

Study Identifies Need for Fundamental Changes

Critics of accounting education charge that its programs and curricula have failed to remain relevant to students and employers. Some educators have heeded the warnings and made significant changes; however, such forward-thinking individuals are in the minority. Accounting programs are consequently experiencing dramatic decreases in student enrollments. Moreover, many practicing accountants and educators say that they would not choose an accounting education if given the chance to do it again. This indicates a serious problem at the profession's most vulnerable point: the quality of its professionals.

To determine the severity of the problems that face accounting education, the American Accounting Association (AAA), the Institute of Management Accountants (IMA), the AICPA, and the Big Five jointly sponsored a study on the future of accounting education. Their charge to the researchers was to "write a high-level thought piece, supported by evidence where possible, about the future of accounting education." The researchers discuss here the study's principal findings and exhort accounting practitioners to become actively engaged in supporting fundamental reform in accounting education.

The Perilous Future of Accounting Education

By W. Steve Albrecht and Robert J. Sack

The research methodology for the authors' study consisted of four major parts. The first stage was a literature search, with special focus on empirical reports and institutional studies like those prepared by the AAA, IMA, and AICPA, but also including academic articles on accounting education. The second stage included interviews with a number of business, accounting, and education leaders. Four focus groups of approximately 25-30 educators and corporate, public, and governmental accountants nominated by the sponsoring organizations made up the third part of the research. Participants in the Ross Institute Roundtable at New York University served as an additional focus group. The last stage was an analysis of survey questionnaires directed to accounting practitioners and educators (of the 783 responses, 134 were from active accounting department chairs).

The Study

The study's main conclusion was as follows:

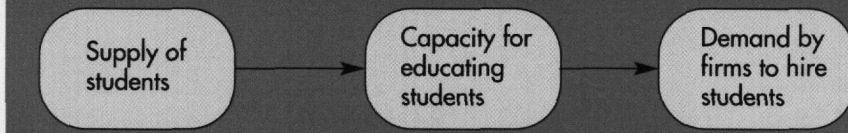
While we have been long-time supporters of accounting education, if we were creating a new business school today, we would not have separate undergraduate or graduate accounting programs. At least, we would not have accounting programs that are structured as they are today. This conclusion represents a complete reversal of the

beliefs that have driven the past 25 years of educational development, during which separate accounting accreditation and accounting school status have been sought and achieved at many academic institutions. However, consider the following facts:

- The number and quality of students electing to major in accounting is decreasing rapidly, driven by the perception that an accounting degree is less valuable than other business degrees or less valuable than it once was.
- If given the opportunity, both accounting professors and accountants would not again major in accounting.
- Accounting leaders and practicing accountants believe that accounting education, as currently structured, is outdated, broken, and in need of significant modification.

The status quo of accounting education looks bleak. At best, educators may be able to avoid changes as long as the economy stays strong and university budgets remain healthy. However, this indecision will result in a downward spiral beginning with fewer qualified students, reduced budgets, and decreasing faculty positions and eventually leading to the elimination of some accounting programs. Department chairs responded that budget and faculty allocations at their colleges are based on the number of students enrolled, a criterion that does not bode well for an education program experiencing declining enrollment.

EXHIBIT 1
TRADITIONAL EDUCATIONAL MODEL



Changes in Business

Historically, businesses have relied on accountants to prepare financial information for internal and external decision making, to audit the fairness of that information, and to assist in the fulfillment of regulatory and tax-reporting requirements. Information was expensive, and accurate financial reports required expertise possessed only by individuals with rigorous education or relevant experience. Investors rarely had sufficient power to influence management or require specific information. Organizational threats came largely from a few domestic competitors. Because information preparation and dissemination was expensive, product life cycles and competitive advantages were managed effectively and inefficiencies were not readily observable by outsiders.

Three major developments have altered the business environment (as traditionally conveyed by accounting educators to students) and the nature of the professional activities of accountants: technology, globalization, and investor power in the capital markets. Although familiar enough to merit lip service from educators, these developments have not been systematically integrated into accounting programs.

