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Concepts Before Rules: A New Approach to Intermediate Accounting

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ABSTRACT: This paper describes the first course in a new sequence of upper division financial accounting courses. The philosophy of the new curriculum is to teach the concepts of accounting before teaching the rules of accounting. This approach provides students with a foundation that allows them to subsequently understand the rules better and remember them longer. In addition, this approach facilitates accomplishing other commonly stated goals of an accounting education such as developing thinking skills, communication skills, problem-solving skills, and an ability for life-long learning.

INTRODUCTION

The purpose of this paper is to describe the first course in a new upper division sequence of courses in financial accounting developed at the University of Texas at Austin. This revised curriculum addresses many of the objectives for an accounting education that have been articulated by the Bedford Committee (American Accounting Association [AAA] 1986) and the Accounting Education Change Commission (AECC 1990). The first two courses in the new sequence are a revised version of what is commonly called "intermediate" accounting, and the third course is a revised version of "advanced" accounting. The revised sequence of courses departs significantly from the traditional curriculum in accounting by exposing students to the important concepts in accounting *before* introducing the rules of accounting. In so doing, the new curriculum addresses many of the concerns commonly raised about intermediate accounting.

This new sequence of courses is required for students in a five-year

accounting program. These students are admitted into the program at the end of their sophomore year, and they spend three more years earning both a bachelor's and a master's degree in accounting. The sequence of accounting courses taken by these students is summarized in exhibit 1.

Prior to entering the program, the students are required to take a semester of introductory financial accounting and a semester of introductory managerial accounting. Because these courses are required of all students majoring in Business Administration, they were not included in this curriculum revision.¹ During their

¹ For a discussion of an innovative first course in accounting that shares many of the objectives of the revised curriculum discussed here, see Saudagaran (1996).

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EXHIBIT 1**The Accounting Curriculum for the Audit/Financial Reporting Track****Courses Required of All Tracks**

Introductory Financial Accounting
 Introductory Managerial Accounting
 Introductory Taxation
 Financial Accounting Concepts and Research^a
 Managerial/Cost Accounting
 Intermediate Accounting Topics^a
 Introduction to Auditing
 Principles of Systems Analysis

Track-Specific Requirements for the Audit/Financial Reporting Track

Advanced Auditing
 Advanced Accounting Topics^a
 Financial Statement Analysis
 Graduate Accounting Elective

The other tracks are Taxation, Management Accounting & Control, and Information Management. Each of these tracks requires four graduate accounting classes specific to that track.

^a These three courses constitute the revised upper division sequence in financial accounting.

junior year, the students take three accounting courses; one is an introduction to taxation and the other two are second courses in managerial and financial accounting. All three of these courses emphasize the concepts related to that area of accounting. During their fourth and fifth years, students take courses in intermediate accounting topics, auditing, and systems, along with four additional courses that vary depending on the "track" the student has chosen. Exhibit 1 lists the courses that are required for students in the most popular track, Audit/Financial Reporting.

The third-year financial accounting course, called Financial Accounting Concepts and Research, is the first course in the revised upper division financial accounting sequence. This course is designed to prepare

students to *learn* rules, not to *teach* them rules. With this in mind, the study of current accounting rules is deferred until the students have a solid grounding in the concepts of accounting. The details of this course are presented below.

The main focus of the second course in the revised curriculum is the current rules of accounting that are typically taught in intermediate accounting. However, there is substantial modification in both the pedagogy and content compared with traditional versions of intermediate accounting. The conceptual foundation acquired in the first course allows the second course to be taught using unstructured cases and original pronouncements rather than textbooks and end-of-chapter problems. A conscious effort is made to

not have an encyclopedic coverage of every rule, but to cover rules that (1) are most important in practice and (2) reinforce the basic accounting concepts learned earlier. The third course in the revised sequence covers topics traditionally associated with advanced accounting. This course is also taught with an emphasis on solving cases using original pronouncements.

This new sequence has three advantages over traditional intermediate and advanced courses that depend heavily on standard textbooks for readings and on end-of-chapter problems for practice and application. First, in the revised curriculum, students acquire a solid foundation in the concepts of accounting. This conceptual foundation makes it easier for students to (1) remember the rules when they are studied, and (2) apply the rules to unfamiliar circumstances. Second, the new curriculum gives students a more realistic impression of accounting practice. Traditional intermediate and advanced accounting courses often leave students with a *rule-oriented* perspective of accounting. They view the practice of accounting as knowing the "right" rule to apply in each case, and implementing the answer contained in the rule. This perspective makes it difficult to appreciate the degree to which accounting practitioners are required to exercise judgment. Third, the revised curriculum helps students develop the essential problem-solving skills and critical-thinking skills that a university education should impart. Traditional intermediate and advanced courses generally involve solving highly structured problems with only one correct answer. Such problems do not encourage students to develop

the ability to formulate a problem-solving strategy, identify the necessary information, critically evaluate available information, or exercise judgment.

