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Educators' Forum Consultative Teaching: International Examples

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ABSTRACT: Learning environments in accounting need to reflect the skills demanded in the workplace. Recognizing this need, many suggested reforms in accounting education emphasize a shift from content knowledge to higher-order thinking skills. Such changes create a need for new teaching practices as well. Teaching strategies for addressing improvements in abstract thinking skills are the focus of this paper. It is suggested that accounting education reformers consider adopting more conceptually oriented accounting programs that include such strategies as segment teaching assignments and tutorial systems. Examples of these and other teaching strategies described as the consultative method are presented from accounting programs in New Zealand and Australia. The recommendations for reform are made with evaluations of the underlying issues which curriculum changes, such as these, may create.

DYNAMIC world-class manufacturing systems and technologically sophisticated labor markets have been emerging since the early 1980s (Heitner et al. 1990), and each continuing advance reaffirms the need for higher skill requirements to function effectively in society (Toffler 1980). Higher-order thinking skills such as creativity, flexibility, the ability to make decisions given incomplete information, complex pattern recognition, synthesis skills and holistic thinking are needed to function in this rapidly changing, highly competitive environment (Dede 1990).

It is hard to imagine a discipline more representative of these workplace needs than accounting. Yet, despite the profession's need for well-trained, flexible and creative thinkers who are capable of looking beyond the numbers and working with diverse and often conflicting information, accounting education remains largely a "textbook-based,

rule-intensive, lecture/problem" presentation and learning system (The White Paper, 1989, 11). For example, in a survey of accounting academics regarding curriculum reform, 55.7% of respondents expressed support for traditional teaching methods as exemplified by textbook-based, lecture methods (May et al. 1995, 27). Thus, most of our accounting students "learn" by memorizing vast

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amounts of information and producing the "right" answer.

Numerous calls have been made for reforming accounting education (Siegel and Sorensen 1994; Institute of Chartered Accountants in Australia 1994; Sundem 1992; Sundem and Norgaard 1991; American Accounting Association 1986). In particular, the White Paper, *Perspectives on Education: Capabilities for Success in the Accounting Profession*, (1989, 6, 8) issued by the (then) "Big 8" public accounting firms argues for reforms that would create "capabilities of judgment" within students and a broader educational background beyond the "ability to apply decision rules."

This paper provides examples of accounting programs in Australia and New Zealand that have incorporated many of the curriculum revisions sought by U.S. reformers of accounting education. Although accounting programmatic aspects in New Zealand and Australia have been described elsewhere (Walker and McClland 1994; Moores and MacGregor 1992; Bloom and Kantor 1991), the important changes in faculty-to-faculty, student-to-student, and student-to-faculty interrelationships that provide the underlying intricacies for an in-place example of new teaching methodologies are considered here for the first time.

ALTERNATIVE TEACHING STYLES FOR ACCOUNTING EDUCATION

To institute meaningful changes into accounting education consistent with eliciting and refining students' capacity for abstract thought and sound judgment, the relationship between the instructor and the student needs to be "re-engineered" along with the introduction of alternative teaching strategies. One means for implementing changes of this nature is the adoption of a consultative teaching style.

The methods described here as consultative and highlighted in table 1 derive from the ideas of authors who have focused their work on improving teaching methods over a number of years. They include the influences of Christensen et al. (1991), Paul (1990), Kurfiss (1988) and Shute (1979) on critical and abstract thinking; the importance of continuity in the educational experience in Dewey's (1950) essays; as well as the innovative teaching approaches and curriculum revisions described in articles and working papers by Kimmel (1995), Doney et al. (1993), Mock et al. (1990), Fetters et al. (1989), McNeal (1989), Weaver (1989), Farmer (1988) and Baker et al. (1987). Additionally, the Accounting Education Change Commission's "Objectives of Education for Accountants: Position Statement Number One" (1990), "The First Course in Accounting: Position Statement Number Two" (AECC 1992), and *A Catalog of Resource Materials for Teaching Accounting Students Critical Thinking* (Pincus 1995) issued by the Federation of Schools of Accountancy support teaching methods which can be described as consultative. These sources provide the basis for the comparisons between the consultative and traditional teaching styles illustrated in table 1.