Technology has made information preparation and dissemination a quick, easy, and inexpensive process. Yet, most accounting courses focus on the preparation of financial data rather than on its use. Because preparation is increasingly inexpensive and achieved as a by-product of an operating activity, those trained solely for data preparation must expect to command less value in the economy.

Like technology, globalization has significantly influenced business operations and the role accounting and accountants play in them. Faster trans-

portation, combined with instantaneous information, have led to a global marketplace where buying products from foreign companies is as easy as buying them locally. Companies now face competition from around the world.

The concentration of power among certain market investors is the third significant development in the business world. These investors include mutual funds like Fidelity and Vanguard and pension funds like CALPERS and TIAA-CREF, which hold major stock positions in many companies. Their influence is so strong that corporate executives must constantly be prepared to respond to their questions, concerns, and demands. Armed with readily available and inexpensive information about investees and their competitors, such large institutional investors have raised the competitive bar and shortened the periods over which success is measured. If management cannot satisfy a major investor's expectations, it runs a substantial risk of either being replaced in a portfolio or being the victim of a stock sell-off. To prepare for such investor demands, management requires instantaneous information, not only about the current state of affairs but also about future events.

These changes have drastically altered the old accounting model, which assumed that information is expensive and that reliable, historical data has value. Today, anyone armed with the right software can be an "accountant" and produce financial information. Additionally, developments have increased the level of competition among companies to the point where historically successful businesses are obsolete.

Some of the business changes caused by these three factors are obvious:

- An increased pace of change in the business world
- Shorter product life cycles and shorter competitive advantages
- Quicker, better informed, strategic actions by management
- The emergence of new companies and new industries
- The emergence of new professional services
- The outsourcing of nonvalue-added, but necessary, services
- Increased uncertainty and the explicit recognition of risk
- Increasingly complex business transactions
- The restructuring of compensation rewards with—
 - the elimination of or reduction in rewards for services replaced by technology
 - unchanged rewards for traditional, but necessary, services
 - increased rewards for services that leverage technology and assist in better strategic decision making.
- Changes in financial reporting and relationships with financial markets and major market players
- Increased regulatory activity
- Increased focus on customer satisfaction.

Accounting's Response

Are accounting organizations, professionals, and educators adapting to the quickly changing business environment? The question is best answered by scrutinizing the reaction of four groups: large and medium-sized public accounting practices, industry, the Big Five firms, and accounting education programs.

Facilitating member success and maintaining its status as the preeminent nonprofit organization of practicing "accounting" professionals are two of the core objectives of the AICPA. Its "Vision Project," which focuses on the demands of the new marketplace, was created to identify member concerns and develop new values, services, and competencies. Additional plans like redesigning and computerizing the CPA exam, developing new technology-related services (e.g., the cpa2biz portal), establishing a global professional credential (alternately known as XYZ

