

CHAPTER 5

Improving Accounting Education

Thus far, we have discussed the bookend problems of decreasing student enrollments and dissatisfaction among graduates. Here we discuss concerns we heard about our educational models. The one message that came across loud and clear in our research, and of which we became convinced, is that most of the educational models we use are “broken” or in desperate need of repair. In many ways, it is not what we have done that has resulted in our current situation as much as it is what we have not done. Accounting education is perceived as having a number of problems, including:

- **Course content and curricula**
- Our curricula are too narrow and often outdated or irrelevant. They are driven by the interests of faculty and not by demands of the market.
- We are not exposing students in the right ways to highly relevant concepts such as globalization, technology, and ethics.
- **Pedagogy**
- Our rule-based, memorization, test-for-content, and prepare-for-certifying-exam educational model is inefficient, but more importantly, it does not prepare students for the ambiguous business world they will encounter upon graduation.
- Our pedagogy often lacks creativity, involves too much lecture and dependence on textbooks, and does not develop the students’ ability-to-learn skills. We are too bound by our class time and do not require enough student contact with business.
- **Skill development**
- Our educational models focus too much on content at the expense of skill development—skills our students need to be successful professionals.
- **Technology**
- We teach accounting as if information were still costly. Information is now inexpensive and the part of our curriculum that is devoted to information gathering and recording is a waste of time. Information processing, which has been an important part of our educational model, can now be managed quickly by anyone using the right software.
- Our students are not exposed enough to the impact of technology on business and ways in which technology can be leveraged to make business decisions.
- **Faculty development and reward systems**
- Accounting faculty are often isolated from business-school peers and from business professionals. As a result, we are becoming increasingly out of touch with market and competitive expectations.
- **Strategic direction**
- While a few schools have made good progress in the past few years, changes have not been substantive or pervasive enough and some of the changes that have been made are in the wrong direction. As a result, differences in quality between schools are increasing.
- Because of accounting education’s lack of leadership and direction, competition in education has increased, resulting in fewer resources for accounting programs.

We have heard these criticisms before, but never with such collective force. Individually, they might be ignored or dealt with on a piecemeal basis. Taken together, they provide a clarion call for a dramatic change in direction. Our situation is not unlike that of the Titanic. We are being warned that there are icebergs ahead. We can do as the captain of that ship did and push full-steam ahead or we can work hard to improve the educational product we deliver. The several studies of accounting education, beginning with the Bedford Report in 1986, have warned us that changes were needed. While some educators have heeded previous warnings and made changes, we have not done enough. As one educator said:

We've been revising the curriculum significantly over the last several years, trying to react to the marketplace demands. Now we are beginning to realize that the changes needed may be significantly more than previously anticipated. —Participant, AICPA Vision Focus Group

In this chapter, we will discuss perceived problems with accounting education. We will begin by making three general observations, followed by a discussion of content, pedagogy, skill development, technology, curricular, and strategy issues.

General Observations about Accounting Education

Observation #1—Some Schools Have Changed

It is obvious that a few schools have heeded the call for change and have tried hard to keep up with changes in the business world. However, it is just as obvious that even these changes have not been pervasive or substantive enough. The result of these changes, however, are increasingly larger differences in quality between accounting programs. The following comments illustrate this observation.

I think a lot of the changes being made in accounting education today are piecemeal. It's a start and that's important. But, I think that a lot of us feel that it's not moving fast enough and it's not pervasive enough to really provide as many graduates that are more broadly educated and have the backgrounds that we need. Some of the programs that were involved in the Accounting Education Change Commission have made very pervasive changes. They went through and looked at their entire programs and integrated all the way through the fifth year. That's a lot of what we like to see happen. —Participant, New York Focus Group

What I see, because I go to so many schools, is that there are different programs in place at each school and every student is going through a different type of education. Some of the basic accounting stuff may be there, but the advanced-level stuff or some of the things that bring it home—you know, the school activities—those vary widely by college. So, if you recruit students from a lot of schools like I do, you're going to see that some have good experiences that their school provides for them and others don't. And, when you put them together, you notice the differences right away. —Participant, New York Focus Group

Unfortunately, the perceptions expressed in these quotes suggest a scattershot approach by schools and faculty. This conclusion has support in the responses we received to our survey. To understand what has been taking place in accounting education, we asked department chairs to describe the changes that have been made to their undergraduate and graduate programs during the past ten years. Their responses begin on the next page.