The next section provides an overview of the goals of an accounting education. The remainder of the paper provides a detailed description of the first course in a revised accounting curriculum that attempts to address these goals. Successive sections describe major themes, organization and content, pedagogical issues and problem materials, and implementation issues.

GOALS OF AN ACCOUNTING EDUCATION

In 1984, the American Accounting Association Executive Committee appointed a Committee on the Future Structure, Content, and Scope of Accounting Education (known as the Bedford Committee for its chairman, Norton Bedford). In their 1986 report, the Bedford Committee concluded:

University coverage of specialized accounting fields should educate rather than train, emphasizing the concepts, systems, and principles associated with the advanced level of specialized practice. The objective of specialized education should be to provide conceptual and theoretical material to facilitate change as needed and to provide an ability to develop creative applications of the rules and procedures used in the specialization. (AAA 1986, 183-84)

In 1989, the then Big 8 public accounting firms issued a "White Paper" criticizing the education being received by accounting students (*Perspectives on Education* 1989).

This White Paper led to the establishment of the Accounting Education Change Commission (AECC) to promote change in accounting education. The first Position Statement of the AECC states that an accounting education should provide a foundation on which life-long learning can be built. This foundation should consist of communication, intellectual and interpersonal skills, as well as a common knowledge base and a professional orientation. The knowledge set should not be limited to current accounting standards, but should also include an understanding of society, economics, business practices and accounting theory. Professional orientation means that students should understand professional ethics and be able to make value-based judgments.

As the centerpiece of the financial accounting curriculum, intermediate accounting should play an important role in accomplishing these objectives. In a number of articles, Zeff (1979, 1980, 1988, 1989) recalls that prior to the mid-1960s, accounting standards were so general that study of the rules of accounting allowed ample time to discuss the theory and concepts underlying accounting measurements in practice. However, as a result of the explosion of detailed technical standards in the past 25 years, theory has been crowded out of most intermediate accounting courses, and indeed out of the curriculum altogether in many instances. Zeff (1979, 593) concludes

Theory should come at the front, not only at the back of the curriculum. It should provide a framework within which students might endeavor to rationalize (if they can) and assess extant practice, and it

should help them to be informed critics and interpreters of exposure drafts and pronouncements yet to come—and for other kinds of change.

Similarly, Kinney (1990), reflecting on his own accounting education, observes that the classes he took as an undergraduate contained little discussion of accounting as a social-behavioral phenomena or about the economics of accounting and the demand for auditing. Kinney (1990, 299–300) concludes:

Rather than learning a large proportion of the codified rules, students need an appreciation of the dynamics of accounting as a facilitator of contracts, and as a source of information about the firm. Study of the history of accounting institutions and how and why they developed should be useful to future practitioners in understanding the world in which they will work and how it will likely change. That is, understanding the process is more important than understanding the particular accounting issue being debated at any one time or, indeed, knowing the exact rule that exists.

Wilson (1979) proposes an innovative curriculum for financial accounting that is very similar to the new curriculum described in this article. In particular, he argues that study of the mechanics and rules of financial accounting should be preceded by study of the theory of accounting and the sources for current rules. In that way, students will be better prepared to critically evaluate the rules rather than accept them as pre-ordained and immutable. Wilson criticizes accounting education as focusing on “one question and one

answer” education which does not provide students with opportunities to develop critical-thinking skills and a broader understanding of the social and economic forces that are important in accounting. The course described below overcomes this criticism.

MAJOR THEMES OF THE COURSE

The remainder of this paper describes the first course in a revised upper division financial accounting sequence that attempts to address the goals of an accounting education described in the previous section. This section summarizes six major themes that run throughout the course.

The Role of Uncertainty in Accounting

The role of uncertainty in accounting is emphasized throughout the course. Uncertainty affects accounting in two ways. First, there is a demand for accounting because it helps decision makers resolve uncertainty. To emphasize this point, students are frequently placed in the position of a creditor or investor in a firm who is trying to make an investment decision. From that perspective, the criterion for a “good” accounting method is one that is useful in predicting the amount, timing and riskiness of uncertain future cash flows.

