

A Career-Neutral Accounting Curriculum?

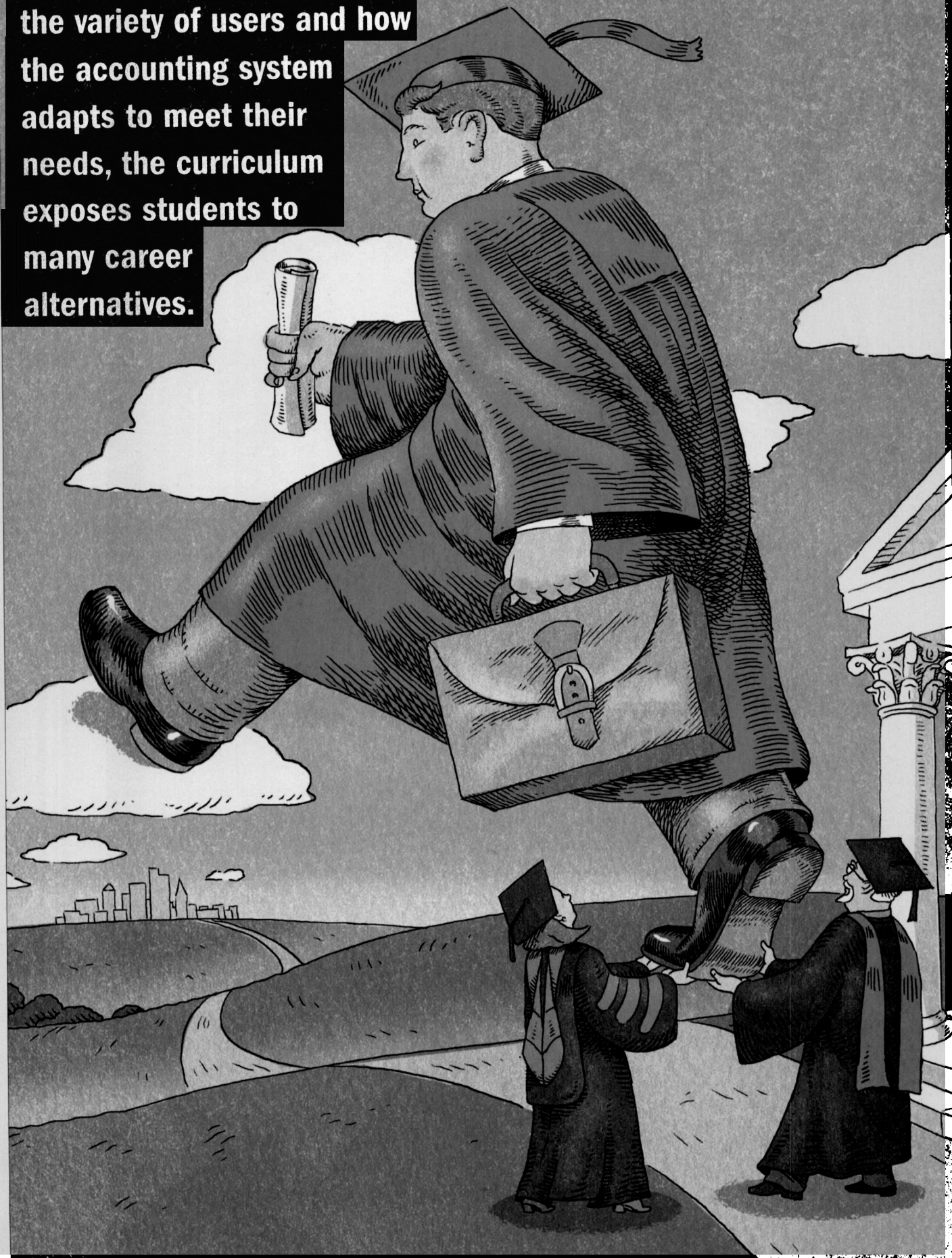
THE ACCOUNTING FACULTY AT
KANSAS STATE UNIVERSITY ARE PLEASED
WITH THE ONE THEY DESIGNED.

