

The Accounting Education Change Commission Grant Experience: A Summary

Chapter 5 MESA COMMUNITY COLLEGE Introductory Accounting Courses: A User's Approach

Type, Size and Mission of Accounting Program

The mission of the accounting program at Mesa Community College (MCC) is to provide opportunities for lifelong learning to a diverse student population, promote excellence in teaching, learning and service, and encourage collaboration among students, faculty, staff and community, within a multicultural world.

In order to accomplish its mission, the MCC accounting program has three major objectives. First, coursework is offered which can be transferred to colleges and universities. Second, coursework is offered which can be applied to Associate of Applied Science (AAS) degrees and certificate programs. Third, coursework is provided for retraining and upgrading of skills to meet community needs. Admission to MCC requires that the student meet one of four criteria: (1) be a graduate of an accredited high school, (2) have a high school certificate of equivalency, (3) be 18 years of age or older and demonstrate evidence of potential success in the community college, or (4) be a transfer student in good standing from another college or university.

Business enrollments overall have been decreasing significantly over the past five years. Currently, there are 2,058 students enrolled in the College of Business at Arizona State University (ASU) who transferred from MCC. Approximately 400 of these students transferred in the past year. In the 1993-1994 academic year, 338 AAS degrees — 12 of which were accounting degrees — and one certificate in accounting were awarded. For the 1991-1992 academic year, which was prior to the receipt of the AECC grant, MCC served approximately 1,922 students in the traditional accounting sequence. Both the traditional accounting sequence and the new accounting courses develop under the AECC grant are currently being offered with 923 students being served in the 1994-1995 academic year. Of that amount, 338 students are enrolled in the new accounting sequence. MCC has a diverse student body, including in-state, out-of-state, and international students.

Characteristics of Program Before the Grant

The accounting program at MCC has been respected by both the community and ASU, the main recipient of MCC transfer students. However, before the AECC even came into existence, accounting faculty at MCC recognized that problems existed in the accounting courses offered. Of grave concern was the attrition rate in the first semester principles course. Approximately 50 percent of students withdrew from this course. Later documentation verified that MCC accounting courses had the highest attrition rate on campus, even higher than MCC math courses, which had been perceived as the courses with the worst attrition. Most of the accounting faculty at MCC felt that a key reason for the high withdrawal rate in their courses could be attributed to the poor basic skills of students enrolled. Attempts to require basic skills prerequisites for the first semester accounting principles course failed.

The actual content and delivery of accounting courses, combined with the attrition problem, had also discouraged some faculty from teaching the principles of accounting courses. One faculty member even switched into the statistics area on a full-time basis rather than teach accounting principles. Another faculty member began experimenting with group projects and other new teaching techniques to minimize the attrition problem as well as the drudgery of teaching accounting principles.

The introductory accounting sequence at MCC consisted of three three-credit courses, which

transferred as six credits to most colleges and universities. The original intent of expanding to a nine-credit sequence was to offer a more in-depth, quality approach without having to rush through the material. As with most traditional introductory accounting courses, the focus of the course was a preparer's approach. Bookkeeping became the emphasis, the "one right answer" syndrome existed, and delivery was generally accomplished by the lecture method. The textbook, not the teacher, drove the course. Since many enrolled students lacked basic skills, learning mechanics such as debits, credits, and journal entries became a stumbling block. Faculty never had the time to allow students the chance to thoroughly learn and understand the theory behind what was being presented or even the purpose of the accounting information. Writing and oral communication skills, as well as team skills, were not a part of this sequence.

Central Objective of Grant

The main objective of MCC's AECC grant was to make substantial changes to the accounting curriculum which directly affected transfer students to the College of Business at ASU. A secondary objective was to apply the relevant portions of the new curriculum to the two-year degree and certificate programs.

