

MAKING ASSESSMENT ACCESSIBLE FOR AN OVER-WORKED FACULTY

Sudha K. Krishnan, California State University, 1250 Bellflower Blvd., Long Beach, CA 90840, 562-985-5757, skrishna@csulb.edu

Mindy Colin, Loyola Marymount University, One LMU Drive, Los Angeles, CA 90045, 310-338 7836, mcolin@lmu.edu

Steven Mintz, Orfalea College of Business, Cal Poly San Luis Obispo, CA 93407, 805-756-2003, smintz@calpoly.edu

ABSTRACT

Learning objectives and student assessment have become essential parts of accreditation of business schools during the past few years. This paper details the requirements for assessment of student learning as per AACSB. An introductory financial accounting class is used as an example to show the types of direct and indirect measures of student learning. We conclude that it is not that difficult to incorporate assessment measures into the curriculum. It takes time to implement at first and often requires refinement over the semesters. But once it is set up as a routine part of class instruction, it becomes just another aspect of class preparation.

INTRODUCTION

Learning goals and student assessment have become essential parts of accreditation of business schools during the past few years. Faculty members typically are involved in two aspects of the process. First, input is provided to the assessment committee about what the students should be learning and ideas on how to assess learning goals. Second, faculty members need to implement the learning goals into each class taught. This paper summarizes what The Association to Advance Collegiate Schools of Business (AACSB) requires in terms of student learning and assessment in the accreditation process and how faculty can implement AACSB requirements [1] in their classes.

Learning Goals

The AACSB provides for the worldwide accreditation of business schools. As part of the review, the Association requires that overall comprehensive learning goals must be set for every degree program offered by the school. The goal is to establish learning goals for each program to help direct education towards desired outcomes. By identifying specific goals, it is also possible for each school to assess whether these goals are being met.

For accreditation purposes, the AACSB requires colleges to provide assurance that learning is taking place based on the goals of the program. By requiring learning goals for every program, the assessment procedure becomes a top-down decision making process where every faculty member has to participate. Once the learning goals have been set for a degree program offered by the school, instructors are expected to incorporate the relevant goals associated with the classes that they teach and build appropriate assessment tools into their courses.

The AACSB has suggested two major types of learning goals – general skills and management specific skills. General skills include critical problem solving skills, communication skills, teamwork and other skills needed by students to function in any business environment. Management specific skills include learning specific knowledge content related to the student's major field of study. For example, in accounting it could involve learning the accounting cycle and being able to prepare and analyze

financial statements. General skills tend to be a part of all courses in the curriculum while management specific skills tend to be unique to individual courses.

The mission of the school plays an important role in differentiating one business school from another. The potential employers play an important role in deciding the learning goals of the program because of the career orientation of accounting. Once the overall goals of the program are decided after considering stakeholder needs, whether general or management specific goals, it is up to each faculty member to incorporate a detailed version of the goals into his/her individual classes. This may involve identifying unique skills in certain classes while some skills may be generic to many courses. For example, one of the general goals may be to work effectively with others. This involves teamwork and could be incorporated in multiple classes through team assignments.

Goals should be identified for every class and faculty should implement these goals through assignments, projects, class activities and examinations. The AACSB requires that these methods of implementation must be monitored in an ongoing systematic manner. Syllabi, assignments and projects must be reviewed regularly to make sure that “learning experiences are included to prepare students to accomplish the intended learning goals” ([1] p 63). The monitoring could be done by someone in the department such as the Chair or by a member of the College assessment committee.

Assurance of Learning

Once the goals are identified and the external monitoring of class materials is accomplished, it then becomes necessary to “demonstrate what learning occurs for each of the learning goals the school identifies as appropriate for its programs” ([1] p 64). The AACSB has suggested three direct approaches to assuring that the learning goals are met.

First, the admission criteria of the program may need to meet the goals of the program. For example, one of the goals in the Pacific Studies program at University of California, San Diego [2] is to prepare students for decision making related to public policy, management and international relations in the Pacific Rim area. This requires knowledge of at least one language of a Pacific Rim country. The program has made Pacific Rim language proficiency a part of the admissions criteria.

Second, course embedded assessments may be used to establish that students are learning through course related activities in specific classes. These may include written assignments, class projects, and examinations. Such assessment techniques may build upon knowledge gained in other classes or may be unique to the specific course.