BY DAN DEINES AND ERICK VALENTINE

IN 1986 the Bedford Report proclaimed “the minimum objective of accounting education programs should be to prepare students to begin and develop in a wide range of professional accounting careers.” Three years later, the managing partners of the then Big 8 accounting firms wrote in their “Perspectives” paper that “passing the CPA exam should not be the goal of accounting education.” Both reports reflected the concerns of academics and practitioners about the bias toward public accounting at most universities. Unfortunately, given the structure of most accounting curricula, it appears the bias still exists.

In response to the profession’s prompting, the accounting faculty at Kansas State University (KSU) created a curriculum designed around how students learn and that emphasizes professional skills. The new curriculum has eliminated public accounting bias yet still meets the needs of KSU students and their potential employers. After all, as the Institute of Management Accountants (IMA®) points out, the vast majority of accounting majors will ultimately end up in private or governmental accounting, so courses biased toward public accounting don’t adequately prepare students for many career alternatives.

By compelling students to identify the variety of users and how the accounting system adapts to meet their needs, the curriculum exposes students to many career alternatives.



By focusing on the accounting system as a source of information for a variety of users at the curriculum's foundation level, KSU has tempered, if not eliminated, the financial accounting bias created by the traditional curriculum. By compelling students to identify the variety of users and how the accounting system adapts to meet their needs, the curriculum exposes students to many career alternatives.

Let's now take a quick look at how the push to move away from traditional accounting programs began and then a closer look at the accounting program at Kansas State.

HOW IT BEGAN

Armed with \$6 million from the Big 8 firms, the Accounting Education Change Commission (AECC) formed in 1989 with the ultimate goal of creating innovative accounting curricula that would better prepare students to become professional accountants. Specifically, the new curricula should produce students who were technically competent and who could write well, make effective presentations, work well in team environments, think critically, conduct meaningful applied research, and be prepared to work in a wide range of professional accounting careers—not merely do well on the CPA exam.

Ultimately, the AECC awarded 11 grants to fund innovative curriculum revisions, and it also held numerous workshops and seminars to promote innovative teaching methodologies as well as curriculum revision. In the 1990s, Deloitte conducted seminars to promote innovation in both the curriculum and classroom pedagogies. The American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), and IMA also began initiatives to support the wave of change washing over accounting education.

Many positives resulted from this reform. Most business schools have recognized the importance of good teaching and the scholarship of teaching. The Association to Advance Collegiate Schools of Business (AACSB) has created more flexible, mission-driven criteria for schools to attain accreditation that in turn fosters academic innovation. More organizations and publications are available to meet the needs of accounting educators. And, finally, a growing number of new technologies facilitate innovations in the classroom.

Yet the bias toward public accounting still persists. With the exception of information systems, you can find most of today's course titles and descriptions in business college catalogs of the 1960s. In his session "Is It Time to

Restructure Undergraduate Accounting Course Requirements?" at the 2006 Colloquium on Change in Accounting Education, Thomas Klammer reported his analysis of the Web-based content of 409 AACSB-accredited business schools (sample included schools with separate AACSB accounting accreditation). He found that 97.6% of the schools required Intermediate Accounting I, and 94.9% required Intermediate Accounting II. This percentage would probably be higher if it included the schools whose innovation was to change the names of Intermediate I and II to Financial Accounting I and II without changing the course content. Despite IMA's proclamation that the cost accountant is dead and that the business process analyst better describes the career of students entering private accounting, 94.6% of schools still teach cost accounting.

KSU'S PROGRAM

To address the concerns articulated in the Bedford Report and the Perspectives paper and by IMA, Kansas State University's accounting faculty scrapped its traditional curriculum and designed one around how students learn and the technical and professional skills companies want. One of the original five schools to receive an AECC grant in 1990, Kansas State has eliminated the financial accounting bias that exists in many traditional curricula.