The consultative approach strives to develop students' abilities for abstract thinking, problem definition, interpretation, synthesis and comparison of competing ideas. The objective is to present students with a series of experiences that allow them to develop higher-order cognitive skills. The teaching style in use is distinguished by the relationship among students and instructor, not by assignments or technology. A consultative instructor interacts with students on a more personal level by questioning and probing, providing both praise and criticism to the same answer,

TABLE 1
Characteristics of the Consultative and Traditional Styles

Consultative	Traditional
Teaching: Interactive, comprehensive and cooperative.	Teaching: Largely one-way communication, highly structured and more narrowly focused.
Learning: Student-centered, active and participatory. Emphasis on the reconstruction of new information into a format understandable to the student's prior experiences.	Learning: Instructor-centered, passive, discrete knowledge acquisition without explicit linkages among subjects or topics, and courses and disciplines stressing the acquisition of standards and procedures with little conceptual emphasis.
Curriculum: Interdependent courses, conceptual content able to be generalized to new situations, textbooks heavily supplemented, if used at all.	Curriculum: Sequential courses not explicitly related to one another, detailed content which is textbook dominated.
Assessments: Loosely structured but well-planned problems oriented to inter-relating the continuity of the curriculum, test of reasoning and communication skills. Assessments are directed at being good predictors of abilities required in real-life situations.	Assessments: Extensive use of multiple choice, objective-type problems. Test of memorization skills. Unlikely barometer of future success in workplace.
Outcome for Students: Abstract thinking skills, ability to make reasoned judgments in a variety of situations. Self-directed, life-time learners.	Outcome for Students: Narrow-ranged cognitive skills, highly capable while being directed in structured situation, must develop value adding skills on the job. Externally-directed learner.

encouraging student autonomy, seeking elaboration of students' initial ideas, posing contradictions to students' hypotheses, and providing sufficient time for students to discover underlying relationships (Brook 1990). The traditional style has been used for years, and most of today's accountants were educated in a traditional curriculum. It is called into question now because today's fast-paced business environment requires new staff to arrive as value-adding employees, and value-adding tasks require the use of cognitive skills that have not

been emphasized within the traditional curriculum.

In the traditional style of teaching, the professor acts as the central authority, providing answers to accounting questions and problems. The exercises and problems addressed are usually well structured and discipline specific; in contrast, the consultative style adopts a broad, comprehensive approach to problem resolution that involves a critical view of algorithmic thought. Problems and questions are more open-ended, less discipline specific, and a "one" solution



answer is not automatically assumed. The consultative teacher asks questions for which there is no clearly "right" or "wrong" answer. Sundem (1994) has stated that accounting education is receiving criticism because it focuses on the preparation of traditional financial statements rather than the application of knowledge to real accounting situations. In a consultative approach rather than preparing a financial statement, the students are asked to determine which variables (sales, working capital, etc.) to change in order to make an insolvent retail business profitable. They are required to justify the logic of their solutions.

The traditional method stresses knowledge retention in the belief that higher-level thinking abilities will eventually flow from the knowledge base. This approach presents large amounts of information, but provides only minimal analysis of relationships or inconsistencies in the data presented. Coverage is often hurried, and student assessment is largely confined to standardized testing, e.g., textbook multiple choice, true and false questions.

In the consultative environment, responsibility for learning is shifted away from the teacher and onto the student. As a result, teaching responsibilities are re-directed and re-centered on correcting students' incorrect prior knowledge about a topic to prevent it from leading to further incorrect linkages to new concepts. Students are presented with questions that make them reconsider preconceived ideas. Here, learning is often achieved when students initially experience a sense of disequilibrium between their knowledge base and the new information presented to them. Consultative assignments require students to *reconstruct* the information presented into a form that is understandable to them (i.e., assimilate it into their prior knowledge-base and experiences).