To accomplish the main objective, it was decided that the new introductory accounting courses must include more than just technical accounting content. The accounting faculty decided the overriding goal of the redesigned curriculum should be to help develop in students the ability and motivation for life-long learning. The introductory accounting courses would be designed to meet the skill competencies necessary to transfer to the College of Business program at ASU and also to change from a knowledge-based emphasis to a process-oriented emphasis. Three significant changes would help accomplish the objectives of the AECC grant: (1) change the focus from the preparer's perspective to that of a user, (2) replace the lecture method with a variety of pedagogical techniques including cooperative learning, and (3) incorporate new skills such as writing, listening, speaking, team work, and critical thinking.

Key Means of Accomplishing Grant Objective

Prior to the receipt of the AECC grant, the six accounting faculty at MCC agreed that it was important to work closely with ASU on curriculum changes affecting the introductory accounting courses for transfer students. Two faculty members volunteered to meet on a regular basis with ASU accounting faculty to develop the new introductory sequence. Two other faculty members began working with ASU faculty on the development of the one-credit computer course which would also be required of accounting majors at ASU.

Meetings between MCC and ASU faculty occurred regularly for one semester. During this time a vision of the new courses was established and overall objectives were outlined. At this point, two significant events occurred: the AECC grant was awarded to MCC and the MCC faculty realized that curriculum development had to move at a quicker pace at the community college than at the university. Due to a much different bureaucratic process in the community college district, detailed course outlines and competencies needed to be submitted to ensure the new courses would be approved by the Governing Board. ASU faculty are not required to submit similar documents and therefore were able to take a slower, more methodical approach to the development of the courses. Both ASU and MCC faculty were confident that even though detailed lesson plans would be developed independently, the overall objectives would be met at both schools.

Reassigned time was given to three faculty to develop the new courses. This time was supported by the AECC grant. No other faculty received reassigned time.

The two MCC faculty who developed the new sequence of courses also taught the sequence for the first two years the courses were offered. A third faculty member, who had chosen to teach in the statistics area, decided to begin teaching accounting again in the third year of the new program. The faculty member who had developed a one-credit computer lab retired from the department and another faculty member took over this course. This faculty member also began teaching the new introductory courses in the fourth year of the program. In the third year of the new program, adjunct faculty were also hired to teach the new accounting courses in the evening program.

Major Changes from Pre-Grant Conditions

The traditional accounting sequence at MCC is composed of three three-credit courses, ACC111, ACC112, and ACC212. The first two courses focus on financial accounting topics and the third course focuses on managerial accounting. This nine-credit sequence is equivalent to the typical six-credit sequence taught at most colleges and universities. The textbook drives the course and competencies for the course mirror principles of accounting textbooks. Although the sequence continues to be taught, enrollment has dropped substantially due to the offering of the new accounting sequence.

The new sequence of courses is composed of two three-credit courses — ACC230 and ACC240 — and a one-credit, open-entry, open-exit, computer lab course — ACC250. Currently ACC250 is only required for non-ASU business transfer students and ASU accounting majors. The ACC230 and ACC240 courses are appropriately titled "Uses of Accounting Information I and II." The focus of these two courses is on how to use accounting information, not on how to prepare accounting reports. The ACC250 course, "Introductory Accounting Lab," covers the procedural details of bookkeeping and the preparation of financial accounting reports.

The new sequence of courses is unlike the traditional sequence in most respects. Some of the major changes to the courses include the following:

1. Prerequisites of critical reading, English, and college algebra have been added to the new sequence to ensure that students possess basic skills necessary to succeed.
2. Students do not learn bookkeeping concepts such as debits, credits, journal entries, posting to ledgers, or preparing financial statements; however, students do learn the concepts of bookkeeping through transaction analysis. The accounting equation is used throughout the courses to illustrate the effects of transactions on the financial statements.
3. Although the lecture method is sometimes used, the majority of class time includes cooperative learning activities and class discussion, which requires active participation of all students in the class.
4. The first five weeks of the ACC230 course are used for preliminary discussions including effective writing skills, decision making, forms of business organization, history and uses of accounting information, role of accounting organizations, transaction analysis, and the accrual versus the cash basis of accounting.
5. To teach accounting concepts, it was decided that a corporate annual report would be the basis for the course content. Students learn about accounting by walking through an entire annual report. The last ten weeks of the ACC230 course are spent on this task.
6. The first five weeks of the ACC240 course bring together what students learned in ACC230 through financial statement analysis. This serves as a good review of ACC230, while also teaching students techniques of a thorough analysis.
7. The second five weeks of ACC240 are used to discuss how internal accounting reports are used in a firm for decision making. Many topics are introduced just as they were in the traditional sequence; however, the emphasis is on comparing the traditional approach to more innovative approaches as outlined in business and accounting periodicals.
8. The last five weeks of ACC240 include a discussion of taxes and accounting issues in government. Oral presentations of student course projects are also given at this time.
9. The culmination of the new sequence is a course project which requires each student to analyze a company, write a report, and orally present the result of the analysis to the class.
10. Throughout the entire sequence students are required to turn in a variety of writing assignments, present material orally to the class, and work in teams.

