### Naked Truths About Accounting Curricula

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# Naked Truths About

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Here is a rallying cry for revamping undergraduate accounting curricula to PREPARE STUDENTS TO BE CERTIFIED MANAGEMENT ACCOUNTANTS AND NOT ONLY CERTIFIED PUBLIC ACCOUNTANTS.

he emperor of accounting education is parading naked. Accounting educators and university administrators are applauding, praising the beauty of the emperor's CPA pass rates. In reality, however, accounting education is at a crossroads. Industry leaders are not happy with the state of current accounting education. Students claim they do not perceive an accounting degree to be as valuable as it used to be, and accounting graduates say they would not major in accounting if they had to do their education over. Decades of academic inertia and neglect may have contributed to this decline.

Now the gap between current accounting education and the needs of the industry is widening. Technological advances have automated many activities that accountants traditionally performed, such as posting transactions, paying invoices, and calculating variances, and have changed accountants' role. Critics feel that accounting education as it is taught at many universities is broken and in desperate need of fixing. Some wonder whether accounting programs as they exist today will survive in the future unless significant changes are made.

Today's management accountants spend less time

preparing standardized reports and more time analyzing, interpreting, and providing information for decision making. Auditing and tax filings are regulatory needs, whereas cost management is essential for organizational success and survival. The objectives, users, and uses of financial accounting and managerial accounting differ in many ways. Traditionally, management accountants have spent much of their time on activities such as tracking variances, making budgets, allocating overhead costs, and computing product costs. Financial accountants have spent much of their time conducting audits and preparing financial statements and tax returns. Management accounting played a key role in the success of the U.S. industrial revolution at the turn of the 20th Century. Similarly, innovative cost management tools and techniques of today, such as activity-based costing, the balanced scorecard, target costing, and lean accounting, are playing significant roles in improving the competitiveness and profitability of companies.

At the same time, nonpublic accounting jobs, the growth of consulting, and certifications such as the CMA (Certified Management Accountant), CFM (Certified Financial Manager), and CIA (Certified Internal Auditor) are significantly influencing career choices of

accounting graduates. More companies are now recognizing that the knowledge gained from the CMA program adds value to their organizations. In fact, CMAs are employed by a variety of organizations, including manufacturing, public accounting, hospitals, government, and nonprofits. Their salaries are comparable to or better than those of CPAs (Certified Public Accountants).

Yet very little has changed in the kingdom of accounting education. Most college and university accounting programs are loaded with courses relevant to the CPA examination, but two-thirds of accounting graduates take jobs outside public accounting and have no interest in taking the CPA exam. Overall, accounting majors have little flexibility and are required to take essentially the same courses irrespective of their career choices.

A sample of 150 accounting curricula I randomly selected using James Hasselback's Accounting Faculty Directory shows that most universities require three to six credits of cost accounting, and just a few require more than six credits. Only a few universities have senior-level courses in the cost/managerial accounting area. Despite significant changes in the business environment and decades of studies criticizing it, accounting curricula have remained static. Accounting faculty are reluctant to design alternate tracks for nonpublic accounting careers. This narrow focus undermines the needs of other industries and accounting graduates seeking nonpublic accounting careers.

This article looks at: (1) the current state of accounting education along with some historical perspectives, (2) the influences of public accounting on accounting education, and (3) how to develop a flexible accounting curriculum without adding more credits. Also, I describe how industry and the Institute of Management Accountants (IMA) can influence accounting curricula and make a difference.

#### STATE OF ACCOUNTING EDUCATION

"There is little doubt that the current content of professional accounting education, which has remained substantially the same over the past 50 years, is generally inadequate for the future accounting professional. A growing gap exists between what accountants do and what accounting educators teach.... Accountants who remain narrowly educated will find it more difficult to compete in an expanding profession.... The Committee's analysis of accounting practice has indicated that accounting education as it is currently approached requires major adjustments between now and the year 2000."2 "The Bedford Report," 1986

Many similar statements were made by other organizations, such as the AAA (American Accounting Association), AICPA (American Institute of Certified Public Accountants), IMA, and accounting firms.<sup>3</sup> They describe in detail declining enrollments, students' lack of relevant skills and knowledge, noncompetitive wages, the growth of consulting, lopsided curricula, and nondifferential salaries of public accounting and managerial accounting. Though there are changes in how accounting is taught, there is little change in what is taught. Decades of criticism have had little or no effect

on accounting curricula.

