

# Intentional Learning: A Process for Learning to Learn in the Accounting Curriculum

## 4.5.2 Student Outcomes and Evaluation

The measurement of student outcomes is a major topic in higher education circles today. Our interest is not in the broad outcomes of student development, but in the outcomes of intentional learning; questioning, organizing, connecting, reflecting, adapting. The attributes will be evaluated not by asking students about them, but by asking students to do them while also demonstrating knowledge of accounting principles and practice. The successful student in the new accounting curriculum: asks questions about process and content, organizes new knowledge into logical structures, connects new concepts with known concepts and experience, reflects on new material and on the process of learning it, and adapts knowledge from one context to solve problems in other settings.

Evaluating outcomes like these requires a different approach than that used in many college courses today. Evaluation should match the goals and teaching/learning strategies of the course. Evaluation should include a variety of methods and should occur often and early so that both faculty and students can monitor the success of learning. The AECC-sponsored monograph on assessment (Gainen and Locatelli, 1995) includes many helpful suggestions for evaluating a variety of learning outcomes in accounting courses.

Research shows that students' study habits are influenced by evaluation methods. McKeachie and others report that "...if teachers say that they are concerned about developing skills and strategies for further learning and problem solving and that they hope to help students develop cognitive structures that will form a foundation for continued learning and then give tests that require memory of individual facts, definitions, and isolated information, students will memorize the facts, definitions, and information on which they expect to be tested. In doing so they will use memorization, repetition, and other learning strategies unlikely to be useful for achieving the higher order cognitive objectives we have proclaimed" (McKeachie et al., 1986, p. 76).

One of the most popular methods of evaluating student outcomes is multiple choice exams. This method has several advantages: grading is consistent, reliable, fast and easy; exams can be given efficiently to large classes. The method's disadvantages are that developing really good questions is very time consuming, and it is difficult (but not impossible) to include higher level thinking/learning skills in answering. Students preparing for multiple choice exams are likely to focus on facts and details rather than concepts and their applications. They are not likely to use the attributes of intentional learning in this process.

However, multiple choice exams may be the most practical evaluation method for accounting faculty with large classes. There are ways to broaden multiple choice questions to involve more thinking and less memorizing or guessing. Some faculty permit students to add a rationale for their answers to questions about which they have some uncertainty. A good rationale for a wrong answer may gain some credit and will also require the student to articulate his thinking. Erickson and Strommer (1991) offer suggestions for multiple choice questions that ask students to remember and relate key ideas, recognize ideas or examples in different context, or apply concepts to new situations. Writing multiple choice questions that require students to analyze and think is not easy, and such questions are not likely to be found in a textbook's standard test bank, but it can be done.

## LEARNING THROUGH TESTING

"In cost accounting I didn't get any of the five questions right, but I got an A because I rationalized and explained what I did, even if it wasn't the answer he was looking for. This was the highest form of learning—not just getting one specific answer but understanding everything that went into it and being able to use the pieces to get a result."

Sidney, junior

"Essays are best. They give you a chance to integrate all your thoughts from different areas — ...Apply thoughts to a situation. The real world will ask us to apply—not multiple-choice questions."

Stephanie, senior

Comments by transitional knowers in Baxter Magolda,  
*Knowing and Reasoning in College*, p. 243

One way to balance students' preparation for an exam is to include at least one essay question. This may be a relatively short question, but it should require synthesis or application of learned material, not just recall of lecture notes or readings. Short essay questions may ask students to solve a problem, apply a principle or accounting rule, or describe the consequences of an accounting decision. Some faculty ask students to write answers in small groups which must agree on their response. The value of this experience is in the discussion of the question and answer and development of group process skills. Although they take time to grade, essay questions are valuable evaluation methods because they involve analysis, synthesis, reflection, and the ability to explain a response in writing.

Examinations are not the only method for evaluating student outcomes. Students, especially beginning students, need frequent opportunities to explore and demonstrate how they are learning. Many of the classroom assessment techniques and the teaching strategies discussed in an earlier section can be used to evaluate learning and the learning process. Short written exercises or papers, class projects and presentations, responses to problems and case studies, are all good ways to assess student learning. Accounting faculty should use a variety of methods throughout the term to evaluate and improve the outcomes of student learning.