Methods of Achieving Faculty and Administrative Support for Changes

The six accounting faculty at MCC unanimously voted to apply for the AECC grant. Two faculty members volunteered to develop and teach the new courses. Although all faculty were willing to support the efforts of these two faculty, it was clear that not all faculty wanted to be part of the development process.

The administration was at first reluctant to support the accounting project. However, once they realized that this change was necessary to continue a positive relationship with ASU, the necessary support was offered. The success of the new curriculum has convinced the administration that their final decision was the correct one. The Dean of Instruction was responsible for nominating the two faculty who developed the new courses for the "Innovator of the Year" award given annually.

Change Activities That Worked Well and Which Others Might Copy

The change activities which took place at MCC have been for the most part successful. Any of the changes implemented could be individually or collectively used at other colleges and universities. A brief description of successful change activities follows:

1. **Integration of nonaccounting skills into the curriculum**

Based on recommendations by local employers, AECC position statements, and national surveys, the accounting faculty focused on integrating the following eight skills into the accounting courses:

- a. Written communication
- b. Oral communication
- c. Listening
- d. Critical reading
- e. Research
- f. Team work
- g. Analytical and critical thinking
- h. Time management

Incorporation of these skills has caused a significant change in grading procedures. Accuracy of technical accounting content is only a portion of the grade on each assignment. Points are also allocated for skill-based competencies. Examples of how the above skills have been included in the new accounting courses follow.

Team Work

Students work in teams during almost every class period. This offers students a chance to apply material that has been discussed in class or assigned for homework. While some of these assignments are quantitative, many are subjective in nature and require the application of the decision making process. Some assignments involve finding information in the financial statements and interpreting that information. The material is often processed as a class after teams have worked on the assignment.

The faculty have discovered that students like working in teams. Students are pleasantly surprised at the insights other students can bring to problems. They also feel comfortable voicing their opinions within the comfort zone of a group of people they know. However, problems with team work have occurred. Faculty have learned that team work results in positive experiences under the following circumstances:

1. Careful attention is paid to the composition of the group. They should be heterogeneous based on ability, gender, and culture. Friends should be split up.
2. Attendance policies must be enforced.
3. Teams should be changed once or twice during a semester. Changing team members is

often initially resisted by group members that have found a comfort zone, but welcomed after the change is made. By mid semester there is much cross-pollination of ideas among groups because more students know each other.

4. Group grades are rarely given for assignments. It is difficult to determine contributions of individual members.

Research Reports

Students are required to research an accounting topic. A written and oral report may be required. This assignment is graded for accuracy and quality of content, as well as for writing, speaking, and research skills. Listening, critical reading, and time management skills are also a part of this assignment. If the student does not follow the guidelines given by the instructor, or cannot read and understand information found at the library, his or her grade will be negatively affected. Since the daily class assignments continue regardless of due dates of individual reports, students must discipline themselves to complete this assignment as well as the daily assignments in a timely manner.

Mini-cases

Short cases are used to begin to develop students' critical thinking and analytical skills. These are unstructured problems which often do not have one right answer. Students must do a written analysis and defend their answers. Students find these time consuming, sometimes frustrating, but nearly always an exceptional learning tool.