Decline in Enrollment. In 1995-96, U.S. universities produced 60,000 accounting graduates. By 1998-2000, this number dropped to 47,600, a 20% decline. Also in 1995-96, there were 192,000 accounting students. By 1998-99, this number dropped to 148,000, a decline of 23%. The number of high school students expressing interest in majoring in accounting had dropped by 50% over the same period. Only 34% of new accounting graduates chose public accounting in 1999-2000.4 Potential factors that might have contributed to this decline include lower starting salaries, emergence of better and more attractive career alternatives, automation replacing many traditional accounting tasks, lack of information, and considerable misinformation about accounting careers. Although the recent accounting scandals and government regulations have stirred some demand for accounting graduates, it is too early to say whether these gains will be sustainable or not.

Lack of Relevant Knowledge and Skills. Studies indicate that accounting students are exposed to a wide array of seemingly isolated rules but not to a broader understanding of the purpose and impact of accounting information. As technology replaces common accounting activities, the only way to stop the outsourcing of jobs to overseas countries and to keep high-paying accounting jobs in the United States is for accountants to perform

Table 1: Accounting Activities, Value, and Academic Emphasis

ACTIVITY	VALUE/COST	EMPHASIS IN ACCOUNTING EDUCATION
Recording business events	\$10/Hr.	High
Summarizing recorded events	\$30/Hr.	High
Converting data into information	\$100/Hr.	Moderate
Turning information into knowledge	\$300/Hr.	Low
Making value-added decisions	\$1,000/Hr.	Low

Source: Steve W. Albrecht and Robert J. Sack, "Accounting Education: Charting the Course Through a Perilous Future," Accounting Education Series, American Accounting Association, August 2002.

high-value-adding activities such as process improvements. Unfortunately, the emphasis of current accounting education is inconsistent with the knowledge and skills of a high-value-added employee, as shown in Table 1.5

Noncompetitive Wages. The pay for services that add value increased between 1990 and 1999 while the pay for scorekeeping that can be performed with technology declined. Between 1990 and 1999, the average starting salary of accounting graduates increased by 31% compared to 35% for finance graduates, 42% for MIS graduates, and 48% for consulting, as shown in Table 2. In 1990, information systems salaries were the highest, and the compensation gap between them and accountants was 10.23%. By 1999, consulting was the highest-paid group, with the salary gap at 23.48%.6

Alternate Accounting-Firm Careers. Over the past few decades, auditing and taxation-the two traditional activities of accountants-became highly competitive, so accounting firms started to expand their nonaccounting services. Slowly, auditing became secondary in growth and revenues to consulting. In 1989, consulting accounted for 21.6% of the big accounting firms' revenue. By 2002, it was more than 40%. Salaries of new auditors grew more slowly, and the compensation gap between consultants and auditors widened, creating professional and personality conflicts among employees of firms such as Arthur Andersen. Only a third of new accounting graduates at the bachelor's level chose public accounting, as shown in Table 3.7

Lopsided Accounting Curricula. As noted previously, a sample of 150 university and college accounting curricula

Table 2: Starting Salaries of New Accounting Graduates by Type of Employment

TYPE OF EMPLOYER	1990 AVERAGE SALARY	1999 AVERAGE SALARY	INCREASE
Public and Private Accounting	\$26,400	\$34,500	31%
Investment Banking and Corporate Finance	\$29,100	\$37,100	28%
Financial/Treasury Analysis	\$26,700	\$36,100	35%
Information Systems/Computer Science	\$29,100	\$41,400	42%
Consulting	\$28,700	\$42,600	48%

Source: Steve W. Albrecht and Robert J. Sack, "Accounting Education: Charting the Course Through a Perilous Future," Accounting Education Series, American Accounting Association, August 2002.

shows an average of 23 credits in accounting, of which only three credits are required in cost or management accounting courses. See Table 4 for the average required credits. A typical accounting curriculum includes an introductory managerial accounting course at the freshman or sophomore level and one or two cost accounting courses at the junior level. Only a handful of schools in the sample have seniorlevel cost/managerial accounting courses. None has a required course in process improvements.