Third, stand-alone testing may be used to test whether students have learned the requisite skills of the program. For example, many schools now require students to take the Major Field Test in their specific subject area that is provided by the Educational Testing Service (ETS) [3]. This may be part of the capstone course in the curriculum or an upper-division major course. The School can administer the test in the final semester. It provides a report on the proficiency of the students in their specific area of study.

The AACSB also suggests using indirect measures of assessment to supplement the direct measures mentioned above. These measures are not a substitute for the direct measures but often help to supplement them. They guide curriculum change and provide indications of trends in the job markets. For example, employer surveys provide information on the necessary skills needed by graduating students. Alumni surveys provide information on how well prepared are the graduates for the business

world. The surveys help to keep the curriculum updated and provide networking opportunities for potential future hires.

The role of individual faculty depends on their specific involvement in the assessment program at the school. All faculty teaching in a program should be allowed to contribute to determining the goals of the program to facilitate faculty acceptance of the goals. Once the goals are decided, the individual faculty member should operationalize the goals and address them in course syllabi, assignments, and examinations. Assessment techniques should be built into the course to test whether those goals are being met and that student learning has been achieved. Faculty members are also responsible for collecting pertinent information to be evaluated by the assessment committee of the college, to determine whether the goals have been met, and to make changes in the future.

Many universities are also subject to regional accreditation, such as the Western Association of Schools and Colleges (WASC) [4], in addition to the AACSB. WASC Accreditation standards include setting learning goals and engaging in outcomes assessment. The overall requirements are similar to that of the AACSB. Business schools and universities should be able to meet both AACSB and WASC accreditation standards as long as they have ongoing assessment programs and outcomes evaluation utilizing faculty input.

LEARNING GOALS AND COURSE EMBEDDED ASSESSMENTS IN INTRODUCTORY FINANCIAL ACCOUNTING

As mentioned above, once the main goals of the degree program are decided, faculty members are obligated to identify specific and detailed learning goals for each course that aligns with overall program goals. The rest of this paper uses the introductory accounting course to provide examples of goals and assessment techniques.

Common degree program goals often include general skills such as written and oral communication, working in teams, critical and ethical reasoning, and problem solving. These general skills can be incorporated into most accounting classes by using, for example, projects and cases. At the introductory financial accounting level both projects and cases facilitate student learning of general and course-specific learning objectives.

Management specific skills in introductory financial accounting are based on the structure of the class. In most universities the introductory accounting course is required for all business majors and minors. The learning goals should take into consideration that most business students do not major in accounting. Typically, the introductory course emphasizes both bookkeeping techniques and the use of accounting information for decision-making. Accordingly, the learning goals concentrate on the role of financial accounting in society, basic business concepts, accounting concepts underlying financial statements, and the use of financial statements to analyze companies. An example of the learning goals is as follows:

“Course Goals

1. Upon completion of the course, the student is expected to have successfully met the following learning goal:

Financial Accounting's Role in Society

- Identify the users of financial accounting information and the types of decisions made by users.

- Describe the uses and limitations of the following primary financial statements: the income statement, balance sheet, and the statement of cash flows.
- Explain the purpose of an audit and the role of ethics in the accounting profession.”

The contact author can provide a detailed list of learning goals for the course.

The learning goals for the class are provided to the students as a part of the syllabus. This helps the faculty in two ways. First, they can refer back to these goals at the beginning of every class to emphasize the learning outcome for that particular class session. Second, they can use these goals in preparing assignments, projects, quizzes and tests so that it helps to keep the class targeted on the learning goals. The scoring rubrics for class components such as the assignments, quizzes, and projects can also help in breaking down the learning goals into the key skills and knowledge that make up that goal. For example, the grading of written assignments can include an evaluation whether the students is at the beginning level, developing in knowledge, competent, or accomplished. The contact author can provide a copy of scoring rubrics used for written assignments in the introductory course.

Student presentations also can be assessed using rubrics. For example, an evaluation of performance might include organization of the presentation, subject knowledge, using graphics, the mechanics of the presentation, eye contact, and elocution. The contact author can provide the scoring rubrics for presentations for interested readers.

Rubrics can provide a valuable tool to assess student learning in an objective manner by describing how the evaluation qualities have been met. A lot of planning is required to establish the rubrics the first time. However, anecdotal evidence gathered by the authors that compared non-rubric assessed courses to those using rubrics have determined that the rubrics help to evaluate student learning and, in the long run, save time in the evaluation of student work. After a rubric is developed, the grading of student assignments becomes very straightforward and objective and it saves time because there is less subjectivity in the process. Some might argue that rubrics are too inflexible by being overwhelmingly objective and not allowing for thinking about a student’s work as “whole product”. The authors have found that sections of the rubric can be allocated for addressing student work as a “whole” by evaluating creativity, general presentation of the content, clarity, style, reflection, and many other aspects of holistic learning.