In a traditional accounting curriculum, the focus is on covering the ever-expanding technical content of accounting rather than on professional skills. Kansas State's revised curriculum is based on two educational objectives: (1) Provide students with sufficient technical and professional knowledge, and (2) provide students with the professional skills necessary to use their knowledge in a workplace. The accounting faculty came to the realization that a five-year program would be necessary to achieve these two objectives. The format the faculty decided to use was a 4-1 program: Students graduate with a Bachelor of Science degree in accounting after four years and then complete a Master of Accountancy degree in the fifth year. Many students interested in a career in industry wrongly assume (or are told by firms recruiting them) that the fifth year is for those who are preparing for a career in public accounting and need 150 hours to sit for the CPA exam. The faculty continually battles this bias and strongly encourages all accounting majors, regardless of their career path—public, private, or governmental—to complete the graduate degree. The graduate program offers specialized tracks that allow students to prepare for a variety of career paths.

SEQUENCING CURRICULUM CONTENT

In designing the curriculum, the faculty determined all the technical accounting content that it felt was necessary for an entry-level accountant from the functional areas of financial and managerial accounting, auditing, and information systems. The sequencing of the content was based on two criteria: Students should understand simple topics before more complex topics, and content and teaching methods should be based on how students learn. We used Bloom's taxonomy of cognitive skills, which Table 1 illustrates, to determine the order of the content. Bloom's taxonomy begins with knowledge and comprehension, which would be the focus in introductory courses, and is followed by application, analysis, synthesis, and evaluation in advanced classes.

In contrast, the traditional curriculum frequently sequences its topics based on how they appear on the balance sheet. For example, Intermediate Accounting I and II are the first courses accounting majors face, and they're proudly proclaimed as "weed out" courses. As a result, students may focus on memorizing procedures because they don't have the background to understand the content more deeply. They frequently learn how to account for bad debts without having an understanding of the credit-approval process or the accounting controls necessary to approve or write off receivables. As a result, students memorize the steps to record the event without considering the broader context of the business event.

The GAAP-based focus of Intermediate Accounting only exacerbates the problem. For example, students may

memorize the rules for recording leases without understanding why businesses use leases or the accounting theory that supports the rules. Finally, this GAAP focus creates the impression that, due to its rigor and location in the curriculum, financial accounting *is* accounting and that the other functional areas, such as information systems, tax, and managerial reporting, are secondary in importance.

With Kansas State's sequencing approach, the curriculum assists students so that they don't apply a higher level of knowledge than their educational background can support. Students first are exposed to how the accounting system works, and then they examine the alternative theories that can be applied to the accounting system, so they have a foundation on which to understand more complex topics later in the curriculum. For example, students learn about alternatives to historical cost, such as replacement cost accounting, in a theory course before applying these concepts to the fair value reporting required by GAAP. Throughout the curriculum, students are taught that accounting is a system that provides information to a variety of decision makers—it isn't merely a mechanism to produce GAAP-based financial statements.

INTEGRATION OF PROFESSIONAL SKILLS

Activities in every course promote the professional skills that companies demand. Group activities promote interpersonal skills and are simple in the introductory courses but increase in rigor as students move through the curriculum. Written assignments, papers, and presentations

Table 1: Bloom's Taxonomy of Cognitive Learning Levels

KNOWLEDGE	This is the lowest level of learning. It includes recall and memory.
COMPREHENSION	Students use facts or ideas without relating them, which reflects a literal understanding of the topic.
APPLICATION	This is the intellectual skill that entails use of information in specific situations. Information may be in the form of general ideas, concepts, principles, or theories that must be remembered and applied.
ANALYSIS	This skill involves taking apart information and making relationships in order to discover the hidden meaning and the basic structure of an idea or fact. The student is able to distinguish between fact and opinion and to assess consistency.
SYNTHESIS	The student is able to reassemble the component parts of an idea in order to develop new or creative ideas.
EVALUATION	This is the highest level of cognition. It involves making judgments on materials, information, or methods. In problem solving, it involves selecting among competing alternative solutions.