Salaries of CPAs and CMAs. A recent survey by David Schroeder and Karl Reichardt indicates that employees with a CMA earn more than those with no certification and that the overall salaries of CMAs and CPAs are very comparable.8 The average salary differences among age groups and professional certifications are shown in Table 5.

In summary, only one-third or fewer accounting graduates make public accounting their career. The compensation of CMAs is better than or comparable to that of CPAs. The demand for consulting services is increasing, and the demand for traditional accounting is declining. Employers are seeking value-adding employees, and critics are complaining about the quality of accounting programs. In this environment, the current state of university accounting curricula is called into question, raising many questions, such as:

Are accounting students getting a complete and

## Table 3: Placement of New Accounting Graduates, 1999-2000

AREA	BACHELOR'S DEGREES (IN PERCENTAGE)	MASTER'S DEGREES (IN PERCENTAGE)
Public Accounting	34	62
Business/Industry	26	19
Government	4	3
Nonprofit	2	2
Other Areas	3	1
Graduate School	11	2
Unknown	20	11

Source: Steve W. Albrecht and Robert J. Sack, "Accounting Education: Charting the Course Through a Perilous Future," Accounting Education Series, American Accounting Association, August 2002.

objective picture of the accounting profession?

- Are current accounting students adequately informed about alternate careers?
- Are accounting programs serving the needs of all accounting students?
- Are there fair and balanced tracks in accounting curricula that are alternates to the CPA?
- Are accounting curricula adequately preparing students for nonpublic accounting careers?
- Are university accounting programs shortchanging accounting students and undermining industry needs?

## Table 4: Sample of Accounting Curricula and Average Required Credits (Averages are rounded to nearest integer)

UNIVERSITY SIZE	AVERAGE ACCOUNTING CREDITS REQUIRED	COST ACCOUNTING CREDITS REQUIRED	INTERNAL AUDIT CREDITS REQUIRED
Small	21	3	3
Medium	23	3	3
Large	21	3	2
Overall Average	23	3	2

Based on data collected by the author, Summer 2002. The data were collected using websites. Not all websites were user-friendly, and some were confusing. The author made reasonable interpretations regarding credits in cases where the data were not clear.

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AGE RANGE	ALL	NO CMA OR CPA	CMA	CPA	BOTH CMA AND CPA
		AVERAGE	SALANY		
19-29	\$52,231	\$51,386	\$53,331		
30-39	\$75,147	\$66,057	\$73,657	\$76,748	\$85,558
40-49	\$90,979	\$76,346	\$97,584	\$92,571	\$96,123
50-59	\$92,202	\$81,497	\$90,282	\$110,081	\$99,157
60 and over	\$91,131	\$88,619	\$91,440	\$93,045	\$78,461
All		\$76,155	\$89,200	\$95,031	\$92,673
		AVERAGE TOTAL			
19-29	\$60,732	\$66,408	\$55,771		
30-39	\$84,210	\$71,731	\$83,713	\$85,671	\$96,232
40-49	\$104,808	\$86,141	\$115,043	\$110,334	\$107,335
50-59	\$107,538	\$92,712	\$106,641	\$132,877	\$114,919
60 and over	\$99,979	\$102,112	\$95,957	\$93,045	\$83,932
All	\$85,771	\$103,234	\$111,096	\$104,795	

Source: David L. Schroeder and Karl Reichardt, "IMA 2003 Salary Guide," Strategic Finance, June 2004, pp. 29-42.

There is no doubt that current accounting education is a mess. A look at the history of accounting education sheds some light on factors that might have contributed to this mess and some ways to get out of it.

#### HISTORICAL PERSPECTIVES OF ACCOUNTING EDUCATION

The evolution of U.S. accounting education goes back hundreds of years. 9 More than 200 years ago, accountants from Britain came to the United States to explore better opportunities. Slowly, public accounting in the United States grew, and state societies of CPAs were formed. New York legislators established the first state society of CPAs in 1897. Several states followed and introduced bills to regulate public accounting. By 1921, all states had passed similar legislation.