Question Asked— Undergraduate Accounting Programs	Percent of Department Chairs Who Stated That This Response Best Describes the Changes They Have Made	Percent of Department Chairs Who Stated That This Response Next Best Describes the Changes They Have Made
Have combined our accounting major with another business major such as finance or information systems	5.7	11.2
Have totally revised our accounting major curriculum and/or requirements	24.6	14.3
Have added several new classes and updated as needed for technical content changes but still have basically the same accounting curriculum we had ten years ago	39.3	26.5
Have not added or deleted many classes but have made substantial changes to the pedagogy of existing classes as well as updating as needed for technical content changes	24.6	39.8
Course content, pedagogy, and classes are the same as those of ten years ago	5.8	8.2

Question Asked	Percent of Department Chairs Who Stated That This Response Describes Changes They Have Made to Their <i>Undergraduate</i> <i>Accounting Programs</i>	Percent of Department Chairs Who Stated That This Response Describes Changes They Have Made to Their <i>Graduate</i> <i>Accounting Programs</i>
Have added skills-development components to most of our accounting classes	64.9	41.0
Have added technology components to most of our accounting classes	73.1	47.8
Have added requirements that students visit and/or interact with business professionals and/or firms to most of our accounting classes	20.9	15.7
Have added group-work components to most of our accounting classes	67.9	43.3
Have added service-learning assignments to most of our accounting classes	7.5	6.0

While these changes are on target, on the whole, they are inadequate. Very few successful businesses would report that they were working with substantially the same product they had ten years ago. Few would admit that, in the last ten years, they had only worked technology into 47.8 percent of their activities. When we asked department chairs to compare their 1990 and 2000 course catalogues and identify specific courses that have been added or dropped, we were disappointed with the types of changes described. While we admit that it is difficult to assess degree of change from the response to a one- or two-sentence question, it appears that many of the changes made have merely added more in-depth coverage of various accounting topics. Further, it appears that the changes have been made in response to interests of the faculty rather than to market demands. Here are the specific courses that have been added or dropped from curricula of respondents. In many cases, there were several schools that added or dropped the same course.

Undergraduate Courses

Content-Type Courses Added to Undergraduate Program	Broadening-Type Courses Added to Undergraduate Program	Content-Type Courses Dropped from Undergraduate Program	Broadening-Type Courses Dropped from Undergraduate Program
Advanced managerial accounting	Tax research	Financial accounting theory	Introduction to accounting—survey course
Advanced tax	Financial statement analysis	Not-for-profit	Estate and gift tax research
Not-for-profit accounting	First-year course on core concepts	International accounting	Governmental
Accounting theory	Accounting information systems	Advanced accounting	Computerized accounting
Advanced accounting	Enterprise systems and business process analysis	Federal tax III	Financial statement analysis
Controllership	Financial management for nonmajors	CPA Review	
Advanced cost accounting	Accounting technology and computer applications	Third auditing class—EDP auditing	
Intermediate financial III	EDP auditing	Advanced cost accounting	
EDP Computer Auditing	Financial accounting research	Intermediate accounting II	
Accounting for quality		Controllership	
Cash management	International accounting and finance	Electronic spreadsheets	
Accounting history	Competitive strategy using accounting information	Governmental accounting	
Governmental auditing	Advanced written communications and presentation	Regulatory accounting	
Estate and gift taxes	Personal finance	Advanced tax	
Advanced budgeting		Business law II	
Advanced auditing		Intermediate II	
Financial for nonmajors		EDP auditing	
Managerial for nonmajors		Partnership and fund accounting	
Tax accounting II		Accounting theory	
Internal auditing		Third auditing class	
Governmental accounting		Introduction to accounting	
International accounting		Software for small businesses	
Accounting theory		Estate and gift taxes	
International accounting		Oil and gas accounting	

Graduate Courses

Content-Type Courses Added to Graduate Program	Broadening-Type Courses Added to Graduate Program	Content-Type Courses Dropped from Graduate Program	Broadening-Type Courses Dropped from Graduate Program
Auditing theory	Database management, networks and JAVA	Oil and gas taxation	Professional conduct and ethics
Capstone accounting course	Shareholder value creation	Advanced managerial accounting	Contemporary issues in accounting
Tax III	Accounting for e-commerce	Advanced auditing	
Comparative accounting theory	Tax Research	CPA review	
EVA	Communications	Governmental accounting	
Advanced accounting II	Financial statement analysis	Accounting theory	
Advanced managerial accounting	Computer applications	Budgeting and control systems	
Tax practicum	ERP	Estate and gift taxes	
Oil and gas accounting	Risk analysis and control	Partnerships and S-Corps	
Advanced accounting I	Accounting services marketing	Accountometrics	
International accounting	Computer and operational auditing	Advanced tax and tax planning	
International and multijurisdictional taxation	Business consulting	Management accounting in textiles and manufacturing	
Operational auditing	Forensic accounting	Internal auditing	
Strategic cost management	Financial statement analysis	Computer auditing	
Advanced budgeting	Organizations and society	Oil and gas tax policy	
Governmental accounting	Joint IS/Acctg. Program	Public utility accounting	
History of accounting	Research methodology		
Accounting theory	Valuation, mergers and acquisitions		
Tax policy	Ethics in tax		
Advanced auditing			
Financial accounting for nonmajors			
Managerial accounting for nonmajors			
Corporate financial reporting			

While the list on the preceding page identifies only the names of classes added or dropped, *there were significantly more classes added than dropped*. Consistent with the responses to the earlier questions about curricula changes, it appears that we are working around the edges, adding more similar classes, rather than making substantive changes to our curricula.