(These were taken from the article "Restructuring the Accounting Curriculum Content Sequence: The KSU Experience" by Penne L. Ainsworth and R. David Plumlee in the Spring 1993 issue of *Issues in Accounting Education*, p. 118.)

Table 2: Teaching and Student Performance Assessment Methods

TEACHING METHODS

LECTURE	Oral presentation by the instructor of facts, simple rules, and relationships. Examples are used, but no rigorous deduction or induction is required of the students.
PROBLEM SOLVING	The necessary set of rules is demonstrated to students; then students are given relatively defined fact situations and asked to apply the appropriate rules. The instructor uses examples to demonstrate various applications of the rules, highlighting exceptions and contradictions. Deductive reasoning is required of the students.
CASE ANALYSIS	Students are presented with ill-structured problems via complex fact situations. The students are expected to induce an appropriate structure for the problem and identify the issues that must be resolved. The students are expected to generate a set of alternative solutions and apply logic and reasoning to determine their preferred course of action. The role of the instructor is to prompt students in identifying facts and interpretations of those facts that the students might have failed to adequately consider.

ASSESSMENT METHODS

OBJECTIVE QUESTIONS	Objective questions assess comprehension of facts and application of rules in simple fact situations. This type of question includes multiple choice, true/false, and matching. The appropriate responses to this type of question are found directly in the material to be learned or in a straightforward extension of the material.
PROBLEM SOLVING	These questions assess a student's ability to identify the objective of the solution and follow the logical steps necessary to determine the solution. Problem solving requires the student to identify the appropriate set of rules and apply them properly. The fact situations are relatively structured and contain few irrelevant facts. The rules can be complex and require a series of logical steps. Typically these questions have deterministic solutions.
WRITTEN COMMUNICATION	This type of assessment allows the instructor to determine not only students' solutions to the problem, but also the reasoning that led to their choice or resolutions. This type of question can be used to assess students' creativity or ability to synthesize across a variety of topics. The fact situations presented to the student should be less structured than problem-solving questions and require some analysis in order to determine the issues and dilemmas.
ORAL COMMUNICATION	The nature of the questions should be similar to those for written communication; however, these questions allow the instructor to assess students' abilities to respond to additional probing, to logically defend positions and assertions, and to refute logical arguments.

(Ainsworth and Plumlee, Spring 1993, p. 120)

increase in length and sophistication as students progress through their courses. To promote critical thinking and lifelong learning, students are exposed to cases and research projects that also increase in sophistication until, as seniors, they are working individually and in groups to resolve complex, unstructured, and ambiguous cases.

TEACHING AND ASSESSMENT

In restructuring the curriculum, the faculty had to address the types of teaching and assessment methods necessary to operationalize the curriculum. Although

there are many teaching and assessment methods available, the faculty settled on those listed in Table 2. It seemed clear that selecting the teaching and assessment methods that developed not only accounting knowledge but professional skills would also depend on the course level. For example, using lectures and objective testing is appropriate at the introductory level because knowledge and comprehension are the cognitive objectives, and professional skills development isn't critical. In upper-level classes, however, case analysis using written and oral assessment would be the preferred pedagogical approach

because the cognitive objectives are synthesis and evaluation, and professional skill development is crucial.

CURRICULUM STRUCTURE

The accounting curriculum at Kansas State University has five levels, as shown in Table 3: introductory, foundation, core content, research, and graduate. As students pass through each level, content complexity and sophistication of professional skills required increase.

Introductory Level

The introductory accounting courses are required of all business majors and also are service courses for the entire university. As a result, the first two courses take a user, rather than the traditional preparer, approach. That is, the course emphasizes understanding decisions required to operate a business and how accounting facilitates these decisions rather than memorizing bookkeeping procedures and how to prepare accounting reports. This approach is consistent with the AECC recommendations to change introductory courses.