As an example, consider students who are studying activity-based costing (ABC). They are taught how to calculate costs under ABC and about its successful implementation. Afterwards, they read H. Thomas Johnson's article "It's Time to Stop Overselling Activity-Based Concepts" (1992). This reading presents them with a knowledge disequilibrium. At this point, student groups are formed. The objective is to apply Johnson's perspective to their previous knowledge base of ABC and standard costs and reconcile the various view-points.

In a consultative classroom, the formation of student groups results in the designation of one group member who keeps a log of the group's procedure for reaching a solution and its means of resolving conflicts. The student records which alternatives were considered, how preliminary solutions were questioned, which wrong turns were followed, why a solution was decided upon, and what underlying assumptions were incorporated in their solution. Using both their final solution and the group's log, the instructor can assess their solution, note successful approaches to problem resolution, and identify reconstructions of knowledge linkages. Consultative assessments are based on students' integrated skills (for instance, writing ability that connects seemingly disconnected ideas) and the comprehensiveness of their understanding (Carpenter and Doig 1988), including societal effects.

The consultative approach views knowledge acquisition as highly inter-related. Consequently, relationships among auditing, cost accounting and financial accounting, for example, require an integrated topical analysis rather than sequential courses. As a result, topical accounting, rather than stand alone, subject-based courses, needs to be taught within course units to reflect

knowledge interrelationships.¹ In a traditional core curriculum, the content of accounting courses is clearly sequential with the result that students memorize material for one course, without analyzing wider relationships that exist within accounting and other business disciplines. Memorization on a course-by-course basis is not conducive for developing abstract thinking abilities or cultivating judgments.

A characteristic of the consultative style, as outlined in table 1, is a topic-based orientation, whereas in the traditional style, a textbook orientation is used. The textbook is presented to the students as the major source of knowledge, thereby encouraging the belief that accounting skills and knowledge are encapsulated in a memorizable set of accounting practices and standards. In the textbook orientation of the traditional curriculum, students have few opportunities to understand how or why an accounting principle was adopted. What was accepted practice before the new method was adopted? What other choices were possible, and why were they not selected? Whose interests are recognized foremost by a given standard, and whose may be subordinated? How are the interests of owners, managers, workers, clients and the community at large represented and adjudicated by a given set of accounting principles? What are the standards followed in this situation by the United Kingdom, New Zealand, Australia and third world countries? And, why? Were all members of the standard-setting body in agreement, or were there dissenters? And, what was the basis for the dissent? These questions traditionally remain unasked. Many of the principles of accounting are presented as if they are issued with little developmental processes and integrating details are often missing. When the technical standards are applied to textbook problems, this study

method is effective. Unfortunately in the real world situations, judgments must be applied to problems that are not clear cut. Studying the bargaining process for accounting standards provides an opportunity for gains in both students' conceptual judgment and technical knowledge.

In the consultative approach, a situational orientation integrates the assignments with well-planned, conceptual learning experiences and open-ended questions. The assignments are integrated with other faculty members' courses, and there is a continuity to these experiences throughout the curriculum. Thus, content has a different purpose in a consultative teaching program: it functions to support, take issue with, and link ideas presented in all topic-oriented courses rather than to provide a core of information to be committed to memory.

Dewey (1950, 42–43, 47, 89–90) wrote about the need for a “continuity of experience” as students proceed through a curriculum. It is important that the continuity of experience in an accounting program be identified and understood; without it, learning is discrete and unconnected. The continuity of experience in the consultative curriculum is based on its topical orientation for cognitive skill building both in individual courses and on a program level. This process begins with a determined program-wide effort to identify topical areas and students' skill requirements. Once completed, coordinated activities are introduced and linked at designated locations within a series of selected accounting

¹ For example, a professional accountant is required to adopt a comprehensive perspective toward solving inventory problems. In a traditional system, inventory issues are separate topics found in auditing, cost accounting, management accounting and financial accounting courses. A topical approach could place inventory issues into one segment of one course.

courses to bring about improvements in students' cognitive abilities as the identified areas are studied and skills practiced. The overall objective is to present students with experiences that allow them to develop higher patterns of cognitive skills (e.g., the ability to recognize and generate analogies among situations).