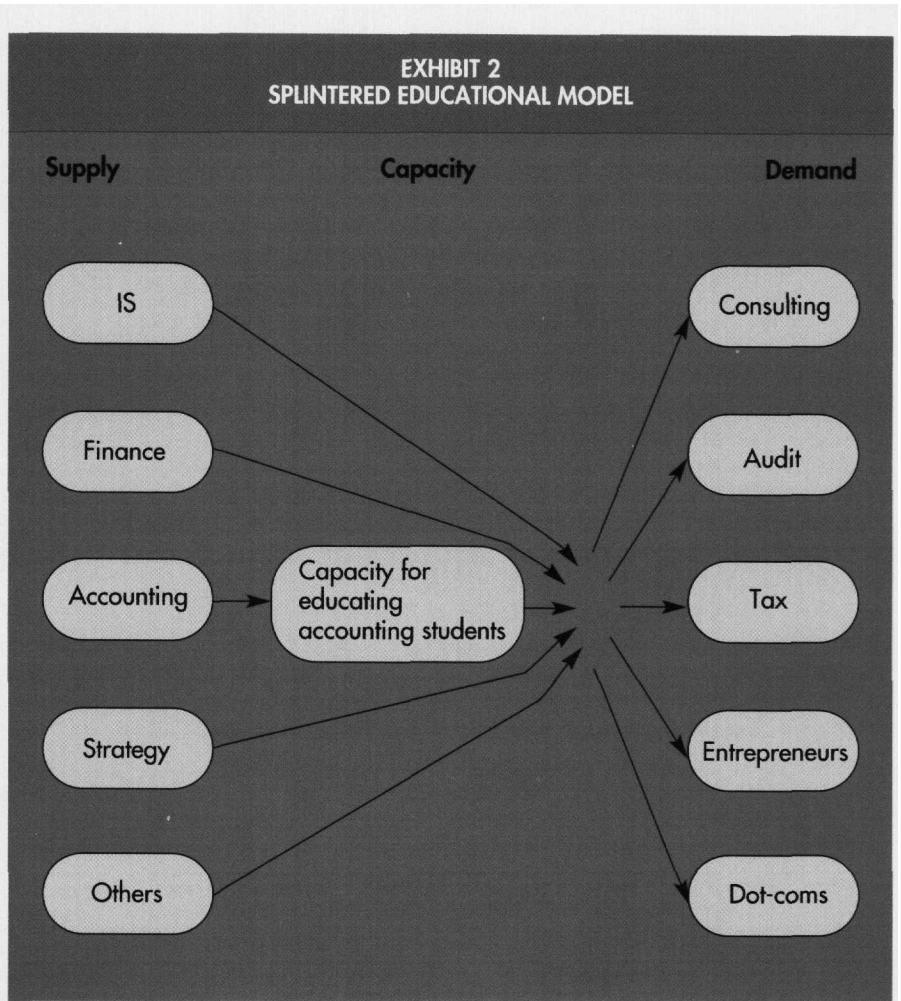
and Cognitor), creating specialty certifications, and participating in the development of a new reporting format using XML (XBRL) are attempts to implement the Vision.

Non-Big Five CPA firms have revised the types of services they offer, too. Tax, audit, and write-up services have given ground to personal financial planning, fraud auditing, human resources, various nonaudit attest services, information systems, and business advising services.

More than any other entity, Big Five firms have assumed completely new roles, no longer referring to themselves as accounting firms, but as professional service firms. During the period from 1993 to 1999, revenue from consulting services grew at a compound annual rate of 27%, tax revenue at 13%, and audit and assurance services revenue at 9%. In 1993, the Big Five's accounting and auditing services averaged 51% of total fees, tax services averaged 22%, and consulting and other services averaged 27%. By 1999, accounting and auditing had slipped to 33% of total fees, tax services were at 18%, and consulting and other services had grown to an average of 49% of the fees.

The Big Five have expanded their list of services and their background requirements for entrants to the profession, and experienced hires reflect these changes. Because of regulatory pressure and other business reasons, the Big Five firms have even divested certain business units. Additionally, they are paying premiums to students and employees who provide client services that leverage technology and take advantage of globalization opportunities.

The IMA has responded to business developments by changing the name of its journal from *Management Accounting* to *Strategic Finance* and by redirecting the focus of its content. IMA members are now referred to as "finance professionals" instead of "management accountants." The IMA has added a new international CMA/CFM certification and has initiated several studies to determine the impact of environmental changes on members. Like the AICPA, the IMA is searching for new services that will ensure member success. Finance profes-



sionals (accountants) have evolved into trusted business professionals that work with management in the decision-making process. There is no doubt that the IMA's reorientation places finance professionals firmly in the management ranks rather than in the role of accounting watchdog.