Observation #2—Competition Has Arrived

A second observation is that increased competition has come to accounting education. For years, public and not-for-profit private universities have had a monopoly on higher education. Within that educational setting, accounting programs have had a monopoly on educating students to become professional accountants in industry and public accounting. Firms that wanted to hire accountants focused their recruiting activities on traditional college campuses and accounting programs. These educational and hiring monopolies no longer exist. Two major types of competition have arrived. The first is competition from other business and nonbusiness disciplines. As the work our graduates perform has changed, other majors such as finance, information systems, computer science, logistics, strategy, and even the generalized M.B.A., have become increasingly attractive to recruiters. We have lost our monopoly on providing students who become professional accountants.

In addition, the popularity of business school, especially M.B.A., rankings has resulted in a transfer of resources away from accounting programs to other business programs. As deans and other school administrators have scurried to improve their M.B.A. rankings, they have directed more resources toward M.B.A. programs. It is obvious from our department-chair survey that accounting administrators are witnessing this shifting of resources. When we asked them to think about the money, faculty, and other resources that their universities allocate to the various business-school programs and how their accounting resources stacked up against other programs, they responded that the relative percentage of resources allocated to accounting programs has:

Response	Percent of Department Chairs Who Responded
Increased relative to other business programs	5.7
Stayed about the same relative to other business programs	32.5
Decreased relative to other business programs	61.8

When we asked chairs whose resources had decreased relative to other business programs to rank-order the most important reasons for the decreases, respondents ranked reasons in the following order:

1. Other existing programs, such as information systems and logistics/supply-chain management, have taken resources from accounting.
2. The M.B.A. rankings in business periodicals have diverted resources away from other business-school programs toward M.B.A. programs.
3. We have fewer students in accounting than we did previously.
4. Accounting is not perceived as important a discipline at our school as it was previously.
5. Resources at our school have decreased and everyone now has fewer resources than before.

These results emphasize the point made earlier—that we are losing students to other, more attractive business and related programs and that these other programs are being rewarded with larger budgets.

The second type of competition is the proliferation of for-profit universities, such as the DeVry Institute of Technology and the University of Phoenix, and from distance-learning programs. These types of schools are now among the largest private universities in the U.S., based on enrollment. During the past five years, more than 1,000 for-profit universities have begun operations, some of which are now actively seeking approval by accreditation bodies, or partnering with accredited traditional universities. One 1998 survey, for example, found that 40 percent of for-profit universities plan to grant degrees in partnership with accredited institutions of higher education. Recent *Wall*

Street Journal articles addressed this new kind of competition. Consider the following quotes from those articles:

Perhaps nowhere is the pinch between the old way of doing business and the new being felt more acutely than in the very birthplace of the Internet: the hallowed halls of academia. Some \$6 billion in venture capital has flowed into the education sector since 1990—almost half of it since last year, when Cisco Systems Inc.’s John Chambers dubbed education “the next big killer application on the Internet.” Analysts expect new investment of \$4 billion in the sector this year. From notHarvard.com to UniversityAccess.com to Medschool.com, the Internet landscape is now dotted with learning ventures offering everything from corporate training to software designed to improve the ways schools run to long-distance learning. With so many entrepreneurs out to chip away at their brick-and-mortar souls, colleges and universities of all stripes are defending their turf—and what analysts estimate to be a \$250 billion market. —Ann Grimes

Media financier Herbert Allen, Jr. wants to bring some show-business magic to one of the Internet’s biggest and most controversial potential markets: beaming classes from top-notch colleges to vast numbers of students via the Web. Mr. Allen is the prime backer of Global Education Network, a start-up that has been quietly working over the past year and a half to bring Ivy League universities and other top-tier liberal-arts colleges together in a consortium to provide online education. “If we’re right, we will create a product that will challenge the product being generated in their classrooms,” said Mr. Allen. To do that, he has infused the endeavor with a media-savvy sensibility. Programmers and film crews are already busy assembling a slate of “beta” courses, creating computer graphics and taping lectures on several campuses, with plans to begin rolling out a test version of the service by the end of the year. —Thomas E. Weber

Distance programs may be the least costly and most efficient of all educational delivery systems and can be provided to large numbers of students almost as inexpensively as they can to a few students. The fact that these programs are going head-to-head with traditional universities is obvious from the mission statement of the Western Governors University, which reads:

The principal mission of Western Governors University is to improve quality and expand access to post-secondary educational opportunities by providing a means for individuals to learn, independent of time or place, and to earn competency-based degrees and other credentials that are credible to both academic institutions and employers.