While Kansas State's introductory courses cover topics in traditional introductory courses, the traditional financial and managerial topics are also integrated into each course. The first course, **Accounting for Business Operations (ABO)**, covers the decisions required for operating activities, and the second course, **Accounting for Investing and Financing (AIF)**, examines financing and investing decisions. ABO includes such topics as breakeven analysis, product pricing, how the accounting system captures sales and cost of goods sold, how FIFO and LIFO impact the income measurement, and how internal and external decision makers use the data captured by the accounting system. In AIF, students first learn about the time value of money and apply it to capital budgeting and financing decisions, and then they learn how the accounting system captures and reports the results of these decisions to both managers and external users. This approach minimizes the financial accounting bias because it focuses on business decisions and how the accounting system facilitates both managerial and financial decision making.

Since knowledge and comprehension are the primary cognitive objectives at this level, lecture is the primary teaching method, and objective questions and problem solving are the primary assessment methods. For example, students might be asked to calculate financial ratios for a company by using a 10-K found in EDGAR, write answers to short essays on an exam, or do group work on

in-class projects. Professional skills are introduced but not emphasized at this level.

Foundation Level

The foundation level serves as the basis for the rest of the curriculum and does two things: (1) It teaches how the accounting system works, and (2) it teaches students about the current conceptual framework used to establish GAAP and the variety of theoretical alternatives that they could apply to the accounting system. The teaching methods at this level start with lecture and problem solving but later move into case analysis. Students initially are assessed using objective questions and problems and then through papers, essay exams, and presentations in the second half.

Accounting Processes and Controls (APC), the first upper-level course for accounting majors, covers how the accounting system captures, summarizes, and controls information. APC, a four-credit course with a one-hour voluntary lab, is composed of topics from intermediate accounting, cost, auditing, and accounting information systems and organizes the topics so students learn about how information flows through a company and the documents and controls necessary to ensure its accuracy and reliability. The content is organized by operating cycles. For example, events involved in the revenue cycle are studied together. Using this approach, students learn that business operations consist of a series of continuous and interrelated events and not a series of GAAP-based balance sheet classifications.

In **Accounting Theory & History (AT&H)**, students learn accounting theories they can apply to accounting systems they have just studied. They learn about the current conceptual framework, alternative asset valuation, and income determination theories within the historical context in which they were developed. Students discover that accounting is a dynamic profession and that, by understanding the strengths and weaknesses of alternative theories, they can adapt to changes that will occur during their professional careers.

Core Content Level

Building on what students learned in the foundation level, the core content level teaches how relevant information from an accounting system is generated to meet the needs of a particular group of users. For example, AT&H prepares students for tax accounting by explaining the origins of income taxes and how taxable income is similar to, yet different from, traditional accrual accounting.

Table 3: Curriculum Levels and Course Sequence

LEVEL	CLASS	FALL	SPRING
Introductory	Sophomore	Accounting for Business Operations	Accounting for Investing and Financing
Foundation	Junior	Accounting Processes and Controls	Accounting Theory and History
Core Accounting	Senior	Financial Reporting Managerial Reporting Accounting for Not-for-Profit Entities	Taxation I Auditing
Research		Accounting Research	
Graduate	Fifth Year	Advanced Financial Reporting Accounting Electives Business Electives Nonbusiness Electives	Accounting Electives Nonbusiness Electives Business Electives

The faculty uses all three teaching methods: lecture, problem solving, and case analysis. All assessment methods are used, but problem solving and written and oral communication are emphasized.

Taxation I is similar to traditional tax courses but focuses more on understanding the system than memorizing rules. This approach clearly reflects tax law and the need to prepare students to deal with future changes in the code. Students also examine the impact of tax regulations on business and personal financial planning.