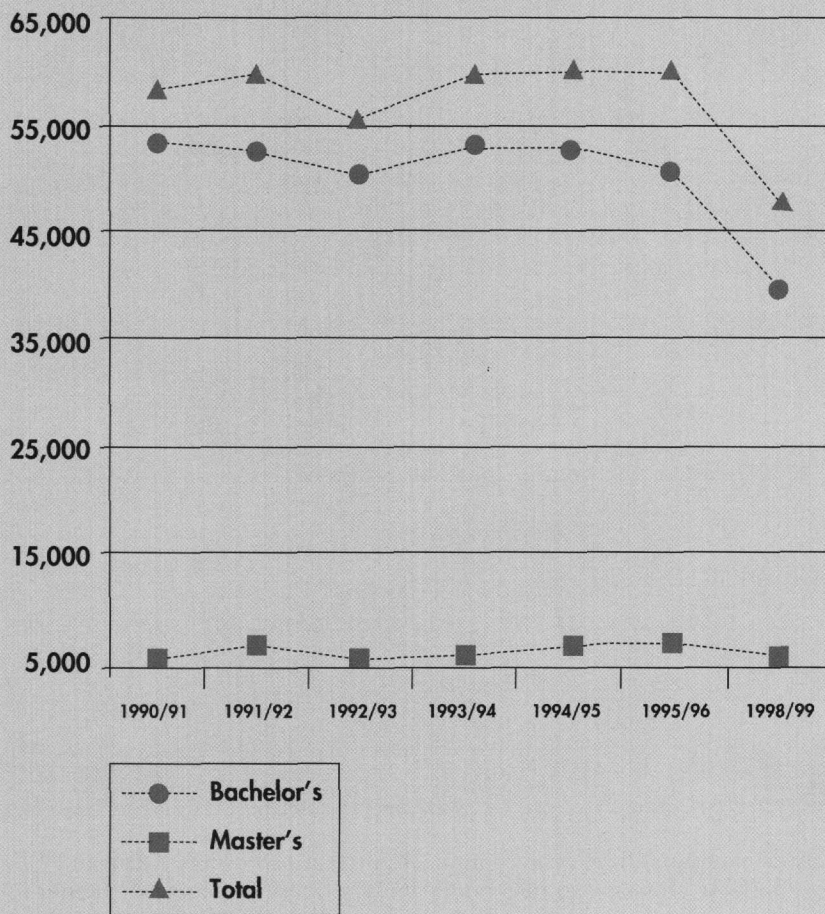
With respect to accounting education and its collective response to the changing business environment, the AAA's actions are significant. It began a benchmarking program to help schools implement needed changes and hired a full-time faculty development director to help faculty members stay abreast of current developments. The AAA is also taking advantage of electronic publishing opportunities that provide a significant source of revenue to support change activities.

Although there is evidence of a willingness to change, individual school and faculty AAA members have not been as proactive as the organizational

body that represents them. In all fairness, effecting change in accounting education is more difficult than in the other groups. "Business has to be more nimble [than education]," said one interviewee. "It is shaped quickly by market forces. Higher education is not so nimble—it's only slowly shaped by market forces."

Education's lack of agility can be attributed to a university hierarchy of departmental and college curriculum committees, university administrators, and boards of regents. For accounting programs, this hierarchy is further entrenched in the requirements of state regulatory agencies and CPA exam eligibility. These different chains of commands must approve any changes to be made to the accounting curriculum. While shielding universities from the problems that exist in the outside world, education's bureaucratic system can also stifle the adaptation that would be necessary to survive in the marketplace.

EXHIBIT 3
TREND IN ACCOUNTING GRADUATES



Effects on Accounting Programs

Schools that have resisted change are finding that students are bypassing the accounting major for more popular and highly paid areas such as information systems (IS), finance, logistics, supply chain management, e-commerce, and strategy. The traditional model for accounting education (see *Exhibit 1*) has lost its appeal for students looking to enter modern business organizations.

The traditional model worked because the supply of students filled the educational pipelines, which mostly flowed into accounting firms. The hiring model included a short "apprenticeship" in public accounting after which an individual had to decide whether to remain in public accounting or pursue a career in industry, inter-

nal audit, or elsewhere. Equating student supply, academic capacity, and hiring demand ensured that attracting and placing entrants to the profession could be taken for granted. Although most college accounting programs continue to reflect this model, it has been displaced in reality by a splintered model (see *Exhibit 2*).