Second, uncertainty is responsible for many of the most fundamental challenges in accounting because the recognition and measurement of assets, liabilities, revenues and expenses are complicated by not *knowing* what cash flows will occur in the future. Throughout the course, students are asked to apply the FASB’s definition of assets and liabilities to

future benefits and sacrifices that are uncertain. For example, in one early homework problem, students are asked to determine if the expected future benefit from 10,000 lottery tickets is sufficiently “probable” to meet the FASB’s definition of an asset. This emphasis on uncertainty is consistent with the AECC’s recommendation that “an attitude of accepting, even thriving on, uncertainty should be fostered” (AECC 1990, 310).

The Need to Exercise Judgment in Accounting

A by-product of uncertainty, the need to exercise judgment in accounting, is also emphasized throughout the course. For example, in the first session, the students may have a homework problem in which an employee has been in an auto accident while driving the firm’s car, and at the end of the fiscal year the firm’s accountants are unsure of whether insurance will cover the damage to the firm’s car. Similarly, a problem in the last session of the course may ask the students to determine whether revenue may be recognized according to SFAS No. 48 when a right of return exists. The ability to exercise this type of judgment involves the ability to use analogical reasoning (Marchant 1989), and is often referred to as “thinking like an accountant.” In the words of the AECC this is described as “the ability to identify problems and opportunities, search out the desired information, and reach a well reasoned conclusion” (AECC 1990, 310).

The Importance of Future Cash Flows in Accounting and Decision Making

The course emphasizes that future cash flows are central to accounting

(because they are represented by the building blocks, assets and liabilities), to economics (because they are the basis for valuation) and to decision making (because they are the object of interest to decision makers). Initially, present value concepts are developed and applied in the context of financial assets and liabilities where future cash flows are contracted. Students are expected to be able to account for any financial contract, especially zero-coupon bonds, coupon bonds and installment loans. These same concepts are then applied to valuing and depreciating tangible assets, where the future cash flows are often less certain.

The Problem of Periodically Reporting Profit

In the first session, the students learn that one of the most difficult aspects of accounting is to determine how much of the total profit of an enterprise should be recorded in a particular quarter or year. The judgment needed to make this determination is reinforced in the discussion of nearly every topic covered in the course. Various homework problems emphasize that over-accrual of a loss in one period may lead to recording a gain in subsequent periods, or recording "too little" depreciation in one period will often lead to recording "too much" in later periods. Later in the course, students learn that different accounting methods do not affect the amount of income reported over the life of the enterprise, but may result in very different amounts of income being reported in a particular accounting period. For example, the holding loss from an increase in the current market interest rate of a receivable can be recorded in the current period using fair value account-

ing, or can be recorded over future periods until the receivable is collected using historical cost accounting. Students learn that this may be important because each method produces different asset and revenue measures in subsequent periods and one set of measures may provide more useful information than the other.

The Relevance and Reliability of Alternative Accounting Methods

Early in the course, the concepts of relevance and reliability are introduced as criteria for choosing among competing accounting methods. The course emphasizes that standard-setters and practitioners frequently are faced with a trade-off between relevance and reliability so there is not always one accounting method that is clearly "better" than all others. For example, after present value concepts have been studied, we ask students to account for a financial asset or liability using both historical cost and fair value accounting, or for a depreciable asset using both historical cost depreciation and market value depreciation. In both cases, the students discuss which method results in "better" accounting on the basis of relevance and reliability.

The Economic Incentives of Financial Statement Preparers, Users and Auditors

An important aspect of the course is to consider the strengths and weaknesses of alternative accounting methods for a set of economic circumstances. The economic incentives of financial statement preparers, users and auditors are emphasized early in the course by having students adopt each of these three perspectives and consider the

effect of these alternative incentives on preferences. For example, the students may be asked to argue whether a lease contract should be recognized as an asset and a liability from the perspective of (1) the firm's external auditor, (2) the firm's management, or (3) an investor in the firm. These alternative roles are periodically introduced throughout the first two-thirds of the course so that by the last third of the class the students are very familiar with the conflicting incentives of these three parties, which might lead them to oppose each other in the standard-setting process.