To succeed, this approach requires that topical areas be linked and assessed to ensure that the continuity of experiences and presentation techniques are advancing the students' conceptual skills. For example, when unrecognized liabilities are studied, modules for study should be pre-selected for a continuity of approach within a course or among several courses. Initially, the presentation could be definitional (Module 1). Later the effects of these liabilities on financial ratios are studied (Module 2). Thus, prior knowledge is applied. Beyond this level, approaches become more comprehensive as Janusian methods are used to explore societal implications of employer obligations, and employee right issues as they are related to unrecognized liabilities (Module 3).² Finally, a search for liabilities that are currently unrecognized is made by the students, as well as the possible reasons these potential liabilities remain unrecognized (Module 4). These topic linkages are difficult to isolate in sequential, text-book-centered courses. For additional descriptions of the application of these methods to the accounting curriculum see Smith and Smith (1991).

CONSULTATIVE ACCOUNTING EDUCATION: EXAMPLES FROM AUSTRALIA AND NEW ZEALAND

Even though Australia and New Zealand are faced with large university enrollments from all social classes in their accounting programs (similar to pro-

grams in the U.S.), there are accounting programs in those countries that have successfully used consultative teaching methods. Two programs in those countries that currently employ a more consultative teaching style in their accounting programs are Victoria University of Wellington (VUW) in Wellington, New Zealand³ and Southern Cross University (SCU) in Lismore, Australia (Sloan 1994).⁴

For example, at VUW, if students are studying contingent liabilities, they will be expected to be familiar with the appropriate accounting standards in New Zealand, Australia, the United Kingdom,

² The term Janusian methods is derived from the Roman God Janus, and it refers to viewing issues from contrasting perspectives.

³ The only undergraduate business degree at VUW is the Bachelor of Commerce and Administration (BCA) (Victoria University 1993). The degree currently contains no subject majors, but it is under revision. The BCA is formally separated into Part 1 and 2 sections. Part 1 must be completed entirely before Part 2 can commence. Part 1 is designed as an introductory lesson in commerce and as preparatory study for Part 2. Mastery of the knowledge and skills in Part 1 is believed to be essential before higher levels of study can begin. Part 1 consists of one full academic year of economics and a half year of statistics, computers and mathematics. Part 1 is expected to be completed in the first year of the student's three-year course of study. Part 2 of the BCA broadens and deepens the student's knowledge of issues in commerce and administration.

⁴ The Bachelor of Business (BB) degree, which is also under revision, currently requires 24 semester units or courses (Southern Cross University 1994). Full-time semester study involves four units per semester. There are 12 required units, eight discipline specialized units and four electives for accounting majors. Accounting is one of several business majors available under the BB degree. The course selections include two courses in the principles of accounting, one completed in the first year of study and the other in the second year. Southern Cross University was one of the first Australian Colleges of Advanced Education (CAE). The CAE's primary concern is quality teaching, and the research in these institutions is directed at teaching oriented issues.

the United States, and those of the International Accounting Standards Committee (IASC).⁵ These differing standards are not memorized, but they are compared in a way that allows students to determine the reasons for any differences. Emphasis is placed on highlighting the reasoning behind the differences, and how or whether the standards conform to accepted conceptual and theoretical models of accounting.

Illustrative of this approach at VUW is the precourse preparation of a topical lecture for an undergraduate course Advanced Management Accounting. In preparing a lecture topic such as the "cost-of-quality" module to be presented in a series of three or four lectures, a lecturer first searches the topical area for the current journal articles and books. From this reference list, a selection of articles and book chapters is made for student reading. With this specific topic, the lecture format includes a description of quality, introductions to the writings of major contributors to the area, explanations of optimal levels of quality and total quality management, and measures of intangible and indirect quality costs using Taguchi's (1987) quality loss formula. The undergraduate accounting students accept and expect this conceptual approach as it has been used throughout their university program.