This splintered model demonstrates the problems facing accounting departments. While businesses continue to need accounting services, there is a significantly smaller supply to meet the demand. The reduced supply of accounting students can be traced to the lure of options like IS, finance, and strategy, which have become much more prominent and attractive in the wake of changes in the business world. Ironically, employers that used to com-

prise the nucleus of the accounting market are the very same group presenting these nonaccounting options to prospective employees, as the Big Five and other accounting firms transform into professional services firms.

The Impact on Enrollment

For years, the AICPA has conducted a supply-and-demand study, asking schools the number of students enrolled in their accounting departments and employers the number of offers made. With respect to enrollment, the study's findings are alarming. *Exhibit 3* traces the number of students that have graduated with accounting degrees over the last 10 years.

For more than 20 years, the average number of students receiving bachelors and masters degrees in accounting had been 60,000 per year. For the 1998/1999 school year, the number of accounting degrees awarded was 47,600, a 20% decline from the 1995/1996 school year (the last year comparable data are available).

There is no reason to think the low graduation figure for 1998/1999 is a fluke. For 1998/1999, the total number of students enrolled in accounting programs was 148,000, a 23% decline from 1995/1996, when there were 192,000 students enrolled. Fewer undergraduate students accounted for most of the decline; the number of master's in accounting students remained stable, possibly because of the 150-hour rule. The number of students pursuing master's in taxation degrees fell from 4,000 to 2,000 during the same period. From 1990 to 2000, the percentage of college students majoring in accounting dropped from 4% to 2%, according to the AICPA's "Topline Report" and a 1990 Gallup Poll. Even more disturbing is that the percentage of high school students saying they plan to major in accounting decreased from 2% to 1% over the same period (AICPA Taylor Group Report).

The survey data collected supports the conclusions reached by the AICPA Taylor Group Report. *Exhibit 4* shows the significant decrease in student population as reported by faculty at more than 300 colleges and universities.

A majority of the faculty believes that the number of accounting majors

Technology and consulting employers began increasing their salary offers significantly while public and private accounting salaries remained level.



has decreased while the number of nonmajors taking accounting classes and enrolling as accounting minors has stayed about the same. They further believe that the number of nonaccounting business majors taking accounting classes has increased. This shift in the student makeup places pressure on accounting faculty to adjust their teaching methods to accommodate the educational needs and workload expectations of the increasing numbers of nonmajors.

Exhibit 5 indicates that faculty members believe that the quality of accounting majors has decreased during the past five years while the quality of accounting minors and nonaccounting, business majors has stayed the same.

Factors Affecting Enrollments

Decreased salary levels. For much of the last 10 years, public accounting firms offered business school graduates salaries that were higher than other finance-related employers, and only marginally less than those offered by technology and consulting companies. About four years ago, however, technology and consulting employers began increasing their salary offers significantly while public and private accounting salaries remained level or even decreased. The starting salaries of technology and consulting companies extract a heavier toll from accounting department enrollments than other business school departments because they compete for the same analytically-minded students.

Discussions in the focus groups confirmed that students perceive that accounting firms have not kept pace with salary expectations. A partner from a Los Angeles firm expressed the following sentiment:

We used to pay the highest. I remember when I graduated in 1980, I was

paid a lot more than my finance friends or other graduates. Now we do not. We have a monopoly on the attest function ... but we discount our monopoly service the most.... I will go in for a bid for a client at \$100,000 and somebody will come in and underbid me by \$50,000. In addition, then I cannot pay the salaries. So the firm says, "We'll pay more when the realization is higher." Their realization is higher in consulting. I had a discussion with a partner—a major player at one of the firms—and he believes that when the pain hurts enough, we will start paying more.

More attractive career alternatives. Students entering business schools today have more attractive career alternatives than ever before. With these new career choices come new majors like information systems, e-business, logistics and supply chain management, strategy, and various types of finance specialties, which increase the competition for accounting programs and make attracting bright students that much harder. To make matters worse, these majors prepare students for careers with professional service firms and corpo-

rate finance departments, employers that traditionally recruited accounting students.