Taken together, these themes produce a course that accomplishes many of the objectives of an accounting education that are discussed in the Bedford Report and in the First Position Statement of the Accounting Education Change Commission. Students who have been thoroughly exposed to these themes have a solid foundation for thinking about current accounting standards and for thinking about alternative standards that may be adopted in the future. In that sense they have been "educated" rather than "trained," and are well positioned to begin a lifetime of learning. Further, the course accomplishes other objectives discussed by the AECC such as developing communication skills, both oral and written, and intellectual skills such as solving unstructured problems and developing a logical argument in support of a position.

ORGANIZATION OF THE COURSE

The course is organized into four parts (see exhibit 2 for a session-by-session summary).² The first part of the course reviews and extends the basic accounting framework the stu-

dents were exposed to in introductory financial accounting. Students study the three main financial statements and how they relate to each other, including the role of aggregation in the financial statements and the importance of the persistence of net income. They learn to record journal entries for common transactions and events, including adjusting entries for holding gains and losses. They also learn to adjust a set of financial statements to reflect a different accounting method, for example capitalizing instead of expensing advertising. The role of uncertainty is emphasized in determining whether a resource meets the definition of an asset and whether an obligation meets the definition of a liability. Students also learn the difference between cash and accrual accounting, the importance of accruals, deferrals and allocations, and the role of the notes to the financial statements as complements to, but not substitutes for, recognition in the financial statements.

During this part of the course, the students begin reading the portions of the FASB's Conceptual Framework that relate to for-profit enterprises. The relevant Concept Statements are divided into 14 separate readings of about ten pages each, and each reading has related questions for class discussion. Students are not just exposed to the Conceptual Framework, they are asked to apply it. For example, when the students apply the definitions of an asset and a liability to a long-term noncancelable lease, the class discussion centers on the degree of uncertainty over whether the future benefits and

² An example syllabus is available from the author on request.

EXHIBIT 2
A Sample Schedule for Financial Accounting Concepts and Research
(28 sessions)

Part I — The Accounting Framework

- 1 Introduction
- 2 The Balance Sheet
- 3 The Income Statement
- 4 Adjusting Entries
- 5 The Statement of Cash Flows
- 6 The Notes to the Financial Statements
- 7 Financial Statement Adjustments
- 8 Sources of Risk and Uncertainty
- 9 First Midterm Examination

Part II — Measurement and Recognition

- 10 Introduction to Valuation
- 11 Valuation of Financial Assets and Liabilities
- 12 Holding Gains/Losses on Financial Assets and Liabilities
- 13 Valuation of Physical Assets
- 14 Holding Gains/Losses on Physical Assets
- 15 Positive Net Present Value Projects
- 16 Asset Recognition
- 17 Liability Recognition
- 18 Revenue Recognition
- 19 Second Midterm Examination

Part III — The Accounting Standard-Setting Process

- 20 Regulation of Accounting Standards
- 21 History of Standard Setting in the United States
- 22 Standard Setting in the Private Sector
- 23 Current Standard-Setting Institutions

Part IV — Applying Current Accounting Standards

- 24 Accounting Standards on Asset Recognition and Measurement
- 25 Accounting Standards on Asset Recognition and Measurement
- 26 Accounting Standards on Liability Recognition and Measurement
- 27 Accounting Standards on Liability Recognition and Measurement
- 28 Accounting Standards on Revenue Recognition and Measurement

sacrifices associated with the lease will occur. The terms of the lease agreement are then altered to introduce more uncertainty, and the class must then determine whether the definitions of an asset and a liability are still met. Additional selected Conceptual Framework discussion questions are presented in exhibit 3.

Also during the first part of the course, students read the corresponding parts of an annual report of a well-known publicly traded corporation when a specific topic is covered. These readings are supplemented with articles about the company from the financial press, so that by the end of the first part of the

EXHIBIT 3
Selected Conceptual Framework Discussion Questions

Session Three—Enron has just signed a contract to provide natural gas to an electric cooperative in Iowa. The contract requires the cooperative to purchase at least \$5 million of natural gas at a fixed price each year for five years. Does the signing of this contract meet the FASB's definition of a revenue?

Session Four—Why might accrual accounting provide “better” information about future cash flows than cash accounting? In what way might cash accounting provide “better” information than accrual accounting?

Session Eight—Why is the distinction between “providing information” and “conducting analysis” important? For example, is estimating the amount of outstanding accounts receivable that will never be collected a case of “providing information” or “conducting analysis”?

Session Twelve—Describe the types of choices that accounting standard setters are faced with in determining Generally Accepted Accounting Principles, and give an example of such a choice.