To maintain a consultative approach, professors and tutors at VUW are typically known by their first names. This informality helps develop a more peer-like working relationship among students and lecturers. The differences between the consultative approach, as practiced here, and the traditional system also become apparent when the physical characteristics in the lecture hall are compared. For example, there may be no chalkboards in the lecture hall as the conceptual level of the accounting lecture does not require the con-

tinual illustration of technical calculations. Usually the notes for the lecture are distributed to the students before the lecture, and as students are largely responsible for their own learning, a course drop box is provided for those students not attending class who can pick up the notes and other materials later. There are additional drop box locations for students to turn in their homework assignments.

Additional differences in teaching approaches are also apparent as the importance of the textbook is de-emphasized. Textbooks are used for structuring the course topics and as a reference source rather than as required reading. In fact, some accounting courses do not use an assigned textbook at VUW. If a textbook is required for a course, it is heavily supplemented with journal readings. It is not unusual to use a minimum of three journal articles, reading material from a text and the lecturer's notes, which may be bound, for each major course topic. In an upper-division accounting course at VUW, undergraduates may read 30 articles during the 12-week term. At SCU, in addition to these differences, study guides are also used. These study guides include outlines to the lecture readings and presentations, exercises, and additional reference sources.

Under these approaches, the textbook is not considered the final word about an issue. Instead, it is considered one of several equally valid sources of information. The articles used in the course are selected from both professional and academic journals. Therefore, undergraduate readings are selected from such journals as *The Accounting Review*, the *Journal of Accounting and*

⁵ The teaching methodologies described here are typical of those followed at either university, unless specifically noted otherwise.

Public Policy, and the *Australian Accountant*, for example. The articles are an area for assessment depending on how the authors' ideas relate to other topical areas in the course.

The material in the articles may form part of a lecture or it may be discussed more informally and comparatively in small groups in tutorials. The tutorial discussion may be led by a class member, discussion group, or the tutor who may be a graduate student or professor. There are other purposes for tutorials that go beyond comparative analysis. In large lecture sections, students can have feelings of isolation, and the tutorial allows the students to become part of a small learning group. Although there is a set series of core questions developed for each tutorial, the tutorial belongs to the students, and they are allowed, within limits, to set the direction of the problem-definition process. For example, they can decide whether they want to address the assigned questions and articles, change the direction of discussion, or review topics that arose in the lecture.

The tutorial format allows students time to improve their understanding of material by asking questions and participating in discussions. Students are assessed based on how well they participate in class discussions, not just whether they participate, and their attendance, which is typically mandatory. Methods of consultative learning used in accounting tutorials at VUW can be illustrated with the cost-of-quality module for advanced management accounting discussed earlier. In the tutorial for that topic, a slide of a child's building block is presented on the overhead. There are only ten students in the class in order to facilitate a participative discussion. In this session, students are asked to discuss the quality issues necessary for a company to manufacture these blocks. Students are given time to

consider the question and relate it to work in the course and other areas. In this particular tutorial, students discussed with the tutor, and each other, issues related to quality measures such as types of raw materials used for production, i.e., wood or plastic; safety and legal considerations, market issues, i.e., the life stage of this product; and, environmental matters surrounding the use of lead-free paint.

Although there are variations with the specific course, at SCU, workshops can substitute for lectures, and in some courses, they replace the tutorial. A two-hour workshop at SCU may include a combination of a mini-lecture, student problem sets, case studies, review of materials that students have been working on independently, and student presentations.⁶ A two-hour workshop, along with a variety of classroom interactions, provides opportunities to use abstract reasoning techniques to solve real-world problems. At VUW, workshops are used in combination with tutorials, and conducted by staff members and student tutors who can individualize students' assignments. Thus, the lecture addresses course material from a largely conceptual perspective, and the corresponding course tutorial allows students to develop the ideas they find interesting. The workshop allows students to

⁶ The presentation mode at SCU is composed of a combination of lectures, workshops, seminars, labs and surgeries (Sloan 1994). Lectures are not considered appropriate for presenting detailed information that can be better presented elsewhere. As such, lectures incorporate a number of the features of workshops. Seminars are largely student presentations and discussions of those presentations. Labs are supervised student time in computer labs. Surgeries are voluntary remedial sessions presented in a small group format at students' request. The beginning course in accounting at SCU consists of lecture, workshop and surgery scheduled for two hours each per week.

receive individualized assistance in solving technical problems and time to apply their abstract thinking skills.