These competitors intensify the need for traditional accounting programs to distinguish themselves in unique ways. Failure to do so will result in these lower-cost alternatives causing the decline in our enrollments to accelerate.

Observation #3—The Most Critical Element in a Student’s Successful Classroom Experience is an Inspiring Professor

A third observation is, regardless of curricular and other changes made, an effective and inspiring teacher makes more difference to a student’s educational experience than any other factor. When we asked focus-group participants why they studied accounting and what they liked most about their accounting education, the answer was always the same—it was an inspiring and passionate professor who made the difference. The following quotes are typical of the comments we heard most frequently.

My favorite class was my tax class. My professor was energetic, he made the class think about the class, and forced us to use our brains as to why things are the way they are. And he would just sit there and watch you think. If you were trying to figure out what was going on, he was patient. And in his tax course, you were overly confused, but he would just help you along—he’d never give you the answers. He was very passionate. And, when the class was over, he had chalk all over his arms, all over his shirt because he was so excited about teaching the course. —Participant, Los Angeles Focus Group

The best experience I had was a teacher that I had in advanced accounting. I was competing with a lot of World War II veterans and they were highly motivated. I had this teacher—we called her

Mad Mary—but she really stretched us. That is the sign of a good teacher, not just one that gives a test and didactic type of teaching, but one who really stretched the students—and she did that in advanced accounting. Nobody could think that mergers and acquisitions could be that exciting, but she managed to pound it into us and you know, made us work. —Participant, Los Angeles Focus Group

The class I got the most out of was an audit class. It was really different. We did a real audit and worked in a team environment. You had an end product at the end of the class that you presented to the rest of the people in the class. There was a very passionate teacher—he had real-life experience that he could bring to the class and really helped open up a lot of possibilities in the auditing field that I hadn't known. —Participant, Los Angeles Focus Group

Perceived Problems with Accounting Education

The practice community believes that accounting education has serious problems. While the practice world is not above criticism, that is not the purpose of this study. As a result of completing this study, we have come to the conclusion that the problems our constituents have identified need to be addressed seriously. There is hope. The first step in solving the problems is to understand clearly what critics are trying to tell us. We wish you could have walked in our shoes during the past eight months. Our experiences during that time have convinced us that if serious changes are not made, accounting education will lose its relevance to our business schools, to our students, and to the employers who might otherwise be interested in our students.

There are six major categories of perceived problems: (1) course content and curriculum, (2) pedagogy, (3) skill development, (4) use of technology, (5) faculty development and reward structures, and (6) strategic planning and direction of accounting programs and departments. We will address each of these.

Problems with Our Course Content and Curriculum

Critics argue that our course content and curriculum needs a complete overhaul. They contend that the minor tinkering we have been doing by adding assignments to selected classes or adding a few new classes has not been sufficient. Think about the traditional course requirements for an accounting major:

- An introductory accounting course where debits and credits are taught and where financial statement preparation is emphasized.
- An introductory managerial course that teaches cost accumulation and the preparation of budgets
- One or more intermediate courses—or should we call them “financial accounting fast”—where the students study detailed rules and pronouncements related to financial statement line items.
- Cost accounting—or should we call it “managerial accounting fast”—that reinforces and goes into more detail on the topics covered in introductory managerial accounting.
- Several specific auditing and tax courses where students cover detailed auditing standards and IRS rulings.

While this traditional program may create a good accountant, the business world has told us that they want a good businessperson. As one interviewee stated, “the practice profession has been highly innovative while accounting education has not. What we teach no longer matches what the core competencies of the profession are.” Our focus-group participants told us they appreciated the rigor of our courses, and feel the overall view instilled by an accounting education is invaluable. However, they urged us to cover the basics quickly and avoid the temptation to increase curricula with follow-on courses refining the basics and studying details in more depth. After one focus-group participant suggested that we stop after one intermediate class, there was clear consensus in support of that view. One respected professor expressed this concern well when he said:

Our courses are too detailed and too technical, especially intermediate and cost accounting. We need to admit that we were wrong in our curriculum decisions.