Managerial Reporting focuses on the information needs of professional managers. While this course focuses on many areas covered in traditional cost accounting courses, it doesn't cover job order, process, or standard costing systems because those were covered in Accounting Processes and Controls. Instead, the course focuses on organizing, summarizing, and analyzing accounting and other data to provide relevant information for management decisions that involve planning, controlling, and evaluating a company's performance. Managerial Reporting also describes career options available at corporations or other business entities.

Financial Reporting covers the external reporting requirements of for-profit enterprises. This course teaches how to prepare financial statements and their required disclosures in accordance with GAAP. While financial statements prepared in accordance with GAAP are presumed to be a fair presentation of the company's financial position and profitability, students are asked to critically evaluate the strengths and limitations of finan-

cial reporting requirements. The theories examined at the foundation level in AT&H makes this type of assessment possible. Although similar to Intermediate II, this course has a meaningful theoretical basis that allows students to critically evaluate financial reporting standards.

Accounting for Not-For-Profit Enterprises, a two-hour course, wasn't part of the new curriculum initially. But after several attempts to incorporate the content into Financial Reporting, the faculty agreed that this course represented a unique group of users. Today the course is an introduction to not-for-profit accounting and the regulations that govern reporting to external users.

Auditing I is similar to traditional auditing courses. Since APC covers internal controls and the supporting documents of an accounting system, more time is available to cover additional auditing topics. Therefore, this course covers the objectives and techniques for both financial and operational audits in more depth.

The Research Level

The research level teaches self-learning skills that prepare students to research and resolve complex and ambiguous problems and to participate in lifelong learning. Accounting professionals have always known the importance of learning on their own, but creating an undergraduate course with the express purpose of teaching research skills was unique when it was introduced in 1993 and is still rare today. Case analysis is the teaching method here, and students are evaluated based on numerous presentations as well as individual and group papers.

Table 4: Potential Specialization Tracks within the Master of Accountancy Program

Advanced Financial Accounting is required in each track

Financial Accounting and Auditing

Pick 4 of the 5 Accounting Classes

Advanced Auditing
 Corporate Taxation
 Design of Accounting and Business Information Processes
 Enterprise Information Systems Assurance
 International Accounting

+

Finance 830—Financial Market Theory

Management Accounting/Controllership

Advanced Management Accounting
 Corporate Taxation
 Design of Accounting and Business Information Processes
 Advanced Auditing OR Enterprise Information Systems Assurance

+

Management 810—Operations Management and Analysis OR
 Management 820—Behavioral Management

Taxation

Corporate Taxation
 Partnership Taxation
 International Accounting
 Advanced Auditing OR Design of Accounting and Business Information Processes

Enterprise Information Systems

Advanced Auditing
 Corporate Taxation
 Design of Accounting and Information Processes
 Enterprise Information Systems Assurance

+

Management 867—Enterprise Information Systems Management

Accounting Research, the capstone course for the undergraduate curriculum and foundation course for students entering the Master of Accountancy program, is a case-based, team-taught course that covers tax, financial accounting, and auditing. Its objective is to teach students working in teams how to conduct professionally oriented research using resources such as the Financial Accounting Standards Board's (FASB) Financial Accounting Research System (FARS), Securities & Exchange Commission (SEC) regulations, Internal Revenue Service Code, and EDGAR to resolve complex, ambiguous problems. Both

necessary for any career path they choose. The faculty is confident about the students' writing, presentation, and research skills because they have been evaluating these skills firsthand. In addition, the faculty used The Ennis-Weir Critical Thinking Essay Test and found that students in the new curriculum had statistically higher critical thinking skills than students from the traditional curriculum. Responses from recruiters and graduates, although anecdotal, also support the contention that Kansas State's accounting students are better prepared.

The objective of creating a curriculum that meets the

public accounting firms and corporations bring live cases for students to research and then evaluate the team presentations.

The Graduate Level

The accounting curriculum is designed to be a five-year graduate program. Students in this 30-hour Master of Accountancy program can choose one of four specialized tracks as shown in Table 4 or design a general program of study. Each track consists of three or four courses in accounting, three or four related business courses, and two nonbusiness courses. The program's mix of accounting, business, and nonbusiness courses was created to provide a broader business background for the students. Case analysis is the predominant teaching method, and student assessment is based on oral and written communication.