Birth of U.S. University Accounting Programs. Early accounting education was financed and influenced by the public accounting industry and still is to some extent. At the turn of the 19th Century, accountants

believed in broad, general, liberal education. Practitioners felt that the role of education was to provide a wide range of knowledge and to train students to think analytically and creatively. They felt the most effective way to master the technical procedures of auditing and accounting was through practical experience. 10 Practitioners advocated an expansion of university education to include accounting, and they promoted teaching of accounting to develop conceptual understanding, business breadth, and critical thinking.

With the support of accountants, business schools developed throughout the country. In fact, accountants directly financed or underwrote the first university business courses. 11 According to historians, accounting practitioners became deeply disappointed with the trends in university business schools—the very schools they helped develop and foster. 12 Practitioners believed in apprenticeship as a way to learn the practice of accounting, but early accounting educators in the United States did not believe in or accept the British style of apprenticeship as a form of training. They moved away from the theoretical and conceptual approach and turned to procedural orientation.

Evolution of the Certification Exams. The growth of business increased the demand for qualified accountants. U.S. accountants at the turn of the 19th Century felt the need for a way to measure appropriate and relevant credentials for practicing accountants. To test the competencies of public accountants, a series of certification exams was developed based on a Scottish model that included tests of writing ability; proficiency in arithmetic and algebra, including quadratic equations; knowledge of geography, Latin, English, and history; and mastery of two fields chosen from foreign languages, higher math, and physical and natural sciences. This was the beginning of the CPA exam.

Unfortunately, over time, these expectations changed drastically, and the CPA exam became increasingly rule-based and practitioner-oriented at the expense of broad-based knowledge and skills. During the early 1970s, the CMA and CIA exams were developed to test the knowledge and skills of financial professionals and internal auditors. Over time, all the different certification exams underwent many changes to reflect the changes in technology and industry needs.

Influence of CPA Exam on Accounting Curricula. In the 1940s, a college degree was made a prerequisite for the CPA exam and changed the landscape of accounting education. Universities reoriented their accounting programs to meet the needs of the CPA exam. Not everyone agreed with the orientation of accounting education, and some national accounting leaders were upset. According to historians, W. Sanders Davis, then president of the American Institute of Accountants (AIA) (a precursor to the current AICPA), chided educators for their erroneous assumption "that preparing men for the CPA examination was what was most needed." Unfortunately, despite the many criticisms, little has changed. The orientation of academic programs toward the CPA examination is still alive and well.

During the 1950s, another significant event took place. The Commission on Standards and Experience for CPAs concluded that the CPA certificate reflected only entrance-level competence and not the competence level needed for a professional. It recommended

that practical experience should follow the CPA exam rather than precede it, as some commissioners wanted. Commissioners who disagreed were not sure of the quality and consistency of academic programs. There were also disagreements on how to measure the quality of accounting programs. To address the quality issue, the director of research of the AIA conducted a survey of academic accounting programs and concluded that, in "good" schools, the percentage of those passing the CPA exam was eight times higher than in "bad" schools. Two external studies conducted later suggested that higher passing rates were the result of teaching for the CPA exam. But these so-called good programs failed to provide the wide range of knowledge envisioned by the industry leaders at the time. 15 It was the beginning of the tail (CPA exam) wagging the dog (accounting curricula) and the transformation of university accounting programs into CPA mills.

The erroneous mind-set of equating the CPA exam results with the quality of university accounting programs still plagues accounting departments. Universities brag about their students' CPA exam pass rates as if these are proxies for the quality of the schools' accounting programs. The content and format of the CPA exam became a powerful force and primary source for accounting curricula, and accounting departments revise their curricula to reflect changes in the CPA exam. But no such interest has been paid to the knowledge and skills required for other accounting certifications. In 30 years of my experience with three accounting departments, the topic of preparing students for the CMA or CIA certification has never been discussed, while a great deal of time was spent discussing how to redesign accounting curricula to meet the 150 semester-hour CPA requirement.

The 150-Credit-Hour CPA and Political Influences of Public Accounting. When the modern disciplines of law, medicine, and accounting began to develop, law and medicine chose the path of professional schools while accounting did not. As a result, there were no professional accounting schools until the 1970s. Unlike accounting, law and medicine chose to require a liberal arts degree followed by technical training at the graduate level in the chosen fields before taking licensing exams.

