

ACCOUNTING CURRICULUM REDESIGN: IMPROVING CPA EXAM PASS-RATES AT A SMALL UNIVERSITY

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Abstract

History has played an important role in the modification of accounting programs at colleges and universities. Over the years, the responsibility of educators has been debated and the content expectation of accounting curriculum has varied. Economic and political factors have impacted the profession as has the evolution of the Uniform CPA Examination. Higher-learning institutions have been challenged to provide students with the technical skills and general knowledge necessary to work and succeed in today's competitive global environment. This paper provides a brief history of the accounting profession and how one small liberal arts school has addressed the changes in accounting curriculum as they prepare candidates for the CPA exam. This paper is appropriate for anyone interested in a historical summary of the accounting profession as well as the education and CPA exam preparation curriculum at a small university.

Introduction

The purpose of this paper is to disclose how one small liberal arts university in the Midwest has addressed the ever-changing demands of the accounting profession over a 20-year period by offering a dynamic and continually competitive major in accounting. The article provides a brief history of the accounting profession along with a summary of significant historical events that have impacted the profession and accounting education. A review of the Uniform CPA exam is also provided as well as an explanation of the exam's influence on accounting curricula over the years. The paper concludes with a summary of how first-time pass rate for graduates have increased after implementing major changes in the accounting curriculum.

A Brief History

Accounting education has clearly evolved since the adoption of the double-entry accounting system and for over a century, colleges and universities have offered specially designed programs to properly prepare students for the accounting profession. Initially, accounting teachings focused primarily on bookkeeping techniques and these methods were studied and interpreted from the point of view of the business man rather than that of a professional accountant (Van Wyhe 2007). Teaching emphasis was heavily placed on the recording of daily business transactions and general practice. The occupation of public accountant existed in the early 1700s but the organization of individual professional accountants began at a much later date. As a result of post-Civil War private-sector growth, the Certified Public Accountant (CPA) profession developed as a way to reduce risk perceptions of prospective investors and as a means of organizing the profession, the Institute of Accountants and Bookkeepers was formed in 1882. A few years later, the American Association of Public Accountants (AAPA) was established and by 1917, a new national body, the American Institute of Accountants (AIA) was formed. Both

the AAPA and AIA are considered forerunners to the current American Institute of Certified Public Accountants (AICPA). The pursuit of licensing followed the organization of these and other state accounting entities, and after much debate surrounding the practice of “generally accepted” standards, the first CPA law and uniform examination was approved in 1896 (Miranti 1996).

From these early days in the accounting profession, the importance of accounting in higher education gained momentum. As accounting curricula began to receive more attention from colleges and universities in the early to late 1930s, the role of theory versus practice was intensely debated. It is also interesting to note that years prior to the implementation of the current 150-hour education requirement, select liberal arts programs offered five-year courses of accounting study in an effort to meet CPA exam state laws requiring candidate competency (Van Wyhe 2007). Since that time, educators have consistently recognized not only the importance of developing practice competency and technical expertise in the field of accounting but also for students to obtain the proficiency necessary to pass the uniform CPA examination.

The Importance of the CPA Exam

During the 1940s, private and public accountants worked hard to maintain their status in the academic world. AIA members favored courses specifically designed to train students for public accounting practice and encouraged practitioners to assist in the development of accounting curricula. In fact, the AIA implemented a uniform standard test to be administered to select qualified college and university students as a way to monitor desired collegiate accounting curriculums. Nonetheless, test results varied and overall, academicians were unhappy with the role of practitioners in curriculum standard setting. As a result, the AIA backed off from establishing education standards and with the awarding of a CPA certificate, the CPA exam became the professional gauge in confirming the academic process.

In 1955, the Perry Commission of the AIA validated the role of accounting education in the development of public accountants and went on to conclude that university schools of business should offer postgraduate programs for CPA exam preparation (Perry 1955, 67). The push from the commission was for aspiring professionals to receive four years of liberal arts training along with advanced coursework that followed undergraduate studies. Throughout the process, the educational emphasis was on passing the CPA examination. In other words, along with sufficient education, the passage of the CPA exam was also recommended as preparation for entry into the accounting profession. It is interesting to note that during this time, the Perry Commission also stressed the importance of internship programs but early discussions were rejected as being impractical.

Over the years, efforts to improve accounting education continued and during the 1980s, accounting education maintained a heavy emphasis on financial accounting and external reporting. Although less emphasis was placed on bookkeeping techniques, college courses continued to be taught independently of each other with very little of the subject integration that is often seen today in college curricula. Accompanying textbooks were traditionally rule based and even though early professionals acknowledged such limitations as poor communication and written skills among practitioners (Schmidt 1948), early education efforts failed to take into

consideration the role of a professional accountant in a dynamic global environment. Today, however, the function of accounting education in preparing future CPAs continues to be an ever-demanding specialized and challenging task.