Students choose riskier majors and career paths. Majoring in accounting was considered a wise choice because the employment prospects were high. Given the strength of today's economy, however, students are less cautious, risking security for the potential of wealth and career growth. Consequently, fewer students feel compelled to enter a stable profession like accounting.

Misinformation about accounting and accounting careers. After studying high school and college students' perceptions of accounting, the Taylor Group stated the following:

Most students, even those pursuing an accounting degree, are ignorant of the basics of an accounting career. They cannot accurately describe the work of an accountant, their responsibilities, their opportunities, or the types of firms an accountant might work for.

Many students see a CPA license, as opposed to an advanced degree such as an MBA, as limiting their career options, rather than expanding them.

EXHIBIT 4
MAKEUP OF STUDENTS TAKING ACCOUNTING COURSES

Kinds of students	Percent of faculty reporting that student population has ...		
	decreased	stayed the same	increased
Accounting majors	63.5%	25.0%	11.5%
Nonbusiness majors	17.9%	52.9%	29.2%
Accounting minors	23.9%	55.5%	20.6%
Nonaccounting business majors	16.9%	37.2%	45.9%

Many proponents of the 150-hour rule now consider it a mistake that both increases opportunity costs and forces students to over-specialize.

One [student] summed it up aptly, "It seems like you can do a lot more if you get an MBA.... If you get a CPA, you have to be an accountant, but if you get an MBA, you can do anything you want."

For students, accounting most often is associated with money, numbers, math, and taxes. And except for the rare math-and-details-oriented student, these are not positive attributes ... [even accounting and business majors] see accounting as a necessary evil. A commonly expressed thought was, "It's a dirty job, but somebody has to do it." In fact, many choose accounting because of the negative perceptions, thinking that these negative perceptions must lead to higher demand for accountants, greater job security, and possible higher pay. As one said, "Accounting is something that is in demand, because no one wants to do it."

The misconceptions surrounding accountants and the work they do are harmful primarily because the misinformation discourages would-be candidates from entering the profession. Even more alarming is the possibility that the misinformation attracts the wrong candidates.

There are several different reasons for these misconceptions: high school guidance counselors' misunderstanding of the profession, inaccurate definitions of accounting skills as defined on high school aptitude tests, high school bookkeeping classes disguised as accounting courses, and introductory college courses that give the impression that accountants are nothing more than scorekeepers. In some states, including New York, high school accounting classes (really bookkeeping) do not carry credit in college preparation programs, leading better students to believe that accounting is a less rewarding profession.

The 150-hour rule has increased the opportunity cost for students.

Given the changes in the accounting profession, many proponents of the 150-hour rule now consider it a mistake that both increases opportunity costs and forces students to over-specialize. In today's job market for bright, analytically minded students, the opportunity cost to become an accountant—or at least to qualify for the CPA license—is too high. In the course of interviews and focus groups, many accounting professionals said the theory behind the 150-hour rule was sound, but its execution was poor (just more of the same). Still others said the underlying vision of education for an accounting profession is no longer compelling.

Improving Accounting Education

Attracting more students to the accounting profession depends on substantive changes to the current educational model. Within that model, a number of areas need to be addressed, including closer examination of course content and curricula, pedagogy, technology, faculty development and reward systems, and strategic direction.

Course content and curricula. Whereas faculty interests currently shape accounting courses, the curricu-

la should be determined by the demands of the market. Consequently, accounting classes often are narrow in scope and irrelevant. Accounting education does not expose students to concepts like globalization, technology, and ethics.

Pedagogy. The educational model does not prepare students for the dynamic business world they will encounter upon graduation. Conventional teaching methods thwart students' ability to learn real-world skills. Additionally, students spend too much time listening to lectures and not enough time engaged in activities that develop business skills and knowledge.

Technology. Class time devoted to information gathering and recording is pointless, because information is inexpensive and readily available. Students do not have a thorough understanding of technology's impact on business. Nor are they cognizant of how technology can be leveraged to make business decisions.

Faculty development. Because accounting educators often isolate themselves from the rest of the business school—and the business professional community in general—they are not in touch with market expectations.