Several years later, accountants realized the need for better credentials, and the push for graduate accounting education and professional schools of accountancy started. Two AICPA studies were instrumental for the creation of the 150-hour CPA. 16 Unlike the Accounting Education Change Commission of 1998, which focused on improving the relevance and pedagogy of accounting education, these earlier AICPA studies focused on the common body of knowledge and the length of time needed for accounting programs to cover it. Despite the fact that a majority of accounting students do not opt for public accounting careers, AICPA studies did not address the educational requirements for accounting students not interested in CPA careers. AICPA's effort resulted in only marginal success. Business schools did not fully accept or encourage professional schools of accountancy, in part because they felt graduate accounting programs would make the wellestablished MBA programs redundant and threaten their viability.

Unsuccessful in convincing universities of the need for professional schools of accountancy, the AICPA chose a different approach in the 1980s: the 150semester-hour (also known as the five-year program) route. To the best of my knowledge, no other professional organization or state board mandates a specific number of credit hours as a requirement to take its licensing or certification exams. Professional organizations such as IMA, APICS (American Production and Inventory Control Society, now the Educational Society for Resource Management) and ASQ (American Society for Ouality) specify the subject areas and level of competency but not the semester hours students should have. For example, IMA specifies the content and level of proficiency for the CMA and CFM exams. Ironically, decades after the initiation of the 150-credit-hour CPA, the AICPA has vet to provide specific detail or guidelines about what is expected to be taught in the 30 hours required beyond the traditional 120-semester-hour-degree programs.

There are many unanswered questions regarding the power and political influence the public accounting industry exerts on university accounting curricula, as well as the role of state boards of accountancy. Some examples are:

- How did the AICPA manage to get state legislators to pass the 150-semester-hour CPA requirement?
- Why did accounting faculty embrace it with little or no knowledge of what specific courses and topics would be, should be, or could be covered by the additional 30 hours?
- Did anyone look at the potential economic ramifications, such as additional costs to students and employer reluctance to pay more for five-year accounting graduates?
- Who controls the state boards?
- Are state boards overseeing the accounting profession or following the dictates of large accounting
- Are these boards appropriately and fairly exercising their fiduciary responsibilities, or are they acting like corporate boards with passive directors?
- Was there potential political game-playing? I also heard about disturbing and potentially unethical incidents of how some local and regional public accounting firms pressured their employees to make calls to state legislators and ask them to pass the 150semester-hour CPA exam requirement, but that information is confidential.

During the 1980s, accounting firms paid more than \$1 billion in damages to the government for the many lawsuits filed against them for the failed savings & loan crises. To gain clout, the accounting profession started lobbying, very much like the big businesses' lobbying efforts for tobacco and guns, for example. Big accounting firms gained influence and got seats on the state boards of accounting. The AICPA and the then Big Five accounting firms continued to spend millions of dollars for lobbying.<sup>17</sup> Accounting firms and individual accountants made political contributions of more than \$76 million during 1990-2004, as shown in Table 6.18 For the 2004 election cycle, as of August 2, 2004, accounting firms contributed a total of \$9.7 million, with the Big Four accounting firms contributing more than \$1.5 million.

#### MANAGERIAL ACCOUNTANTS-FROM BEAN COUNTERS TO BUSINESS CONSULTANTS

The role of managerial accounting evolved over hundreds of years. Cost management developments always

Table 6: Accountants' Political Contributions

ELECTION CYCLE	I TOTAL CONTRIBUTIONS	CONTRIBUTIONS FROM INDIVIDUALS	CONTRIBUTIONS FROM PACS	SOFT MONEY CONTRIBUTIONS	DONATIONS TO DEMOCRATS	DONATIONS TO REPUBLICANS
2004*	\$9,713,061	\$6,245,448	\$3,467,613	N/A	\$3,248,256	\$6,396,278
2002	\$11,940,759	\$3,503,912	\$5,595,184	\$2,841,663	\$3,504,918	\$8,400,004
2000	\$15,354,056	\$6,903,477	\$5,788,177	\$2,662,402	\$5,896,876	\$9,360,398
1998	\$10,241,316	\$3,346,849	\$5,479,080	\$1,415,387	\$3,996,395	\$6,215,348
1996	\$12,072,680	\$4,988,094	\$5,579,006	\$1,505,580	\$4,978,795	\$7,040,527
1994	\$7,472,464	\$2,604,173	\$4,169,336	\$698,955	\$3,833,630	\$3,714,434
1992	\$6,635,342	\$3,201,132	\$2,835,699	\$598,511	\$3,599,597	\$3,085,406
1990	\$3,349,829	\$1,340,783	\$2,009,046	N/A	\$1,735,087	\$1,622,742
Total	\$76,779,507	\$32,133,868	\$34,923,141	\$9,722,498	\$30,793,554	\$45,835,137