Terms requirements are used to impress upon students that knowledge acquisition is intertwined, and that there is a continuity to all work performed. Throughout their course work, students at VUW must successfully fulfill terms requirements before they are allowed to sit for the final examination. Terms requirements vary, but they might include attending and participating in seven of nine tutorials offered during the course. Additionally, meeting terms might require that a certain assessment score, often 40 percent, be achieved on any examination taken during the course.⁷

In these accounting programs, it is believed that faculty members who have special expertise should present those topical areas in the lecture. Thus, courses are usually taught by up to three different faculty members during the term. This is not a team teaching approach, but rather curriculum-wide segment teaching, whereby, a faculty member is responsible for teaching his area of expertise (as much as possible) within a two- or three-week segment of the course. As a result, a faculty member with expertise in disclosure issues, for example, may teach a section on that topic in the first financial accounting class, advanced financial accounting, and accounting theory during the same term. Segment teaching builds a higher level of curriculum coordination and continuity of purpose among faculty members than in situations where one faculty member has sole responsibility for conducting a course.

Table 2 provides an overview of activities associated with a course using lectures, tutorials, terms requirements and examinations. As table 2 is reviewed it should be noted that more monitoring activities are conducted than are cus-

tomary in a similar course taught in the U.S. Additional monitoring is needed to help coordinate courses taught by more than one faculty member.

AN EVALUATION

Although there is no accounting curriculum that exhibits all the characteristics of a consultative approach, as outlined in table 1, the described programs are using many of the consultative teaching methodologies. The lectures focus on conceptual issues rather than technical rules and content retention. Although the topics selected for coverage in the lecture hall are conceptual, the teaching methodology is mostly passive, and it usually does not involve the students in active learning. Passive teaching methods dominate the lecture largely due to the fact that the average class size is about 200 students. Within the tutorials and workshops, however this approach changes as varied methods of learning are employed. It is largely within these parts of the system that passive learning changes to an active format as students participate in the learning process, and as they select the course materials which they would like to study. The lecture, tutorial and workshop allow for variation in the students' learning styles and flexibility in teaching styles.

Besides student-centered activities in the tutorial and workshop and an overall conceptual orientation to classes, there are two other outstanding aspects of this

⁷ Forty percent represents a D. Fifty to fifty-nine percent represent Cs; 60–74 represent Bs; and above 75 percent are As. The grading scale at SCU is based on pass (50–64 percent), credit (65–74 percent), distinction (75–84 percent), and high distinction (higher than 85 percent). The examinations rarely include multiple choice, true-false, fill-in-the-blank, or other similar questions. The examinations are oriented toward measuring students' writing and reasoning abilities and thus are scheduled for two or three hours.

