the importance of bringing “real life” experiences into the classroom, the Committee suggests an alternative that will benefit both practitioners and academics alike.

CPA firms and businesses should recognize the need to create opportunities for meaningful work experience for educators. Whether the opportunities are project specific or planned externships, practitioners need to provide the experience to keep

professors grounded in the “real world”. These opportunities would enable them to marry the practical with the theoretical and have life experiences which will facilitate their ability to convey the significance of what would otherwise be abstract concepts. Firms that are willing to engage in such programs can realize benefits for their firm as well as enhancing the future of the accounting profession.

The Committee recognizes that arranging meaningful work experience for professors may not be the most efficient way to run a business in the short-term. However, we believe that it is a necessary contribution to the continued development of future accounting professionals.

PROPOSED PRE-CERTIFICATION EDUCATIONAL GOALS

Assuming most students who have completed post secondary school are familiar with general business software like word processing, spreadsheets and databases, the Committee proposes goals of all pre-certification educational accounting curricula i.e.- what students should know and be able to do.

Currently, CPA candidates are expected to have a broad base of accounting knowledge including auditing principles, fraud detection and deterrence, business law, tax concepts, management accounting and financial concepts, and business and accounting ethics. However, QEPC wishes to emphasize that the study of the concepts underlying accounting, auditing, business law, tax and communications is of greater importance than the memorization of specific processes. In this way, curriculums can combine the strengths of academics as well as those of practitioners.

In addition to prerequisite knowledge obtained in current 120 hour programs, the proposed pre-certification educational goals address basic functions expected of CPA candidates. Functions include accounting procedures like the preparation of financial statements, analysis of the effects of simple transactions and the calculation of key

financial ratios and auditing procedures like the critical evaluation of financial statements or representations made by management. The ability to communicate issues of business law and tax law is also essential. The basics of finance and industry specific skills are also expected of CPA candidates.

In addition to technical competencies, CPAs also need to attain a high ethical standard as “trusted professionals”. Therefore, ethics education should address issues of integrity and good business practices. Professional associations can be instrumental in helping to make ethics education more meaningful by working collaboratively with colleges and universities and encouraging research in ethical principles and attitudes. To accomplish the desired result of helping to train competent, reliable and trustworthy professionals, accounting education should include a discrete business and accounting ethics course to serve as an introduction to the general topic and the AICPA Code of Conduct. In addition, ethics topics and cases should be integrated throughout the accounting curriculum. Relevant and updated content should be covered within the context of the technical course material for each requisite class in the accounting program.

Proposed pre-certification educational goals can be found in the appendix of this document.

CONCLUSION

Accounting is a service business. Ultimately, it is the consumers of CPA services who dictate the level of quality that is expected of CPAs. The public demands that CPAs understand the technical issues of accounting, auditing and tax, as well as the conceptual issues of general business, ethics and corporate management. Above all, the public expects that CPAs will have sufficient skills to communicate these issues in an understandable, yet technically correct, manner. Pre-certification accounting education is an important step in meeting these expectations. It is essential that accounting

education equip tomorrow's professionals to fulfill the vital role that will be expected of them.

APPENDIX

PROPOSED PRE-CERTIFICATION EDUCATIONAL GOALS

WHAT GRADUATES SHOULD KNOW

A. Prerequisite knowledge

1. Computer user skills including business software (i.e. word processing, spreadsheet, database)
2. General business concepts and operations
3. General business communication and comprehension

B. Requisite knowledge

1. Accounting concepts, including:
 - a. Financial statements and note disclosures
 - b. The effects of debits and credits on account balances
 - c. Account analysis
 - d. Ratio analysis
 - e. Accounting standards (GAAP) and standard-setters (SEC/FASB, GASB, FASAB, IASB)
2. Transaction processing cycles and the control environment, including computer-based information system controls
3. Auditing concepts, including:
 - a. Professional skepticism
 - b. Auditing standards (GAAS)
 - c. Professional and regulatory bodies (ASB, SEC/PCAOB, IAASB, GAO)
 - d. Types of audit evidence
4. Business and Accounting ethics
5. Fraud detection and deterrence
6. Business law and laws related to fraud
7. Tax concepts, including:
 - a. Federal income tax
 - b. State and local income tax
 - c. Gift and estate tax
 - d. Payroll taxes
 - e. Sales and use taxes
8. Government and not-for-profit accounting
9. Management accounting
10. Finance concepts

WHAT GRADUATES SHOULD BE ABLE TO DO

A. Prerequisite skills and abilities

1. Use of general business software including word processing, spreadsheets, databases
2. Explain and apply basic financial, human resource, economic, marketing, operations management concepts and techniques
3. Utilize written and oral communications; demonstrate comprehension of instructions and information

B. Requisite skills and abilities

1. Accounting procedures:
 - a. Prepare financial statements and note disclosures
 - b. Analyze the effects of simple transactions on account balances
 - c. Analyze account balances for over- or understatements
 - d. Calculate key financial ratios and interpret the results
 - e. Explain the roles and responsibilities of the different standard-setters and apply appropriate generally accepted accounting principles
2. Transaction processing cycles and the control environment:
 - a. Develop a flow chart to explain operational processes
 - b. Identify potential weaknesses in a company's internal control structure including computer information systems controls
 - c. Evaluate corporate governance and culture
3. Auditing procedures:
 - a. Critically evaluate statements or representations made by management and others.
 - b. Apply appropriate current auditing standards
 - c. Explain the roles and responsibilities of standard setting, professional and regulatory bodies
 - d. Compare the quality of different types of audit evidentiary matter.
4. Identify potential violations of ethical behavior from a case scenario
5. Fraud detection and deterrence:
 - a. Define the elements of fraud
 - b. Recognize the ways in which fraud is committed
 - c. Examine a fact pattern to identify a potentially fraudulent situation and the three components of the fraud triangle
 - d. Use a fact pattern and identify ways to prevent the fraud from being committed
6. Business law and laws related to fraud:

- a. Explain the fundamental legal principles associated with contracts, civil and criminal matters, social goals associated with the legal system and the role of the justice system.
 - b. Recognize and explain the advantages and disadvantages of the different forms of business organization.
 - c. Compare and contrast the ethical duties and legal responsibilities associated with confidentiality.
 - d. Identify legal restrictions, privacy laws, and rights of individuals on gathering evidence of embezzlement, money laundering, etc.
7. Basic tax law:
- a. Critically evaluate and apply current federal income tax laws for individuals and businesses
 - b. Compare and apply current state and local income tax laws for individuals and businesses
 - c. Apply financial planning concepts to current gift and estate tax laws
 - d. Calculate payroll taxes for a specific case scenario
 - e. Calculate sales and use taxes for a specific case scenario
8. Government and not-for-profit accounting
- a. Analyze the differences between financial reporting for a business enterprise and a government or not-for-profit entity.
 - b. Prepare financial statement for a governmental and a not-for-profit organization by applying appropriate accounting concepts
9. Management accounting
- a. Critically evaluate data to support decision-making
 - b. Analyze expenses to reduce a company's costs and improve profitability
10. Finance
- a. Calculate the time value of money
 - b. Analyze debt versus equity business financing decisions
 - c. Evaluate investment opportunities using discounted cash flow, net present value, and risk analysis