Session Fourteen—Describe what is meant by “verifiability” in the context of the “reliability” of financial reporting information. If information is “verifiable,” does that insure that the information is relevant? Why or why not?

Session Fifteen—Is requiring all firms in the economy to use the same set of accounting methods likely to increase the comparability of financial statements or decrease the comparability of financial statements?

Session Sixteen—Describe who receives the benefit of accounting information and explain why these benefits are so hard to measure.

Session Seventeen—According to the FASB's Conceptual Framework, what are the four fundamental recognition criteria?

course, students know a great deal about the business environment and related accounting issues for that particular corporation.

The second part of the course covers recognition and measurement problems that arise in *implementing* the accounting framework. In this part of the course, students learn to account for any financial asset or liability, using either historical cost accounting or market value accounting. They also learn to account for any finite-lived physical or intangible asset using historical cost, market value or net present value accounting. They also learn to apply the FASB's recognition criteria to assets,

liabilities and revenue, and to evaluate the relevance and reliability of alternative accounting methods discussed in this part of the course.

During this part of the course, students finish the Conceptual Framework by reading the statements on qualitative characteristics of accounting information and on recognition and measurement, which complement the computational material discussed above. For example, when students compare historical cost accounting with market value accounting for financial assets and liabilities, they apply the concepts of relevance and reliability. Similarly, when they discuss issues related to

asset, liability or revenue recognition, they apply the FASB's recognition and measurement criteria from the Conceptual Framework. In a typical exercise, students apply the FASB's recognition criteria to a case on post-retirement health benefits. In particular, the issue is whether there is a relevant attribute that can be reliably measured, and the problems associated with estimating the factors (such as age at retirement or life expectancy) on which measurement of the liability depends. (See exhibit 3 for selected Conceptual Framework discussion questions.)

It is important to note that during the first two parts of the course students are not allowed to use current accounting rules as justification for choosing one accounting method over another. Rather, they must justify their choice on the basis of the FASB's definitions of financial statement elements and the relevance and reliability of the information provided by each method.

The third part of the course introduces accounting standards and the standard-setting process. By this point in the course, students appreciate the basic disagreements among accountants on how to account for various transactions and economic events, and they have a good conceptual understanding of the issues involved. This part of the course focuses on how society resolves these differences of opinion. The students learn to argue for or against regulation of accounting methods based on the costs and benefits to financial statement preparers, users and auditors. They also learn about the major provisions of the Securities Acts of 1933 and 1934 and the role of politics in the standard-setting process. Finally, students also study the cur-

rent standard-setting institutions (FASB, EITF, AcSEC and SEC) and how they relate to each other.

In the final part of the course, we introduce current accounting rules as a transition to the next two courses. Students read and apply an important set of specific standards that address asset recognition, liability recognition and revenue recognition issues. The standards studied in a recent semester are summarized in exhibit 4. These standards are chosen to reinforce basic recognition and measurement issues that were covered from a conceptual perspective earlier in the course and to give students a good idea of how standard-setting bodies have resolved the dilemmas that students have been studying all semester. For example, in the second part of the course, in the session on liability recognition, the students might discuss a case on contingent losses without referring to SFAS No. 5 on contingencies. Then, in the final part of the course they read SFAS No. 5 and apply it to another (or even the same) contingent liability case.

AN EXAMPLE—ACCOUNTING FOR RESEARCH AND DEVELOPMENT

The accounting treatment for research and development is a useful example to contrast a rule-oriented course in accounting with a concept-oriented course. From a rule-oriented perspective, accounting for research and development is provided in SFAS No. 2: expense all research and development. A rule-oriented class might summarize this rule, explain that the standard includes application of overhead in the elements of cost that should be expensed, but that expenditures for equipment and

EXHIBIT 4**Accounting Standards that were Covered in a Recent Semester****Accounting Standards—General**

APB No. 21—Deferred Payments

SFAS No. 130—Reporting Comprehensive Income

Accounting Standards—Assets

SFAS No. 2—Research and Development

SFAS No. 115—Marketable Securities

SFAS No. 121—Asset Impairment

Accounting Standards—Liabilities

SFAS No. 5—Contingencies

SFAS No. 43—Compensated Absences

Accounting Standards—Revenue

SFAS No. 45—Franchise Fee Revenue

SFAS No. 48—Right of Return

facilities that will benefit future periods (whether for research and development or not) should be capitalized and allocated to the periods to be benefited. Judgment could be introduced by discussing potential difficulties in determining whether a certain activity is related to research and development.