EXHIBIT 5
QUALITY OF STUDENTS TAKING ACCOUNTING COURSES

Kinds of students	Percent of faculty reporting that student population has ...		
	decreased	stayed the same	increased
Accounting majors	43.7%	38.2%	18.1%
Accounting minors	31.7%	60.7%	7.6%
Nonaccounting business majors	37.5%	47.3%	15.2%

Students will never believe accounting is a great profession unless those that practice it exude that belief first.

Strategic direction. Because some schools have made changes while others have not, the difference in the quality of accounting programs is becoming increasingly noticeable. Because of accounting education's lack of leadership and direction, competition in education has increased, resulting in fewer resources for accounting programs.

What Can Be Done?

The survival of the current accounting education model is secondary to the goal of increasing the value of accounting students and adequately preparing them for the fast-changing business world. Practitioners that work with educators, recruit students, and serve on advisory boards have a wonderful opportunity to help realize this goal by preaching the message of change to educators and helping them acquire the resources to achieve change. A discussion between business leaders and senior college administrators frequently carries more weight than a department chair working from within the system.

Additionally, practitioners can help educators focus on the following items:

Program assessment. Every accounting department and program is unique. Educators need to understand that a one-size-fits-all approach does not work. It is imperative that faculty members help recruit strong students, be familiar with student expectations for the program, develop a broader knowledge of students' prospective employers, and have a keen understanding of employers' expectations for new hires.

In their new proactive role, educators must also reassess the value of their academic degrees, making certain there is a real need for all programs. To conduct a proper evaluation, the following questions need to be asked:

■ Should a separate undergraduate accounting program be offered?

■ Should the accounting degree be combined with a related degree in strategy, information systems, or finance?

■ Should an accounting minor be the only degree offered?

■ Should a fifth-year or master's program be offered?

Should the accounting department become a service department to other business-school programs?

■ Should an accounting concentration be offered within an MBA program?

■ Should an accounting PhD program be offered? If so, how does it need to be structured?

■ Is a completely new accounting program necessary?

Curriculum and course content.

Practitioners should impress upon educators the need to teach classes that are relevant to today's business world, including technology, globalization, and ethics. With this in mind, educators need to consider developing partnerships with other disciplines so that accounting students have a broad perspective of the economic marketplace.

Pedagogy. Teaching methods must also be examined to train educators in working with students to develop relevant skills. Practitioners should remind faculty members that conventional teaching methods are necessary, but students can gain practical business experience through internships, field studies, and service-learning assignments. In fact, educators should be on the lookout for opportunities to include business professionals in the educational process.

Pedagogy that includes group assignments will strengthen students' understanding of leadership and teamwork, while role-playing will illustrate the value of negotiation. Likewise, technology assignments will broaden their apti-

tude for technology, and large projects will hone project management skills.

An exciting career choice.

Accounting is grossly misunderstood by students. Educators and practitioners need to rectify misconceptions and do a better job of selling the profession's image. They should point out the many exciting and rewarding careers available to accountants, from audit, assurance, and tax services to consulting, finance, investment banking, and government. Additionally, students need to be assured that the CPA brand has not lost its market value. Students will never believe accounting is a great profession unless those that practice it exude that belief first.

Is the End in Sight?

If accounting education fails, the practice of accounting will not be far behind: There will simply not be enough entrants to keep it alive. Through cooperation and involvement, practitioners and educators can implement the needed changes that will breathe new life into an academic program that has grown old and stale. However, the goal of restoring the accounting discipline to its former pre-eminent position in the business school will not be accomplished unless educators are joined by practitioners. □

W. Steve Albrecht, PhD, CIA, CFE, CPA, is the Arthur Andersen LLP Alumni Professor of Accounting and associate dean of the Marriott School of Management at Brigham Young University. Robert J. Sack, CPA, is an emeritus professor of business administration at the Darden Graduate School of Business Administration, University of Virginia, and a retired partner from Touche Ross & Co. (now Deloitte & Touche).