Our insistence on covering topics in so much detail has led to many criticisms regarding accounting curricula and course content. Some of the most frequent criticisms are:

1. Our courses are too often taught as a series of technical rules, resulting in a conformance orientation.
2. Our curricula and content are too focused on professional examinations and achieving the right answer.
3. Our curricula are too narrow, do not expose students to a broad business education, and do not use enough real-world examples.
4. We do not use a global perspective to teach accounting.
5. We do not deal enough with values, ethics, and integrity.
6. We teach too much of what accountants used to do instead of what they will do.
7. We have developed 150-hour programs that require students to take additional content-based courses rather than learning critical skills that will make them successful.
8. Our Ph.D. programs, which are designed primarily to help faculty develop narrow research agendas, perpetuate the focus on detailed specialization which carries into classrooms.
9. Our introductory accounting classes give students the wrong impression of what accountants do. For the most part, they perpetuate the bookkeeping and rule-based orientation students were exposed to in high school.
10. We do not teach students how technology has reshaped everything we do in business. Rather, we assume we have adequately covered technology when we give them spreadsheet and database assignments.

The following quotes highlight some of these criticisms.

The tremendous benefit that comes out of an accounting education is the organization and the structure and the discipline and the understanding you gain from looking at the business from an accountant's eyes. But then the course goes off into a study of paragraph 114 of SFAS 131, and all that perspective is lost. —Interviewee

New graduates don't know anything about business. Now, that's a broad, sweeping, generalist kind of statement, but they don't understand manufacturing. They don't understand distribution. They don't understand banking. They don't understand insurance. And yet, they get thrown right into, in some cases, very large organizations, in some cases small organizations, and they don't seem to have a grasp of what a business does. —Participant, Chicago Focus Group

I've found that I'd never had any hands-on stuff in school—you only get that in the internship you go to during the summer. Other than that, you get zero hands on, it's all textbook. You get out in the real world, and in these last six months, I've found it's not textbook. It's very much looking at things and seeing how the numbers interact with each other and seeing that relationship that no one helped me understand in school. —Participant (recent college graduate), Chicago Focus Group

Students need to be exposed to ethical issues and dilemmas. We had an experience this summer where we had an intern with us—an individual from a big university. He took it upon himself not only to pad his expense report, but to teach the other interns how to do it. Initiative? We terminated that individual in the middle of the internship and explained to the university what was going on. Somewhere in the university, students have got to get ethics training. —Participant, Chicago Focus Group

To help us assess which topics (content knowledge) are most important, we asked respondents to our survey to rank various topics as 1 (not important), 2 (somewhat important—part of a course), 3 (moderately important—one college course), or 4 (very important—more than one course). The following are the results:

Topic	Average Faculty Rank	Average Practitioner Rank
Financial accounting	3.74	3.57
Information systems	3.54	3.56
Finance	3.36	3.28
Taxes	3.30	3.28
Managerial accounting	3.25	3.05
Auditing/assurance services	3.13	3.06
Economics	3.10	2.81
Technology topics	3.08	3.01
Statistics/quantitative methods	3.00	2.73
Business strategy	2.91	3.15
Business law	2.84	2.95
Global/international business	2.80	2.92
E-commerce	2.77	3.00
Marketing	2.63	2.45
Organizational behavior/human resources	2.60	2.46
Ethics	2.54	2.89
Operations/supply-chain management	2.51	2.48
Accounting research methods	2.13	2.50

It is interesting to note that there are seven topics that practitioners felt were more important than educators: information systems, business strategy, business law, global/international business, e-commerce, ethics, and accounting research methods. These are generally broadening-type courses. Courses traditionally included in accounting programs were ranked higher by educators than by practitioners.

In our focus groups, we heard many complaints about five-year programs; most were criticisms about the way these programs have been developed. Practitioners are very concerned that we have just added “more of the same.” Consider the following comment.

The 150-hour rule is about not only what we are going to add on, but about how we should approach the students’ entire education so that we can make it integrated and stop teaching those things that are no longer relevant. We need to teach them in a different way and look at it as a whole program rather than just an add-on. Too many of the 150-hour programs merely added on more accounting at the fifth year and that’s not what we wanted. —Participant, New York Focus Group

The five-year accounting degree continues to be a challenge, especially due to a lack of reward (differential salary) compared to other options. It is genuinely difficult to advise students to choose the Master’s of Accountancy degree over other options. —Comment on accounting educator questionnaire

To help us assess the validity of these criticisms, we asked department chairs about the nature of their fifth-year programs. We first asked how many had five-year programs and then asked about those programs. Here is what we found when we asked which response best describes the status of their graduate programs in accounting ten years ago and today.

Response	Percent of Department Chairs Who Chose This Response
We didn’t have a master’s degree program in accounting ten years ago and we still don’t have one today.	8.0
We have added a new master’s degree program during the past ten years to comply with the 150-hour requirement to sit for the CPA exam to become a CPA.	31.8
We had a master’s degree in accounting ten years ago but we have substantially revised the degree requirements during the past ten years.	47.7
We had a master’s degree in accounting ten years ago and we have basically the same degree requirements today as we had then.	12.5

Ninety-two percent of respondents offer master's degree programs in accounting. Because we wanted to assess whether the “add-on” criticism was valid, we asked department chairs which of the following responses best describes the nature of their fifth year required to complete the master's degree program at their schools. Here are their responses.