Because of the CPA exam's role in influencing curricula, educators have tracked exam content, structure, and first-time pass rate while following the many changes that have taken place since the first CPA exam was administered. The first CPA exam consisted of four parts: Theory of Accounts, Practical Accounting, Auditing, and Commercial Law. Each section was three hours duration and all parts had to be passed at one time (Miranti 1996). Until the 1990s, the Uniform CPA exam was administered over two and one-half days and consisted of four subject areas tested in five sittings: Auditing, Business Law, Accounting Theory and Accounting Practice (Part I and II). The exam was administered twice per year in May and November and test takers completed a paper and pencil exam. In 1994, the exam was restructured into a two-day exam including Auditing, Business Law and Professional Responsibilities, Accounting and Reporting (including Taxation, Managerial, Governmental and Not-For-Profit) and Financial Accounting and Reporting.

Since April 2004, the exam has been computer-based and in addition to technical competency, the exam also assesses professional writing skills as well as authoritative database and electronic applications. The uniform exam can be taken in separate sections over an 18-month period covering four "windows-of-opportunity" rather than candidates having assigned test dates in May and November of each year. Content now includes: Auditing and Attestation (AUD), Financial Accounting and Reporting (FAR), Regulation (REG), and Business Environment and Concepts (BEC).

Certainly, the CPA exam has played a significant role in the shaping of many accounting curriculums as the profession has changed dramatically and grown more complex over the past two decades. Passing the CPA exam continues to demand the technical competency of students and exam candidates but professionals also need to be prepared for a business world filled with economic and ethical challenges. In addition to technical expertise, communication and interpersonal skills continue to be critical to the overall education process (Williams 1993; Reckers 2006) and the current CPA exam attempts to assess a broader base of knowledge.

150-Hours of Education

The four-year degree that was typical at most colleges and universities fell short of meeting the changing business world of the later part of the twentieth century. As new accounting and income tax rules developed, new courses were added to accounting curricula to keep up with the pace of changes. With the ongoing concern that new accounting graduates continued to be too technical and lacking in areas such as communication, critical-thinking skills and general liberal arts knowledge, in 1988 the AICPA approved the requirement of 150 hours of education for new members. Proponents of the 150-hour requirement argued the increase in education would benefit clients, students, and society in general by producing better educated and well-rounded professionals while opponents viewed the requirement as a barrier to entry with increased education costs and little to no increase in salaries. Opponents also argued that small colleges

and universities would be devastated by enrollment losses with students going to larger schools that offered master degrees in accounting and business (Boone and Coe 2002).

In spite of these arguments, more than 40 states adopted the 150-hour legislation and as a result, universities have developed and modified accounting programs to meet the demands of students with aspirations of becoming certified public accountants. After adoption of the new laws, colleges also faced the challenging decision of whether or not to extend undergraduate accounting programs to five years or to offer dual-degree programs where students could complete an undergraduate and graduate degree in an effort to accumulate 150 hours of education. Variations of those options were also considered by many business schools. From a different perspective, accounting students in the 150-hour states faced the issue of whether or not to graduate with a four-year degree with fewer than 150-hours and then independently complete additional education requirements as a way of qualifying for CPA exam candidacy. Or, students could search for dual degree programs that allowed them to earn both an undergraduate and graduate degree within the five-year period.

NASBA's Influence

The National Association of State Boards of Accountancy (NASBA) is the umbrella group for the state accounting boards and since its inception, has played a significant role in the certification of accounting professionals. From the first days of organization, NASBA's primary role has been to:

- act as a forum for state boards to discuss issues of common concern
- encourage reciprocal recognition of the CPA qualification between states
- enable state boards to speak with one voice in dealing with AICPA, the Federal Government, and other stakeholders

Responsibility for the CPA exam is shared between AICPA, NASBA and the state boards and the original intent of the organizations was to allow for flexibility to schools and educators in establishing accounting curriculum. In 2002 and 2005, however, NASBA proposed changes to curriculum requirements for CPA examination candidates with the idea of promoting greater uniformity in the educational qualifications of candidates sitting for the Uniform CPA exam (Reckers 2006). For many reasons, the proposals were later rejected by academicians and others in the profession and adequate support for passage failed. NASBA still plays an important role in certifying accounting professionals however the political authority rests with state legislators while academic responsibilities include the educational development of accountants and auditors.