In one course the author saved a great deal of time by simply giving the students the rubric criteria prior to their completing an assignment believing that it would give students a better chance to learn the course material. The author also attached a copy of the rubrics to student assignments after they were graded. This reinforced how students should learn the material in a specific project or other assignment. Overall, less time was spent on commenting based on student responses. The rubric enabled the instructor to grade more consistently and quickly by applying the same rubric to student assignments. All instructor comments were written on the rubric sheet and then both were returned to the student. This reinforced student learning. Rubrics can be refined over time and faculty can use them to develop teaching material and pedagogical styles.

Direct Assessment of Student Learning

While class grades may be a convenient measure of overall management specific skills, it is an aggregate measure and may not provide an assessment of specific skills or knowledge. Components of the grade such as assignments, cases, presentations, and projects are better indicators of specific skills. Scoring rubrics associated with each component assists faculty and assessment committees to track overall course goals, program goals and long-term student progress.

Another convenient way to test for student learning is to incorporate pre- and post- quizzes. Based on the detailed learning goals outlined in the syllabus, a quiz can be prepared with at least two multiple choice questions per objective. The students take this quiz on the first day of class. The students are provided only with their score and without being given the solutions. The same quiz is given again during the last week of class and it can serve as a review of class material. This time the grades are given to students along with a discussion of the solutions. Anecdotal evidence indicates that student learning is facilitated with pre-and post-quizzes.

Pre and post quizzes can help in long-term studies of student skills. The analysis of the information collected can help in adjusting learning goals. A slightly more complicated, but often more informative, measure of student skills is to give a pre-test of student skills on the first day of class as described above and then match the graded assignments, exam questions, and projects to the objectives of each question on the pre-test. Student improvement is measured by comparing their success on the matched assignments to their pre quiz responses. Then, at the end of the semester, an un-graded survey asking students about what did (and didn't) help them to learn the materials and skills for each learning goal becomes an indirect assessment of both the students and the course. We address indirect assessment more in the next section.

Some assignments can target assessment of multiple skills. For example, in-class assignments involving teams can assess a general skill such as teamwork as well as specific skills such as knowledge of the subject. It is important, however, that the rubrics related to such assignments should emphasize both sets of skills. Another example would be to ask students to make oral presentations of summaries of articles related to accounting from media such as Wall Street Journal. This fulfills not only a specific learning objective (learn to research) but also targets the general skill of oral communication.

Another method of directly assessing such skills is to assign a team project related to multiple goals from the syllabus. In the financial accounting class, a common project assigned is the financial statement analysis of companies. Different versions of this project have been assigned almost every semester for the last five years. Questions have been changed, restrictions added, the project narrowed or even expanded based on the time availability during the semester. The main project involves teams identifying two companies in the same industry, research on the companies using the library facilities, calculations and comments on ratios. The grading involves a written component, an oral presentation, class participation, and peer evaluation within teams. The project is worth 15% of the class grade. Over the last few semesters, Blackboard has been used to support the project and team web pages have been used to communicate between team members.

When the project was assigned the first time, the class sizes were small (around 30 students) and two complete class sessions were allotted to presentations by the teams. As the class sizes expanded (35-38 students), the presentations were spread over five class sessions and, in any one session, there were a maximum of two presentations in the first 20 minutes of class after which regular class material was covered.

The project requires involvement of the faculty. The teams were assigned by faculty (rather than self-selected) based on student grades to date, gender and the student's major area of study. A mix of majors can enhance the presentation and facilitate student interaction with others, an important element in teamwork.

The project is not assigned on the first day of class because it covers advanced topics such as ratio analysis and the preparation of financial statements. On the day the project is assigned in class about one-half the class time is used to discuss project requirements and allow the team members to meet and get to know each other.

Assessing the project can be an involved process. Traditionally, evaluating class participation and peer evaluation can be fairly subjective and difficult compared to the written and oral components of the project. Concerns about equal participation are handled through peer evaluations. Students are encouraged to assess the work of team members fairly and to critically evaluate their participation in the group. To support their grade and to make the project more business-like, the teams have to file minutes on their web page created on Blackboard. The minutes' inform each member of his/her responsibility and also lets the instructor know what is going on in the meetings. When students document their team processes and work, the result is to provide way to fulfill the general program learning goals by making the expectations for successfully being able to work in teams separate from the course content. The documentation also helps the instructor to be less subjective in grading this portion of the project.