The only required course is **Advanced Financial Reporting**, which contains topics that all accountants should know in a global business environment. Students learn about the financial reporting requirements of large national and multinational corporations. Topics include accounting for business combinations, segment reporting, foreign currency translations, and derivatives.

IMPACT OF THE CURRICULUM

Kansas State's accounting curriculum has achieved several important objectives. Students are better prepared to be accounting professionals because they now graduate with the professional skills

Transitioning from a Traditional Curriculum

Stacy Kovar, Ph.D., says that the transition from a traditional accounting program to the new curriculum at K-State was easy for her. "The K-State curriculum is not about teaching completely different things. It's about arranging and presenting them in a way that is better for the students to learn," she explains. Take, for example, how this approach helps a faculty member teach Management Accounting. Since the courses early in the program cover fundamentals such as cycles, controls, theory, and history, the students coming into her Management Accounting course have more of a foundation so they can talk about the topic in a meaningful way. This means Kovar can do a lot more in her Management Accounting course.

Another example would be Financial Accounting, where students take this course before a systems one in a traditional curriculum. "Students haven't seen the big picture of how cycles work, and, as a result, Financial Accounting has to be taught in a silo method where you focus only on the financial accounting issues vs. the context and theory behind what is being done," Kovar explains. Since Accounting Processes and Controls comes before Financial Accounting, students at Kansas State are able to analyze problems in a more complete way.

"We've taken a lot of fundamental things and put them up front, and we focus more on skills and critical thinking," Kovar says. "It makes a huge difference for student learning without there being a radical change in the content being taught."

Bedford Report's call to prepare students for a wide range of professional accounting careers has been achieved. By compelling students to identify the variety of users and how the accounting system adapts to meet their needs, students are made aware of the wide variety of career alternatives that are available to them.

Finally, Kansas State University's accounting faculty has embraced the new curriculum. When the curriculum was

completely implemented, Don Kieso, KSU's liaison with the AECC, polled each faculty member by secret ballot, asking if they preferred the traditional curriculum to the new curriculum. No one voted in favor of returning to the old curriculum. Even new faculty who have had to adopt the curriculum have embraced it.

CHANGING TO A NEW CURRICULUM?

The first wave of change that swept through accounting education saw the implementation of some significant curriculum revisions by a limited number of schools. While many schools considered making substantive changes, most opted to make piecemeal changes to the traditional curriculum. As a result, many of the shortcomings of the traditional curriculum continue to exist: Rather than basing the curriculum on how students learn, the content is based on financial statement classification and functional areas. Rather than integrating professional skills throughout the curriculum, the focus remains on content. Rather than making students aware of their many career alternatives and providing them with the technical knowledge and skills necessary to become well-educated, adaptable accounting professionals, the focus remains on improving the pass rates of the CPA exam.

Kansas State's curriculum is one of several alternatives that accounting departments could consider if they were interested in making substantive changes. One of its advantages is that it can be implemented rather easily. The courses in the core content level are similar to traditional courses, so changing would involve integrating professional skills and making modest changes in teaching and assessment methods. The more substantive change would involve the two courses at the foundation level and Accounting Research. In fact, faculty who have joined KSU since the curriculum was implemented have had little difficulty adapting (see "Transitioning from a Traditional Curriculum"). Kansas State's accounting faculty will help those interested in making substantive curriculum changes and improving the accounting education of tomorrow's accounting professionals. ■

Dan Deines, Ph.D., is the Ralph Crouch, KPMG Professor of Accounting at Kansas State University. You can reach him at (785) 532-6038 or ddeines@ksu.edu.

Erick Valentine, Ph.D., is an assistant professor at Kansas State University. You can reach him at (785) 532-6380 or valenti@ksu.edu.