Accounting Education at Small Colleges

Over the years and as previously discussed, educators at colleges and universities have periodically revised accounting curricula in an effort to stay current with the profession and provide quality education for students. The substance of accounting education has been the subject of intense study and debate with the direction of state requirements evolving toward graduate education (Moehrle 2006). Small liberal arts colleges with limited resources have found it especially difficult to offer courses sufficient to cover all topics within a dynamic and

challenging discipline. For example, there were 32 Financial Accounting Standards Board pronouncements since the year 2000 and tax regulation continues to be introduced and modified. In addition, the Sarbanes-Oxley Act of 2002 had a significant impact on the profession as did the introduction of XBRL (eXtensible Business Reporting Language) and International Financial Accounting Standards (IFRS) guidelines. As a result it becomes increasingly difficult – especially for small schools -- to continually modify accounting programs so that aspiring accounting professionals obtain the technical knowledge, skill, and abilities needed not only to pass the Uniform CPA exam, but also compete for jobs in a competitive market.

Curriculum Changes at Drury University

Background

As described in the Drury University Academic Catalog, Drury University is located in the Midwest and is an independent, church-related university, grounded in the liberal arts tradition and committed to personalized education in a community of scholars who value the arts of teaching and learning. Drury College began in 1873. It was organized by Congregational home missionaries who felt the need for an academically strong liberal arts college in the area and is accredited by the Higher Learning Commission and is a member of the North Central Association.

Drury College became Drury University on Jan. 1, 2000, reflecting its growing role in higher education. Drury was one of the first universities in the state to offer continuing education and evening classes to meet the needs of non-traditional students. Unchanged is the commitment to providing a quality academic experience; preparing students for working and living in today's world; learning the value of service to their communities, and experiencing diversity.

The Breech School of Business Administration is accredited by AACSB International, The Association to Advance Collegiate Schools of Business, and by ACBSP, Accreditation Council for Business Schools and Programs. The school functions on the undergraduate level as the department of business administration. It also offers a master in business administration degree (MBA) at the graduate level. The undergraduate majors (accounting, computer information systems, economics, finance, management and marketing) of the Breech School of Business Administration are dedicated to providing academic preparation consistent with the highest professional standards and liberal arts tradition of Drury University. Majors in the six subject areas provide students the opportunity to learn and grow while gaining a deepening understanding of the role of business and economics in our society. The curriculum is organized to give students knowledge of business practices and economic processes and an awareness of the major business and economic concerns confronting society.

The accounting major at Drury was introduced in the 1960s, shortly after the Breech School of Business became a part of the institution. Early discussions centered on whether accounting belonged in a liberal arts curriculum at all but the accounting major was eventually accepted as one of three undergraduate business majors initially offered to students, i.e. general business, economics and accounting. Prior to the implementation of the 150-hour education requirement,

accounting majors completed courses outlined for the business administration major plus an additional 21 hours of upper-division accounting and 6 hours of study in business law. Students were encouraged but not required to complete accounting internships and starting in the mid-1990s, a CPA review course was offered only as an elective. This course was seldom taken by accounting majors and even then, was offered only as an independent or directed study. In fact, few students sat for the CPA exam and few were recruited by nationally-, or even regionally-recognized public accounting firms. Specialized courses such as governmental and nonprofit as well as accounting information systems were not listed in the college catalog at the time.

Curriculum Changes

Following Missouri's adoption of the 150-hour requirement on June 30, 1999, Drury revised the accounting major in an effort to prepare students for CPA exam candidacy. Consistent with Missouri education specifications, additional upper-division courses became part of the required major. Also, a greater departmental emphasis was placed on the students taking and passing the CPA exam. Concurrently, an aggressive internship program was implemented to expand the student's understanding of the intricacies of the accounting profession and improve career opportunities upon graduation.

Increase in Financial Accounting. Financial accounting course offerings were expanded resulting in a more comprehensive study of financial topics with students taking three sections of intermediate financial accounting, i.e. *Intermediate Accounting I, II and III*. In addition, students also completed a business combinations course titled, *Advanced Accounting*. A technology course called *Accounting Information Systems* was also added and after years of being a stand-alone class, the course has recently been integrated with *Cost Management Systems*. Consistent with content changes of the Uniform CPA Examination and the exam's decreased emphasis on cost accounting and accounting theory, our intermediate accounting classes now cover the conceptual framework and accounting theory as described in the *Statements of Financial Accounting Concepts* and these courses also highlight the new IFRS international standards. Ethics topics are addressed throughout the accounting curriculum. See Appendix A for an outline of these curriculum changes