Response	Percent of Department Chairs Who Chose This Response
The fifth year is comprised mostly of accounting courses that help students specialize in an area of concentration, such as tax, assurance services, managerial accounting, etc.	27.2
The fifth year is comprised mostly of courses that are intended to provide students with a broad background in business, such as additional finance, marketing, technology, and communication courses.	7.4
The fifth year is comprised of approximately an equal mix of broad-based and specialty courses.	65.4

While the widespread notion that the fifth year has suffered from add-on accounting courses may be overstated, it is obvious from these data that there have been many specialty courses added. There also appears to have been some broad business courses added. Still, very few schools have effectively built their undergraduate degree with a fifth year that focuses on providing a broad business background.

It may be that we have taken exactly the wrong approach in developing our fifth-year programs. Instead of adding almost exclusively broadening-type experiences and courses, as those who developed the law envisioned, we have added too many additional accounting courses. Because we have a certain kind of training (and tenure), we have used our training to add additional courses that we can teach. The result has been more courses that we can teach without retooling, but narrower and more specialized programs for our students. These specialized programs are not attractive in an environment where the business world is calling for broadly trained accountants.

Problems with Pedagogy

How would you feel if you received personal student-teacher evaluations that not only told you your course content was irrelevant, but also that the way you delivered that content was flawed? That is essentially what critics, including focus-group participants and survey respondents, told us. Here is what they say is wrong with our pedagogy.

1. There is too much emphasis on memorization. Our tests are based primarily on recall. One participant referred to our emphasis on memorization and regurgitate as the “trained-monkey” approach.
2. There is too much lecture, reliance on textbooks as course drivers, and “faculty knows best” attitude.
3. We are reluctant to develop creative types of learning, such as team work, assignments with real companies, case analysis, oral presentations, role playing, team teaching, technology assignments, videos, writing assignments, involving business professionals in the classroom, and studying current events.
4. We do not use enough out-of-classroom experiences, such as internships, field studies, foreign business trips, online (Internet) experiences, service-learning assignments, and shadowing of professionals.

The following comments by focus group participants are representative of these pedagogical criticisms.

I don't think the purpose of education is to teach specific content. I think it's to teach students how to think and how to navigate their way through new experiences so that they will have a context or a framework to work from that they will understand and pick things up quickly. So the more rich contacts that we can give them in the educational experience, the more we challenge them to think for themselves, the better. We need to get more consistency across different curriculums around the country to challenge students to really be able to think and not just come up with problems and answers. Unfortunately, my education was very much memorize and regurgitate. —Participant, Chicago Focus Group

I look back on my auditing class and I can still remember having to memorize an unqualified report. I had to memorize that and then on the test, I had to write it out. Why in the heck did I ever have to do that? Yeah, you've got to know the basic three paragraphs or whatever, but now I just go to my technical book. Why did I have to memorize that? How much time that took was unbelievable. —Participant, Chicago Focus Group

These pedagogy problems are not unique to accounting education. However, the combination of technology replacing much of what we have traditionally covered and the proliferation of standards that make research skills more valuable than memorization of facts, exacerbate the problem in accounting. We can argue that finance and information systems professors have the same problems, but their curricula have generally not been as content-specific as ours, allowing them to avoid the same imperative for pedagogical change we feel.

To assess faculty use and feelings about various pedagogical approaches, we asked educators about which learning activities they use and believe are most effective. Here is what we found:

Learning Activity	Percent Who Currently Use	Percent Who Do Not Use	Percent Who Believe Not Useful and Should Not Be Used	Percent Who Believe but Used Too Much	Percent Who Believe Useful and Used About Right	Percent Who Believe Useful and Should Be Used More
Assignments with real companies	40.8	59.2	5.1	4.3	37.9	52.7
Case analysis	69.3	30.7	2.7	8.5	51.3	37.5
Feedback exercises (quizzes, etc.)	75.6	24.4	4.3	10.5	73.5	11.7
Lecture	90.6	9.4	0.8	41.4	56.3	1.5
Oral presentations	62.4	37.6	4.0	8.4	53.3	34.3
Reading textbooks	84.0	16.0	6.3	12.1	73.8	7.8
Role playing	15.3	84.7	39.3	5.2	21.4	34.1
Team (group) work	74.6	25.4	3.1	20.4	48.7	27.8
Team teaching	11.1	88.9	26.0	4.3	21.2	48.5
Technology assignments	77.0	23.0	2.4	5.1	39.5	53.0
Videos	37.6	62.4	22.5	5.4	59.2	12.9
Writing assignments	78.4	21.6	1.6	2.4	50.2	45.8

A review of these data suggest we know what needs to be done—it also suggests we have not done it. Why, if we believe there is too much lecture, do we continue to rely on it? Why, if we believe it would be profitable to develop assignments with real companies, is it not done more? You can ask the same questions about team teaching and technology assignments. Faculty seem to know what to do, but do not do it.