\*2004 figures do not include donations of "Levin" funds to state and local party committees. Levin funds are contributions of up to \$10,000 from sources that are allowed to give to parties under the applicable state's laws, including, in some states, corporations and labor organizations. Levin funds may be used for certain types of voter registration, voter identification, and get-out-the-vote activity.

Source: Federal Election Commission, via the Center for Responsive Politics

played a key role in the success of businesses. For example, during the depression of 1772, Josiah Wedgwood, a British businessman, attributed the success of his pottery factory to innovative cost accounting methods that helped him calculate costs of materials and labor for each step of the manufacturing process and set prices to ensure profitability. 19 Similarly, after the U.S. industrial revolution at the turn of the 20th Century, cost management developments played a key role in the successes of U.S. industries such as textiles and automobiles. The industrial revolution also brought many changes to management accounting, advancing it from simple bookkeeping to a means of a firm's success and survival.

By 1925, things had changed. Financial reporting became the driving force for cost and management accounting systems. Slowly, managerial accounting became obsolete and lost its relevance.

In the 1970s, the business environment in the United States started to change, characterized, for example, by intense competition, globalization, increased resource mobility, and demanding customers. To survive and succeed, U.S. manufacturing companies started to use highly successful tools and techniques such as TQM (total quality management) and JIT (just-in-time production). These developments, combined with the emergence of information technology and automation, significantly changed manufacturing processes and made traditional cost accounting methods obsolete and dysfunctional. Also, for a while, cost/managerial accounting techniques lagged manufacturing improvements.

But by the 1990s, significant cost management tools and techniques, such as activity-based costing/ management, the balanced scorecard, and target costing, emerged to help organizations become lean, competitive, and profitable. The role of the management accountant drastically changed from that of a routine staff position to a consultant and business partner. Current and future management accountants will work in teams, with a focus on improving processes and exploring ways to add value to the organization.

For example, cost accountants of the past would compute the cost of products with little or no understanding of a production process or bill of materials. Critics claimed that the cost information they produced was inaccurate, irrelevant, and, therefore, led to erroneous decisions. Today's new management accountants understand business processes and the concept of the value chain. They have a better appreciation of links between internal factors such as product design and external factors such as customer satisfaction. With knowledge of powerful cost management tools and techniques, today's cost managers provide relevant and futuristic information. They can explain the costs of today, compare them with the costs of yesterday, and know the difference between value-adding and nonvalue-adding activities. Above all, they have the knowledge and skills to help companies become more competitive and more profitable.

Strategic planning and process improvement are two of the most critical activities for current and future management accountants, but these are not taught adequately in today's accounting curricula.20 Companies want employees who understand the causes of cost, know the difference between value-adding and nonvalue-adding activities, and participate in the valueadding ones. Employers want management accountants who go beyond controlling costs to reducing them. Companies want employees who understand the processes and have the know-how to simplify them. They want employees with knowledge and skills in learning to learn, critical thinking, problem solving, and communication. Above all, companies no longer want "bean counters"—they want employees who can work as business consultants to help them make "better beans" at a lower cost. Unfortunately, current accounting education as taught in universities appears to be a roadblock to preparing these management accountants.

#### DIFFERENCES BETWEEN THE CMA AND CPA

The CMA designation provides corporate management and individual IMA members with an objective measure of knowledge and competence in the field of management accounting. Often called a "mini MBA," the CMA program covers a broad range of business topics, including economics, finance, management, financial accounting and reporting, management reporting, analysis, behavioral issues, decision analysis, internal auditing, and information systems. The CMA and CPA have different objectives.