Integration of Subjects. In recent years, our accounting curriculum has also shifted the focus of cost and managerial accounting within the major. With the *Business and Environment* section of the CPA examination being revised to cover more operations management topics along with variance analysis, a newly designed course was introduced that supports student efforts to prepare for the BEC section. Additionally, CPA exam content covering accounting information systems topics has been deemphasized, dropping from 22-28 percent to 15-19 percent of the section's content. Our newly integrated course is now called *Accounting Information and Cost Management Systems*, and addresses topics traditionally covered in stand-alone advanced managerial and information system classes. We have recognized that with limited faculty resources, integrating subjects helps to provide students with a comprehensive exposure to significant accounting topics while reducing the number of individual courses offered.

Increase in Auditing Coverage. Based on the school's CPA exam pass rates the elective course, *Advanced Auditing*, has recently been revamped in an effort to increase pass rates on the auditing

section of the exam. At Drury, the AUD section has consistently been a particularly difficult section for our students and pass rates are typically well below the national average. On the other hand, our students tend to score above the national average on the FAR and other sections of the exam. One possible explanation is that our students are required to take four sections of financial accounting as part of accounting major requirements while auditing is a single three-hour course within the curriculum. Students are also required to take two sections of federal taxation covering individual, partnership and corporate taxation. Students also participate in an annual *Voluntary Income Tax Assistance (VITA)* program that helps students learn the practical application of income tax preparation. As a result, students have been more prepared and comfortable in accounting areas other than auditing and are now strongly encouraged to complete a second course in auditing theories and techniques as a continuation of the initial course on basic auditing concepts. See Appendix A for an outline of these curriculum changes

Preparing for the Exam. Another elective class that has gone through significant transformation is the *CPA Problems* class that is now referred to as *Issues in Public/Corporate Accounting* and was originally designed to allow students to prepare for either the Uniform CPA Examination or the Certified Management Accountants Examination (CMA). Since the newly-designed course inception in 2003, however, only one student has elected to pursue the CMA rather than the CPA exam. Even though the class is an elective, the majority of students desiring to pass the CPA examination elect to take the review course.

Increased Internship Opportunities. As part of the Breech School of Business core curriculum, all students pursuing a Bachelor of Business Administration degree are required to have an internship experience. This requirement is one feature that sets the Breech School apart from other universities. Although internships have always been encouraged, the requirement was a curriculum change that was introduced during the 2005-2006 academic year. The Breech School is unique in that all business students are required not only to complete an internship, but also study abroad before students are approved to graduate. Along with the university career center, accounting faculty play a key role in securing and facilitating the internship experience.

Drury internship recipients have accepted positions at major companies throughout the United States and abroad. Accounting students routinely complete internships at Big 4 public accounting firms such as PricewaterhouseCoopers and BKD, LLC, a top-10 public accounting firm headquartered in Springfield, Missouri. Many local public firms also provide valuable internship and part-time opportunities for our students while other students seek private-accounting internships such as those with O'Reilly Automotive, Cerner Corporation or City Utilities, to name a few.

When student interns are asked their viewpoint of the biggest contributor in helping them acquire internship opportunities, most indicate faculty connections with specific companies as well as faculty guidance throughout the interview process as being the most beneficial. Ongoing alumni interactions are also a key in ensuring internship opportunities are available. Students seem to acknowledge the significance of the internship requirement and are generally appreciative of the chance to apply classroom learning to a real-world setting.

Year after year Breech students are placed in prestigious internships and respond by performing at a high level. As a result, employers keep coming back to Breech seeking new interns. The faculty's close relationships with alumni also play a major role in successful internship placement and overall job placement after graduation.

Accounting Program Success and CPA Exam Pass Rates

There are a number of ways to measure the attractiveness and success of an institution's accounting program, (i.e. quality of accounting graduates, quality of faculty service and research, quality of incoming students and teaching efforts, etc.), however, Allen and Woodland (2006) suggest that CPA exam pass rates are an important gauge of accounting program success and can be used as an indicator of the resources committed by educators to help students prepare for the profession and are consistently used by business schools as recruiting, promotional and achievement measurement tools. Taylor and Rudnick (2005) agree and suggest that many schools use CPA exam results as a measure of success and publish those results in correspondence with alumni, donors and future students. Researchers have also argued that the improvement of CPA pass rates alleviates the concerns associated with the costs of entering the profession and that pass-rate success may be a benefit that outweighs the cost associated with an additional year of education (Allen and Woodland 2006). Since the profession unmistakably uses the exam as an entrance requirement, most university accounting programs continue to modify and restructure curricula to accommodate the changes in exam content thereby working toward the goal of not only training students for a demanding profession but first preparing them to complete the challenging CPA exam with a high percentage first-time pass rate.