We also asked practitioners and educators how strongly they felt about various out-of-classroom learning activities. When we asked them to allocate 20 points among the following learning activities (the more points allocated, the more useful they felt the activity was), we found the following:

Learning Activity	Number of Faculty Allocating Points to This Activity	Average Points Allocated by Faculty	Number of Practitioners Allocating Points to This Activity	Average Points Allocated by Practitioners
3–4 month internships with companies	267	9.29	465	8.63
Field study projects with real companies	229	4.54	384	4.42
Service learning assignments	196	3.53	356	4.26
Shadowing professionals	154	2.63	341	3.33
Foreign business trips	138	2.70	246	1.77
Online (Internet) classes	121	2.47	283	2.33

Not surprisingly, practitioners and faculty believe an internship is the best out-of-classroom learning activity. However, also we heard frequently that, to be effective, an internship needs to be carefully managed by both the school and the firm. An effective internship is not just temporary employment, but also it must be a learning experience. There must be ongoing faculty monitoring of the experience and the students must know that they will be evaluated by the school and the firm. Service-learning assignments also scored high, especially among educators. Field studies received significant points, while shadowing professionals, foreign business trips, and online experiences were allocated fewer points by fewer respondents.

Lack of Skill Development

Students forget what they memorize. Content knowledge becomes dated and is often not transferable across different types of jobs. On the other hand, critical skills rarely become obsolete and are usually transferable across assignments and careers. Accounting education has frequently been criticized for spending too much time on content mastery and too little time and effort to helping students to develop skills that will enrich their lives and make them successful. The following comments are typical of these criticisms.

The analytical ability of auditors, particularly young auditors, is atrocious. They don't understand financial statement analysis. And, when they do find something that deviates from their expectations, they don't have the confidence to pursue the questions. —Interviewee

We have not trained our students in accounting to deal with uncertainty. Most of them say, "I've got to get my spreadsheet complete before I can make a decision." But today, you have to make some decisions with some risk. You have got to be able to make a decision without perfect knowledge. I think we should look at how we teach people and we should give them some more cases with uncertainty. —Participant, Los Angeles Focus Group

I think of the way that communication has changed because of the Internet, email, voice mail. A lot of the time you don't even have face time with people anymore. The students we're seeing right now, they're a dot.com generation. They're a generation that grew up with that as opposed to all of us and they're used to just shooting a quick email and not going in depth or having the face time with someone. So I think the way communication has changed in general affects everyone, but going back to my students, they really are different. They are a dot.com technology generation and they're lacking in some of the different types of communication styles that we were all used to. —Participant, New York Focus Group

To assess which skills educators and practitioners believe are most important, we asked respondents to prioritize skills in terms of how much class time should be spent developing each. On a scale of 1 (no priority) to 5 (top priority), they ranked skills as follows:

Skill	Average Faculty Ranking	Average Practitioner Ranking
Analytical/critical thinking	4.53	4.29
Written communications	4.39	4.32
Oral communications	4.22	4.27
Computing technology	4.10	4.07
Decision making	4.03	3.96
Interpersonal skills	3.94	3.89
Continuous learning	3.82	3.70
Teamwork	3.81	4.02
Business decision modeling	3.65	3.65
Professional demeanor	3.64	3.66
Leadership	3.58	3.83
Risk analysis	3.42	3.39
Measurement	3.36	3.12
Project management	3.26	3.66
Customer orientation	3.23	3.34
Change management	3.13	3.36
Negotiation	3.13	3.35
Research	3.08	3.26
Entrepreneurship	2.99	3.24
Resource management	2.98	3.32
Salesmanship	2.61	2.79
Foreign language	2.60	2.56

Interestingly, faculty and practice respondents were in substantial agreement as to which are the most important skills. It is also important to recognize that this ranking of skills aligns closely with the core competencies identified in the AICPA Vision Study and its Core Competency Framework for entry-level students, by the IMA in their 1995 and 1999 Practice Analyses, by the Institute of Internal Auditors in their recent study of the knowledge base of internal auditing, by the AECC, and with academic research on accounting education. It is interesting to note that faculty feel more strongly than do practitioners about the higher-ranking skills, but less strongly than do practitioners on most of the lower-ranking skills. Using 3 as a cutoff, there are only two skills that practitioners believe should have little or no priority. If we effectively teach these skills, we will add value that cannot be duplicated through distance learning and other lower-cost delivery methods. We must find ways to integrate the teaching of skills into our curricula.