- ♦ The CMA exam is designed with a user orientation, i.e., to show how managers use accounting information for planning, controlling, decision making, and to make continuous improvements, whereas the CPA exam is preparer-oriented, i.e., to learn how to prepare financial statements such as the balance sheet and income statement.
- ♦ The CPA exam is primarily rule based, whereas the CMA exam is concept based.
- CPA certification is designed as a license to practice, whereas the CMA exam is designed to gain knowledge that will help companies do better.
- ♦ The CPA exam requires an accounting degree and 150 college/university credits, whereas the CMA exam requires any degree and relevant competence.
- The CPA exam is designed to test technical proficiency in accounting standards, auditing, tax, and law, etc. The CMA exam is designed to certify one's expertise in the business areas that are critical to the decision-making process and to recognize the unique qualifications and expertise that provide distinction in today's economic climate.
- CPAs are much like sports referees, making sure the game is played fairly and with appropriate rules and regulations (i.e., following GAAP). CMAs are the players, working together to win the game.
- External auditing, an activity exclusively the domain of the CPAs, is like counting and attesting to the accuracy of the beans that were produced. CMAs are the internal consultants that help make betterquality, lower-cost beans.

#### A CMA-TRACK ACCOUNTING CURRICULUM

Despite these and many other differences between the CPA and CMA, accounting students at most universities take more or less the same courses-e.g., Intermediate Accounting, Advanced Accounting, Auditing, Cost Accounting, Nonprofit Accounting, Law, etc. irrespective of their career objectives. While this may serve the needs and desires of faculty, it does not meet the needs of students. Accounting programs need to be flexible and fair. They must provide a balanced preparation for alternate accounting careers. While all accounting students need foundation courses such as Intermediate Accounting, not all need a second law course or advanced

## Table 7: A Typical Accounting Curriculum vs. a Suggested Management Accounting Curriculum (differences in bold)

TYPICAL ACCOUNTING CURRICULUM	PROPOSED MANAGEMENT ACCOUNTING CURRICULUM
3-6 credits of Foundations of Accounting	3-6 credits of Foundations of Accounting
6 credits of Intermediate Accounting	3-6 credits of Intermediate Accounting
3-6 credits of Cost Accounting	3-6 credits of Cost Management
3-6 credits of Advanced Accounting	6 credits of Advanced Cost Management
3 credits of Auditing	3 credits of Process Improvements
6 credits of Tax	3 credits of Tax
3 credits of Internal Auditing	3 credits of Internal Auditing
6 credits of Law	3 credits of Legal Environment
3 credits of Accounting Information Systems	3 credits of Accounting Information Systems

financial accounting courses. I have taught a CMA review course for more than 10 years, and it is my experience that, despite six credits of law, most accounting graduates know little about regulatory issues such as antitrust laws or environmental protection laws. They also lack overall business understanding and knowledge about the interactions between departments within the organization.

Cost management and process improvements are two of the most value-adding subjects. Trying to cover these and many new cost management tools and techniques along with traditional cost accounting such as standard costing in one or two three-credit courses is not easy. Most university teacher evaluation systems do not distinguish between teaching current topics or obsolete topics. Like the labor-based overhead allocations, most teacher evaluation systems simply count the number of credits taught irrespective of the nature of the course and the effort needed to teach it. As a result, teachers may choose to spend much of their time on good, old topics, which is a relatively easy job compared to coverage of emerging cost management topics, which requires the professors to learn a considerable amount of new information and to spend much more preparation time and effort for teaching the class.

What is currently addressed in typical accounting curricula is not an adequate preparation for successful completion of the CMA certification. A broad, comprehensive exposure of both traditional cost accounting and emerging cost management topics is feasible only with additional courses. Professors and college administrators, however, often cite little time or few resources as a reason for the lack of additional cost management courses and alternate accounting tracks. But with minor modifications to existing curricula, accounting departments could easily make room for non-CPA-oriented careers and create a management accounting track that meets industry needs and better prepares students for the CMA exam. One such model is given in Table 7.

The primary advantage of this revised curriculum is that it requires no additional time. A total of nine to 12 credits from a traditional accounting curriculum (three to six credits of Advanced Accounting, three credits of Law, and three credits of Tax) are replaced with six additional credits of Cost Management and three credits of Process Management courses. A course in operations management, though not required, is important for the management accounting track. Similarly, separate tracks for the CFM and CIA can be developed.