In contrast, from a concept-oriented perspective, the accounting treatment for research and development is a very rich topic. Students have an opportunity to apply asset recognition criteria, leading to a discussion of whether a reliably measured cost is relevant or a relevant future economic benefit can be reliably measured. Trying to determine the correspondence between cost and expected future benefit incorporates the role of competitive markets and the effect of grouping potential assets. Even though the outcome from a particular research and development project may be highly uncertain, for a portfolio of projects there may be an acceptable correspondence between cost and expected future benefits. Once learned, these

concepts can be applied to many other topics in accounting.

As students analyze the alternative accounting methods for research and development, they inevitably face a continuum of how much judgment is required. To consider the effect on financial reporting of a rule that requires substantial judgment, students must consider the incentives of the parties involved. Consideration of incentives leads naturally to the standard-setting process, which attempts to resolve disagreements over the “best” way to account for research and development. In addition to considering the views of each of the interested parties, standard setters must decide whether to consider the economic consequences of a proposed standard, such as whether a new standard for research and development would lead to less innovation in the economy.

All of the issues related to research and development discussed above are very important for future accountants to contemplate. After addressing these issues, students will have a better understanding of the

reasons for the current rule than if they had simply been told to remember that research and development should be expensed. In addition to broadening their knowledge base, students learn to think logically and critically about an important issue. Also, the arguments raised in discussing this issue relate very closely to many other topics, such as the accounting treatment for advertising costs and other intangibles, accounting for contingent gains or impaired assets and the relevance of current market values for other assets. Finally, this approach also implements the AECC recommendation that accounting courses should focus on "developing analytical and conceptual thinking, not on memorizing professional standards" (AECC 1990, 308).

A simple exercise that can stimulate class discussion of many important issues requires students to argue in favor of one of the following three methods of accounting for research and development: (1) expense immediately, (2) capitalize and expense over five years, or (3) expense immediately or capitalize and amortize over some period on the basis of judgment. Students can be assigned to alternative perspectives, with one group adopting the perspective of a financial statement preparer for a firm that has material research and development expenditures, another group the perspective of an investor in that firm and the final group the perspective of the outside auditor for that firm. To argue their positions, the students will have to think through many of the issues discussed above. Such an assignment works well as an essay or for class discussion, thereby further developing oral and written communication skills.

PEDAGOGY AND ASSIGNMENTS

The content of this course is not very compatible with a lecture format in which the students receive the wisdom of the instructor, but it is very compatible with the active learning teaching style recommended by AECC. The philosophy of the course is that the students develop their thinking skills by struggling with the basic issues of accounting, and they develop their communication skills by defending their positions in writing and in class discussions. Thus, for this course to accomplish all of its objectives, it is important to incorporate as much active learning into the class time as possible. Because students are frequently asked to exercise their judgment, it is important that they be allowed to experiment with their opinions and support those opinions in class. The homework problems and discussion questions are designed specifically to stimulate class discussion so students actively engage in the learning process.

The course content also lends itself very well to many cooperative learning strategies that can be used to directly involve the students. On the first day of class, students are assigned to seats in three-person groups. This allows the instructor to easily learn the students' names and it makes it very convenient to have students work in groups during class. Each day, students are assigned readings and homework that is a mix of computational problems and broad discussion questions and class time is spent primarily discussing this homework, either together or in small groups.

The problems assigned in this course are somewhat unique and are an important feature of the course.

In addition to standard computational homework problems and the conceptual framework discussion questions discussed above, other problems require the students to exercise judgment when there is no clearly correct answer. In part, the absence of a right answer occurs because prior to the last part of the course students are not allowed to appeal to accounting standards to determine the correct solution. For example, the students must make a recommendation to a firm that is trying to determine how to account for a contingent gain. They are not allowed to use current standards, so they must decide for themselves whether the contingent gain should be recognized, and they must be able to use basic accounting concepts to argue in support of their position. This approach gives students an opportunity to apply the definitions of assets and liabilities and the concepts of relevance and reliability, and it requires them to engage in the debate over accounting for contingencies in a way that merely applying the current standard does not. This type of problem could either be the basis for a written assignment, or could be for class discussion only.

The course also includes a required amount of writing because it is a "substantial writing component course" at the University of Texas. To satisfy this requirement, students write eight, two-page essays during the semester, emphasizing the conceptual content of the course. Exhibit 5 presents an example of a recent writing assignment.