Failure to Exploit Technology

We understand the need to use technology in our teaching and to expose students to technology. However, do we understand what is meant when we say students need to learn technology? We are not sure we understood when we began this study. Our initial thoughts were that technology meant using various technology tools to solve problems, understanding systems controls and maybe some programming, and understanding technology terminology. While understanding these aspects of technology are important, probably even more critical is understanding how technology has reshaped everything we do. Students need to understand how technology has made information cheaper, for example. As professors, we need to know what cheap information means for the way we teach.

Students need to know what cheap information means for the work they will perform as professionals. It also means they need to know how technology is used to facilitate and drive business, including everything from communication, to on-demand information for decision making, and to the importance of strategic partnerships. Technology has revolutionized everything, including the way we live and work. It should have caused us to completely rethink everything we teach, not just whether we should add an Internet or spreadsheet assignment. Technology has made business models and transactions more complex, has shortened product life cycles, and has been the enabler for dynamic change in the business community. It has created a demand for instant feedback and instant answers. Our students must understand how technology has and will continue to change the way we provide and use information to make decisions. Critics argue that many educators have still not caught the vision of what this means.

While we did not ask questions in our surveys about the impact of technology on business, we did ask participants which technology skills they believed new accounting graduates should have. When we asked them to rank the skill as either a 1 (not important for new hires to possess), 2 (nice to know, but not critical), or 3 (critical), these were their rankings:

Technology Skill	Average Faculty Response	Average Practitioner Response
Spreadsheet software	2.94	2.89
Word-processing software	2.92	2.76
Windows	2.82	2.80
World Wide Web	2.76	2.47
Presentation software	2.64	2.42
Technology terminology	2.60	2.47
Database software	2.59	2.41
Information systems planning and strategy	2.49	2.28
Electronic commerce	2.51	2.28
Technology security and controls	2.50	2.37
File and directory management	2.50	2.42
Communications software (e.g., Outlook)	2.38	2.33
Systems analysis	2.22	2.04
Project management	2.09	2.29
Technology management and budgeting	2.07	2.13
Intra/Extranets	2.06	2.02
Graphics software (e.g., Adobe)	2.03	1.89
Computer hardware	1.99	1.95
Computer operations management	1.98	2.02
HTML and other web programming	1.76	1.60
Other operating systems	1.72	1.83
Programming languages	1.52	1.52

These responses show a high degree of consensus between the importance rankings of educators and practitioners. If we use a cutoff of 2.5 (halfway between “nice to know” and “critical”), faculty believe there are ten and practitioners believe there are three technology skills that absolutely cannot be ignored in our curricula.

Program Issues

Thus far, our discussion has focused on aspects of the educational process over which faculty have significant influence or control—curriculum, course content, pedagogy, skill development, and technology. Now, we turn our attention to criticisms of accounting education that are more departmental or programmatic. Administrators are directly responsible for these program elements.

What if all businesses offered the same products or services in exactly the same way? In addition, what if all those businesses had different raw materials to work with, different amounts of resources to bring to the product-development process, and different marketing outlets? In this world of instantaneously available information, only those entities that wisely exploited their strategic advantages would survive. Is that not the situation accounting education is in? We have numerous schools all trying to prepare students for the same markets with varying amounts of resources and varying quality inputs. Few accounting programs have a distinct personality; most of them are clones of other programs. Many schools have Ph.D. programs that look like all other Ph.D. programs. Many schools focus on teaching to the CPA exam, emphasizing public and financial accounting at the expense of managerial accounting and other career opportunities. Most schools teach a financial-based introductory accounting course.

While this “copycat” strategy has been successful in the past—where supply, capacity, and demand were in equilibrium, and where instantaneously available information did not readily expose schools’ weaknesses—it will not work in the future. As stated in [Chapter 3](#), the number of student enrollments is down. With more information available about the strengths and weaknesses of individual schools, and with schools having differing resources, quality of students, and faculty passion, some schools will not be competitive in the future if they do not define a specific strategy that exploits their competitive strengths. Without proactive action by accounting program leaders, we may soon experience the demise of many stand-alone accounting programs. Our accounting faculty will either be terminated or absorbed into other departments. We can stop, or at least slow down, this demise by addressing the issues discussed earlier in this chapter. But, we must do more.

Concluding Comments

Have our criticisms of accounting education been too harsh? Maybe. But then, previous cries of impending danger have been largely ignored. We have spent far too much time resting on our traditions and looking in the rearview mirror when we should have been teaching to the future. With the right direction and work, accounting education has a bright future. That future depends upon the actions we take now.