Industry's Role in Promoting the CMA Industry can play a key role in developing a CMA track in accounting curricula. In many companies, it was a common practice to fill senior accounting posi-

tions and controllerships with experienced employees from public accounting firms. While these accountants are very good and talented, they bring little knowledge of manufacturing, process orientation, or cost management. Many of them hold only a CPA certification. These non-CMAs often have little or no knowledge of the CMA and show no particular interest in hiring CMAs. Industry managers often complain how ill prepared their accountants are in meeting their needs. Instead of being passive, the nonpublic accounting industry should follow the footsteps of the 19th Century public accounting industry and aggressively seek to develop management accounting curricula that meet their specific needs.

Some ways industry could help promote managerial accounting include:

- ♦ Hiring employees with the CMA certification,
- Encouraging employees to become CMAs,
- ◆ Providing resources to prepare for the CMA exam,
- Increasing visibility through class visits,
- ♦ Providing financial assistance to faculty to develop new and relevant courses,
- Increasing visibility by participating in student activities, and
- Developing internships and mentor programs for students interested in management accounting.

#### IMA'S ROLE IN PROMOTING THE CMA

Two decades ago, cost accounting came under attack from both practitioners and academics. Cost accounting techniques were criticized as obsolete, irrelevant, and dysfunctional to managerial needs. IMA stepped up to the plate and earmarked millions of dollars to make a significant, positive contribution through research grants, student scholarships, workshops, articles, and seminars.

The AICPA acted furiously to get the 150-hour CPA requirement approved by the state boards. Now it is IMA's turn. By taking appropriate steps, IMA can make a difference in accounting curricula. Some ways IMA can contribute include:

 Asking local chapters to write position papers that explain the need for a management accounting track and sending them to accounting department chairs, business school deans, and university provosts and

chancellors.

- Meeting with administrators of accounting departments, business schools, and universities, making a convincing case for a management accounting track.
- Taking an active role in all student clubs with activities such as presentations, class visits, guest lectures, scholarships, and mentor programs.
- Providing and disseminating better and balanced information to students about alternate accounting careers.
- Promoting the importance of management accounting and the CMA and CFM certifications to students.
- Getting the media to pay attention to the lopsidedness of accounting curricula and the need for a management accounting track in university accounting curricula.
- ♦ Relentlessly promoting the CMA and CFM exams based on the factual merits of these designations.

#### ACADEMICIANS' ROLE IN PROMOTING THE CMA

The future of accounting programs depends on the attitude of accounting faculty. It is hard to understand why accounting faculty show little or no interest in understanding the changing business environment and the need for changes in accounting curricula. With some attitude adjustment, academicians can make a positive difference. Instead of chasing big accounting firms and maintaining status quo accounting, faculty can-and should-be flexible and open to new curriculum ideas. Some ways they can help are:

- Read the literature on the state of accounting education.
- Understand the needs of industry.
- Obtain CMA certification.
- Develop and actively pursue management accounting curricula.
- Inform students about the nature and importance of management accounting and the CMA.
- Organize IMA student chapters.
- Be active in IMA activities.

#### A CRYING NEED FOR CMA EDUCATION

It will not be easy to change 100 years of public accounting influence. We can praise the beauty of the

"emperor's clothes" of accounting curricula or acknowledge that the emperor is naked. It is dysfunctional to any university's goals of broadening students' exposure to business by focusing primarily on the CPA. It is unfair to accounting students seeking careers in nonpublic accounting, and it undermines firms seeking value-adding employees. There is an urgent need to free accounting curricula from the iron grip of CPA orientation and provide alternate tracks for all accounting students.

A century or so ago, public accountants responded to their industry's needs and helped design relevant accounting curricula to meet this need. Now it is time for IMA and industry accountants to respond to their industry's needs and help design relevant management accounting curricula. Unless industry demands alternate accounting education and actively promotes the CMA certification, there is little chance that anything will change. Industry and academicians will be talking about the inadequacy of accounting curricula for decades to come.

Note from the author: The statements made in this article are of a generic nature and do not apply to any specific university. While there are some universities with value-adding curricula, many are lagging. My objective is not to blame or point a finger at any one. Instead, my goal is to generate some discussion so that we can make an honest attempt collectively to improve accounting education in general and management accounting education in particular.

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