Pass rates at Drury. At our institution, we have determined that both CPA exam pass rates and our successful placement efforts seem to attract good students to the program and retention has not been an issue. Even though Drury's pass rates are not formally published, pass-rate information is used as a recruiting tool and enrolled students are fully aware of the Uniform CPA Exam pass-rate expectation. In turn, a competitive advantage in the recruiting process has been achieved by increasing the number of graduates who have made progress or have completed the Uniform CPA exam (see Table 2 for pass-rate comparisons).

As can be seen from Table 2, changes in the accounting program curriculum have contributed to our Uniform CPA Exam pass-rate exceeding AICPA Published Pass Rates. The only area in which we have not consistently exceeded national averages is in Auditing and, as previously mentioned, actions have been taken for students to strengthen their grasp of auditing in the form of an additional auditing class and opportunities to work in the VITA program.

Table 2
CPA Exam Pass-Rate Comparisons
2007-2011

Year	CPA Exam Section *	Pending Drury Graduates	Number of Students Taking Exam	Number Passed	Drury Pass-Rate	AICPA Published Pass Rates**
2011	AUD	14	8	3	37.5%	45.6%
	BEC		8	7	87.5%	47.1%
	FAR		11	10	90.9%	45.6%
	REG		10	6	60.0%	44.2%
2010	AUD	14	13	4	30.7%	47.8%
	BEC		12	8	66.7%	47.3%
	FAR		14	13	92.9%	47.8%
	REG		11	9	81.8%	50.6%
2009	AUD	13	8	7	87.5%	49.8%
	BEC		8	6	75.0%	48.3%
	FAR		6	5	83.3%	48.5%
	REG		5	5	100.0%	49.8%
2008	AUD	11	11	5	45.5%	49.1%
	BEC		10	10	100.0%	47.5%
	FAR		11	11	100.0%	49.2%
	REG		11	8	72.7%	48.7%
2007	AUD	17	10	5	50.0%	45.6%
	BEC		10	9	90.0%	46.6%
	FAR		10	6	60.0%	48.2%
	REG		10	8	80.0%	47.0%

*Auditing and Attestation (AUD), Business Environment and Concepts (BEC), Regulation (REG), and Financial Accounting and Reporting (FAR)

**Published Uniform CPA Examination Passing Rates at www.aicpa.org.

Note: Drury University student CPA Examination Passing Rates are not published annually by NASBA due to the limited number of Drury candidates sitting in any select window of opportunity. Pass-rate scores are self-reported and then recorded by administration.

Concluding Remarks

In conclusion, several historical events have influenced accounting education over the years and unsurprisingly, universities have adopted changes in curricula in an effort to prepare students for careers in accounting. There continues to be an emphasis on greater accountability in the profession and as rules and international accounting standards expand, the ongoing need for education revision will likely continue as well. Undoubtedly, certification will remain a well-recognized credential within the profession and one that will separate job candidate credentials in a highly competitive work environment. As such, the process of obtaining CPA certification will remain a challenging experience for students and one that accounting educators can help students achieve. In turn, the Drury University Breech School of Business has shown that curriculum improvements can lead to improved pass rates for accounting students.

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Appendix A

Curriculum Comparison

ACADEMIC YEAR OF CHANGE **					
PRIOR TO 150-HOUR REQUIREMENT	2000-2001	2002-2003	2004-2005	2005-2006	2011-2012
<i>General business courses *</i>				General business courses classified as “Tool” and “Core”; study-abroad required	
<i>Accounting Courses:</i>					
Principles					
Management				Course changes to Financial Statement Analysis	
Intermediate I					
Intermediate II					
	Intermediate III				
Cost				(A)	Class discontinued
Federal Tax I					
Federal Tax II					
Auditing					
Advanced				(A)	
		Accounting Information Systems			
			Internship required		
					New Integrated Class: Acct Information and Cost Management Systems

<i>Electives:</i>					
Theory				Class discontinued	
Gov't & NFP			No longer elective	(A)	
Advanced Auditing					Students now strongly encouraged to take
CPA Problems	Issues in Public/ Corporate Accounting	Students now strongly encouraged to take class			
Internship				Required class; no longer elective	

*Includes 6 hours of business law as well as 8 hours of economics

**Curriculum unchanged unless indicated otherwise

(A) Students required to choose one of *Cost, Advanced or Governmental and Nonprofit Accounting*