The students are informed about their grading rubrics for the written component and the oral presentation. These were adapted from rubrics developed by the North Carolina Department of Public Instruction [5] and writing rubrics from California State University, Fresno [6]. They are used for grading the two major components of the project. The entire team gets the same grade for the written and presentation portion of the project. Student grades are then adjusted for individual students based on peer evaluation and class participation.

In past semesters the project has been viewed as the most popular assignment in the class. Students learn from calculating ratios and engaging in financial analysis. They develop general skills such as decision-making and communication skills as well as management-specific skills including the use of accounting information for decision-making. They enjoy working with other students and learning from peer interaction.

Indirect Assessment of Student Learning

The AACSB suggests that indirect measures such as surveys cannot be used to replace direct assessments but do provide valuable information to amend the learning goals and direct measures used in class. Anonymous surveys targeting specific components of the class can be used to assess learning and evaluate specific skills of the students.

The most effective survey of learning goals is a pre-post survey. A sample of such survey can be obtained from the contact author. It uses the same learning goals as defined in the syllabus. The survey was adapted from one used by another instructor at one of the author's institutions. It should be administered at the end of the course. Improvements in the score demonstrate student learning. Moreover, the survey can help to boost student confidence prior to the final examination as it provides feedback on what students have learned during the course.

Course software such as Blackboard and WebCT facilitate the transmission of the surveys and keep them anonymous. Blackboard allows the instructor to track whether the students have taken the survey. This can be used to award points towards participation in the completion of surveys. The surveys help to meet the accreditation requirements by assessing course learning.

We have used survey results to alter project assignments and teaching methods. The assessment of student learning in these surveys is typically gained by asking students what they have learned from a particular assignment. It is expected that they will provide a subjective response to the question. Teaching methods are evaluated by asking students to explain the usefulness of techniques such as class discussions, handouts, videos and other techniques. These questions target specific projects such as case studies. By using open-ended questions students can provide more detailed feedback that supports the indirect assessment of learning. It also provides a base for future comparisons over time and may assist in changing individual course and program goals.

Using Assessment Measures

The direct measures of assessment affect the final grade in some form. The pre-quiz is not incorporated into the grade but the post-quiz can be to make students take the quiz seriously. Since the most useful results are achieved by not having students study for the post-quiz it should be administered during the last week or so of the course and without announcement. The quiz can be given on line especially if this is way the pre-quiz was administered. The purpose of the post-quiz is to assess student learning during the semester.

Class participation credit is given for in class discussions, the presentation of assignments, and other forms of participation. Students are encouraged to ask questions of each other so the instructor is not always leading the discussion. The evaluation of such performance helps to determine whether students reason properly and their communication skills. These are important attributes that can affect future success in the business world.

Projects are an important component of the final course grade, as they require students to use analytical reasoning and problem solving skills. In some sense the projects can be used a culminating experience in the course.

After completing the assessment of course learning, the instructor should then analyze the results including those in rubrics and determine whether changes should be made in course assignments and teaching methods for the next course offering. In particular, the instructor should note deficiencies in student learning and decide whether it is due to a lack of effort by the student or inadequate teaching methods. The deficiencies identified also provide feedback that may lead to changing individual course goals and, perhaps, the overall goals of the program.

CONCLUDING COMMENTS

Though the paper uses an introductory financial accounting class as an example, all the methods of assessment of student learning can be embedded in any upper-division course. The identification of clear learning goals is the most important step in the process of assessing student learning. Methods of assessment should be based on components of the learning goals rather than keyed into overall course learning. This provides specific feedback on learning objectives that can help to make changes in course content and teaching techniques. Rubrics are helpful in this process. In addition to those presented in the paper, the AACSB provides rubrics on their website.

Class assignments provide tools to help students learn specific material and they facilitate discussions, the analysis of cases, problem solving skills, and teamwork. Faculty can use surveys to evaluate both pre- and post-learning by the students. They also provide a benchmark for future offerings of a course.

The assessment of student learning is a critical component in evaluating whether a particular course has met its goals. It also helps to determine whether overall program goals are realistic or need to be changed given the feedback provided by assessment techniques. Assessment should be an ongoing process and not used just to meet accreditation requirements. While faculty may spend a great deal of time to initially develop the techniques, in the long run the information gathered makes it worthwhile. Also, it takes less time in future semesters because the basic assessment measures have been established and only require adjustments when the results of assessment warrant such changes.

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