The emphasis on active learning including participation, working in groups, solving unstructured problems and writing essays is consistent with the recommendations of the AECC:

Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems that require use of multiple information sources. Learning by doing should be emphasized. Working in groups should be encouraged. Creative use of technology is essential.

Accounting classes should not focus only on accounting knowledge. Teaching methods that expand and reinforce basic communication, intellectual, and interpersonal skills should be used. (AECC 1990, 309-310)

Grading for the course is based on a mix of exams, quizzes, writing assignments and class participation. All work in groups is done in class and is not graded. The exams consist of two midterms and a final. A quiz is given at the beginning of every class session to motivate students to be prepared. The quiz is one question chosen from among the homework assigned for that class session and students may use their notes to complete the quiz. Class participation is evaluated each session on an "outstanding," "satisfactory," "unsatisfactory" basis and summary grades are reported to the students after each midterm exam.³

The course has been offered in sections that vary from 20 to 50 students, but the instructors have found that sections of 30 to 35 students seem to work best. This number of students is sufficient for spirited discussions without being too difficult to manage the discussion and evaluate the level of participation of each student.

³ By departmental policy, final grades are assigned with the long-run objective of having 30 percent As, 60 percent Bs and 10 percent Cs and below.

EXHIBIT 5
Sample Writing Assignment

Electronic Medical (EM) is a small manufacturer of a variety of medical devices that are used for diagnosing and treating cardiovascular diseases. EM has a limited distribution system and generally makes most of its sales to a few medical supplies firms that specialize in serving as brokers between small manufacturers such as EM and doctors and hospitals. When EM makes a sale to one of these firms, they typically receive a specific purchase order, fill the order, ship the goods to the distributor's warehouse and mail an invoice for the goods. When the invoice is mailed, EM records revenue and a receivable for the purchase price of the goods that have been shipped.

EM was recently approached by a new distributor, Manor Medical Supply (MMS), who would like to explore an alternative arrangement. MMS offered to pay a higher price to EM for medical supplies if they are allowed to keep their "inventory" in EM's warehouse until it is needed. This system has some appeal for EM because they currently have excess warehouse space.

The first transaction between EM and MMS occurred in late 1994. On December 12, MMS sent a purchase order to EM for \$25,000 worth of medical devices. Before December 31 (the end of EM's fiscal year), EM personnel gathered together the items ordered by MMS, placed them in a separate location of EM's warehouse and sent an invoice to MMS. MMS did not make any payment before the end of EM's fiscal year.

You are an accountant working in EM's accounting department. Your boss, Mort Rorem, has asked you to determine the appropriate accounting treatment for this transaction and to write a memo explaining the treatment and the reasoning behind it. He is specifically interested in whether EM should record revenue for 1994 for this transaction, but he also wants you to develop general conditions that must be met before revenue on transactions with MMS can be recognized.

Your memo should be no longer than two pages, double-spaced, with one-inch margins and 12-point font. Preceding the text, the memo should indicate the date it was written, to whom it is written, who it is from and what it is about.

IMPLEMENTATION

The course was first taught in the fall of 1994, when all students entering the five-year program were taught the new curriculum. The majority of those students graduated and took the CPA exam in the spring of 1997. In general, the course has been very popular with students and this is reflected in course evaluations. During the 1996-97 academic year, students gave the course a score of 4.2 on a five-point scale (five is "excellent" and one is "very unsatisfactory") in

response to the question "Overall this course was...." The average for this question across all business courses was 3.7 for the same academic year.

There was initially some concern that students select accounting as a major because they are attracted by the comfort of right and wrong answers. Some feared that students would resist this course's conceptual approach to accounting. While this has been true for a few students, most seem to be pleasantly surprised that accounting is actually

more interesting and challenging than they thought it would be.

There was also some initial concern that students would resist having to read the entire Conceptual Framework. However, in surveys given each semester, students have overwhelmingly indicated that reading the Conceptual Framework was a valuable part of the course and should be continued. They indicated it was useful because it raised many of the important issues in accounting and prepared them to read original pronouncements toward the end of the course.

In surveys at the end of every semester, students have expressed strong support for the opportunity to *think* about accounting and to express themselves in class discussions.

Students have found that active learning is more interesting and helps them retain the information longer. While students experience some frustration with the ambiguity and the need to exercise judgment in some of their assigned problems, they also recognize that they receive a more realistic view of accounting than if they took a course that emphasized only the application of current rules to highly structured problems. A few selected comments of individual students are presented in exhibit 6.