TABLE 2
Summary of Consultative Course Schedule and Activities

Students	Faculty
<p>Precourse: Pay charges for copies of articles, lecture notes and study guides required for course. Course meets for 12 weeks and the calendar year is divided into 3 terms.</p>	<p>Precourse: Meeting with course coordinator and faculty teaching the course. Objectives reviewed. Course coordinator responsible for monitoring, and scheduling, but may not lecture in the course.</p>
<p>Lectures: Voluntary attendance. Lecture notes and other materials available in class or in drop box pickup. Passive lectures. Large class sizes in lecture hall. Total time in a term: 30 hours.*</p>	<p>Lectures: Conceptually-based lectures around a series of topics; not technically oriented. Three faculty responsible for three coordinated segments of the course.</p>
<p>Tutorial: Required attendance beginning in third week of term. Meeting once each week. Participative activities in a small-group base (15 max.). Students are placed in interactive situations, but typically do not make formal presentations. Total time in a term: 7.5 hours.</p>	<p>Tutorial: No new material presented; discussion oriented toward clarifying presented materials. Questioning of students and by students is used in place of lecturing. Faculty activities specific to student's needs.</p>
<p>Examinations: Problem-solving and discussion questions; rarely use multiple choice or true and false questions. Scheduled for 2 to 3 hours outside of the regular class period.</p>	<p>Examinations: Prepared by at least two faculty members and reviewed by course coordinator. Test coordinated to ensure it fits within scheduled time period and questions correspond with course objectives.</p>
<p>Terms Requirements: Students must fulfill terms requirements at certain point in the course in order to continue in that course. Requirements can include attendance in tutorials or achieving a minimum grade on each examination.</p>	<p>Terms Requirements: Requirements are set by faculty and coordinator. Monitoring of the requirements is the coordinator's responsibility.</p>

* At SCU, the time courses meet varies from 3 to 4 hours per week with additional voluntary meetings of another 2 hours for beginning accounting courses. Therefore, in a 12-week term, the course may meet for 30 to 40 hours of scheduled class time with an additional 20 hours available at the student's discretion. Tutorials have largely been replaced with workshops and seminars at SCU.

system that help students develop judgment. One is that textbooks are largely used as supplemental material. Therefore, students do not get the impression that all the "correct answers" are in the textbook. They realize that there are other opinions about how ac-

counting events should be recognized. By comparing the methods used in several standard-setting environments, the students can critically assess the methods and the underlying reasons why one group of standard setters may have different opinions. This comparative

analysis allows students to understand that accounting knowledge is based on a critical reasoning process, and more importantly they are allowed time to question issues based on this interrelationship of concepts. Diminishing the role of the textbook is one of the strongest factors leading to the development of critical thought among these students.

A second factor that supports the consultative teaching approach is the manner in which lectures are scheduled. The lecture is viewed as series of learning modules, and the faculty member with the highest level of expertise in a topic is assigned responsibility for teaching the course segment where such expertise is put to its best use. Thus, the faculty member who has recently been involved in critically analyzing an accounting topic area is, if practical, the lecturer responsible for that portion of the course. The segment approach provides for curriculum continuity from a topical perspective.

Of course, not all aspects of the accounting programs described in these examples are instituted in a highly improved manner over the traditional system. For example, knowledge acquisition is not much better organized than in the traditional system. Courses are generally sequential and distinct from each other, but to some extent, this characteristic may be tempered by segment teaching and terms requirements within a course. Additionally, even though the potential is there for close linking of cross-course topics, it does not occur in a highly organized manner.

In evaluating a consultative system, it must be realized that many U.S. university traditions found in faculty-to-faculty, student-to-faculty, administrative and constituents interactions are clearly affected by these reforms. Therefore, the reasons for in-place programs not adopting some of the consultative methods

along with additional evaluative aspects of consultative approaches should be a first concern for potential U.S. curriculum reformers.

Table 3 outlines a number of salient traditions that face change along with teaching methods if consultative reforms are adopted in the U.S. These curriculum reforms will change basic and well-accepted university institutions that provide underlying support for traditional teaching methods (Kuh and Whitt 1988; Meyer and Scott 1983; Holzner 1968). These familiar institutions provide a common view that shows "educating" is occurring. Reforms change these recognizable teaching methods, administrative approaches, students' learning behaviors, and constituents' understandings as illustrated in table 3. Thus, stresses are added to reforms that have little to do with teaching methods. Also contributing to these institutional changes is a slight increase in costs for many accounting programs as the changes are likely to require more training for faculty, but salary expenditures would probably not have to be increased as consultative teaching methods could be handled with current faculty levels at most U.S. institutions.⁸ When table 3 is reviewed, it can be seen that the risks for successful and meaningful reforms are high, and these risks are even higher if factors beyond teaching methodology are ignored.