After taking this course in their junior year, the students in the five-year program take the revised course in intermediate accounting topics in the fall of their senior year and most of them do an internship for half of the spring semester in their senior

EXHIBIT 6 Comments of Students on the Class

I believe this class has brought reality to my accounting education. I used to think that accounting was clear-cut with no gray areas; however, I could not have been further from the truth.

I honestly thought accounting was like bookkeeping—a no brainer. This class has showed me how many issues are dealt with in accounting and how ambiguous the answers are.

I think the best thing about this class is that it gives us the opportunity to think.

Guided discovery is good, because we discover the issue through debate. I remember and understand issues much better when I am forced to defend my position.

The challenge to think independently and work through problems from top to bottom with little and, in some cases, very ambiguous guidance, from the standards has been rewarding.

This class has taught me to be a critical thinker. Most importantly for me, it has taught me to think before I speak.

This class...really helps you think about accounting issues. The discussions we have are great and they help to flesh out our thoughts about certain problems.

Class discussion and interaction among classmates facilitates the learning process; it provides the opportunity to ask questions, clarify ideas and generate ideas....

We gained a strong knowledge base of accounting concepts then apply them to realistic situations rather than memorize standards.

year. A recent survey of students returning from their internship indicated that Financial Accounting Concepts and Research was helpful in preparing them for both intermediate accounting topics and their audit internship. The results of this survey are summarized in table 1.

As might be expected, there have also been a number of challenges to implementing and delivering this course. First, there was a lack of available materials, textbooks and problem material that were suitable for the course. Consequently, nearly all of the materials have been written specifically for this course and development of those materials took a great deal of time.⁴ Second, this course requires some extra effort from the instructor. A significant portion of the grading is subjective, which is more time-consuming and more likely to be questioned by the student. In addition, varying the annual report assignments and the essay assignments from semester to semester places a burden on the in-

structor to constantly develop new materials. Finally, leading students through a thought process and helping them to build arguments in support of alternative accounting methods is more difficult than explaining a rule and asking them to apply that rule to a structured problem.

Students had two primary complaints the first few semesters the course was offered. The first was the lack of structure in the course. One reason for this perception was that a new, evolving class needs time for the overall themes and structure of the class to develop. That problem has been largely addressed and the students now have much less trouble understanding how all of the topics in the class relate to each other and to future coursework they will take. The other main reason for the perception that the course lacked structure was

⁴ The materials for this course consist of text and related problems for each class session, and they can be made available for use in other schools.

TABLE 1
Survey Responses of 90 Students Who had Completed Both Intermediate Accounting and an Auditing Internship

1. How well did Accounting 456 prepare you to take **Intermediate Accounting (ACC 380K.1)** last fall?

7 Perfectly	6 Very Well	5	4 Of Some Value	3 Not Very Well	2	1 Not At All
0%	47%	38%	12%	1%	2%	0%

2. How well did Accounting 456 prepare you for your **internship**?

7 Perfectly	6 Very Well	5	4 Of Some Value	3 Not Very Well	2	1 Not At All
0%	17%	32%	41%	4%	3%	2%

that the course highlights rather than hides the ambiguities in accounting and the need for judgment. In this way, the course reflects the lack of structure that exists in accounting practice. This aspect of the course cannot be fixed without returning to a rules-based course.

The second concern that students have about the course is related to the writing assignments. Initially, the students had a difficult time relating the assignments to the material studied in the course. Over time, more care has been taken to give writing assignments that fit more closely with the content of the course, so that this problem has been largely corrected. The remaining issue relates to the grading of the writing assignments. This problem is partly due to the difficulty of obtaining and paying for adequate graders for the writing assignments and partly due to the natural resistance

of students to write and to receive criticism of their writing. This problem is a continuing challenge.

CONCLUSION

This paper describes the first course in a revised upper division financial accounting sequence. The philosophy of the new curriculum is to teach students the concepts of accounting before teaching them the rules of accounting. By emphasizing the concepts first, the revised curriculum accomplishes the goals of an accounting education articulated by the Bedford Committee (AAA 1986), the Big 8 "White Paper" (*Perspectives* 1989) and the Accounting Education Change Commission (AECC 1990). In particular, the revised curriculum begins to prepare students for a lifetime of learning and provides them with an understanding of the role of accounting in the operation of the economy.

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