⁸ The consultative approaches at VUW use similar teaching loads to those at a "typical" U.S. program. If these methods are adopted in the U.S., additional faculty salary costs would not be incurred. As an example, the "typical" teaching load for two faculty members who teach three equivalent courses a semester, have two separate course preparations, and maintain the same number of office hours, is compared below on a per-week basis for NZ and the U.S.:

(Continued on page 211)

TABLE 3
Evaluative Issues in Teaching Reforms

Traditional

Consultative

<p>Faculty: Conceptually-based methods call on a different mixture of teaching skills requiring a high level of cooperation and coordination among faculty. One course, interrelated topics, possibly two or more faculty members.</p> <p>Administration: Disequilibriums are created in well-accepted university institutions, as, for example, changes in the definition of classroom privacy (more open) and more unprompted monitoring of teaching activities. Redefined traditions.</p> <p>Students: Participation in and responsibility for learning increases among students. Their role in the learning process is redefined causing many familiar signposts of academic progress to significantly change. Learning role is redefined.</p> <p>Constituents: Awareness of reasons for programmatic changes creates high expectations for conceptual development results among graduates. Unawareness by constituents creates confusion about changes. Mixed Responses.</p> <p>Costs: Immediate costs may be somewhat higher if consultative methods are fully incorporated into a program as more faculty training may be required. Possibly higher.</p>	<p>Faculty: Subject-based teaching around course-specific technical expertise requires significantly less coordination among faculty. One course, one subject, one faculty member.</p> <p>Administration: Easily administered with high levels of classroom privacy and little monitoring of teaching activities. Traditions remain recognized and unchanged.</p> <p>Students: Students in traditional programs are generally comfortable with the passive teaching methods found in lecture-based teaching. Learning role is clear.</p> <p>Constituents: Those who are aware of the new skill needs, question why clear programmatic changes have not been made. Those who are unaware, see little need for change. Mixed Responses.</p> <p>Costs: Traditional lecture methods are very cost effective methods for the delivery of materials. No change in costs.</p>
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CONCLUSIONS

Currently, there are no statistical results showing whether students' abstract thinking skills are directly affected by consultative methods, in the described programs or in similar programs proposed and being tried in the U.S. In fact, these educational reforms are based more on good faith efforts than actual results. In addition, there is no information as to whether these teaching methods attract a different type of student to these programs, and thus outcomes may be changed by different entrants into a program. Collection of this data remains an area for future analysis.

Yet, traditional, content-based accounting education appears to do little to prepare students to function successfully in the fluid, ambiguous environment of the new workplace. In the past when accountants had the time to develop professional judgment slowly in their jobs, there was a place for text-based, rule-oriented, teacher-centered education. Today most straightforward accounting tasks are handled by software programs, and expert systems can assist with higher-order decision making. These technological innovations leave professional judgment and creative insight as the main contributions of the professional accountant. Accounting education programs must therefore graduate students capable of exercising their full range of cognitive skills when they arrive on the job.

Adapting consultative teaching methods to our programs by expanding

information sources, adopting a comprehensive and long-term perspective toward problems, encouraging more interactive student/instructor dialogue, assessing students' higher order thinking skills, assuring a continuity among course topics and subjects, and enhancing the ability of students to adapt to rapidly changing circumstances are steps we need to take in preparing students for the challenges of the competitive world economy.

Footnote 8 (Continued from page 209)

	Student Load	Contact Hours ^a Per Semester	Total Load
U.S. (3 courses)	120	44 Per week (15 week semester):	5,280 352
NZ	240* 18** 15*** 60****	12* 27** 18*** 12****	2,880 486 270 720 <hr/> 4,356 Per week (12 week semester): 362

^a 50 minutes per contract hour
 * Segment taught for 1/3 the semester (4 weeks); 240 students with three contact hrs. per week.
 ** 3 tutorials taught for 9 weeks with one contact hour per tutorial per week.
 *** 2 tutorials taught for 9 weeks with one contact hour per tutorial per week.
 **** Segment taught for 1/4 semester (3 weeks); 60 students with four contact hrs. per week.



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