Reading Logs

Because there is no one textbook which fits the needs of the new accounting courses, several textbooks are used, as well as periodical articles. Students answer questions on a reading log for all reading assignments from textbooks and periodicals. These logs are sometimes used as a basis for group discussion. Since students write peer evaluations of their team members, There is much peer pressure to come to class prepared with the reading log complete. These assignments help students develop critical reading and team skills.

2. Requiring prerequisites of critical reading, English, and college algebra

The changes discussed above would not have been successful at MCC if prerequisites had not been required. This change is particularly relevant to community colleges, while it may not be relevant to universities with high admission standards.

3. Switching from a preparer to a user approach in combination with a one-credit computer lab

A concern of accounting faculty was that students would not be able to change their mind and transfer to a four-year college other than ASU without losing accounting credits. As evidenced by positive articulation agreements with the two other major state universities — University of Arizona and Northern Arizona University — the combination of ACC230, ACC240, and ACC250 does prepare business transfer students for most universities even if the transfer university has not made major accounting curriculum changes.

4. Using an annual report as the driver of the course instead of a textbook

All faculty teaching the new accounting sequence are encouraged to use real annual reports in class. It has been fairly easy to obtain enough of the same company's reports by calling and requesting them from the corporate headquarters. An alternative source is to have students use the *Wall Street Journal* service to obtain a particular company's annual report.

Change Activities Undertaken That Did Not Work

The AECC grant allowed MCC to make significant and positive changes to the accounting curriculum; however, some proposed changes were not implemented or did not work. The main concerns and challenges faced by the accounting faculty are discussed below.

1. Change requires an enormous amount of time and dedication. As they currently exist, community colleges can be detrimental to change efforts. With over 20,000 students, MCC is a large campus. Smaller campuses are most likely in an even less envious position. Despite

the size of MCC, only two faculty dedicated themselves to the AECC grant. One of these two faculty has now moved on to a new and unrelated change project. While accounting faculty at universities tend to be discipline specific, faculty at community colleges, including MCC, must often be certified to teach in more than one discipline. Faculty time is divided between two or more key efforts. Teaching loads average 15 credits per semester. Administrators consider most change efforts to be part of the faculty's normal duties and are, therefore, reluctant to support change efforts financially. For the accounting change to continue to be a success, it is important for administrators to recognize the time element required of all full-time and part-time faculty teaching the new accounting courses.

2. Although the prerequisites added to the accounting courses are perceived as successful, a change to those prerequisites occurred which has been viewed negatively by faculty in support of the AECC change. MCC is one of ten campuses in the Maricopa County Community College District. As a result, curriculum changes must be approved by all ten campuses. Significant resistance to the accounting change existed when the new accounting courses were approved. As a compromise, faculty developing the new courses agreed to allow an alternative prerequisite of ACC111. This prerequisite is contrary to the goals of the AECC grant. By taking the ACC111 course, which has not changed in content or pedagogy, students can enter the new accounting courses still lacking in basic skills.
3. Demand for the new accounting courses in the evening program has exceeded the supply of part-time faculty qualified to teach them. As a result, many new adjunct faculty are being hired to teach the new courses. Due to lack of resources and time, full-time faculty have not been able to properly train adjunct faculty. The administration has supported an effort to offer a training session and a small stipend to adjunct faculty. It is unknown if an ongoing program to train new faculty will result.
4. To date, articulation problems with the universities have been nonexistent with regard to the newly designed accounting courses at MCC. All state universities have agreed to accept these courses as equivalent to their own. However, articulation problems occurring in other areas have recently caused discontent between the community colleges and universities in Arizona. It is unknown at this time if changes may occur which negatively impact articulation agreements in the future.
5. Although it was hoped that assessment would be an ongoing process from the beginning of the AECC grant, the lack of administrative support in this area resulted in assessment of the accounting project not being properly planned and implemented. Accounting faculty were not trained in the area of assessment. Time and support were needed to develop a good assessment plan. Students began taking the new accounting processes in Fall, 1992. Therefore, the first potential graduates from ASU occurred in Spring, 1995. Despite faculty pleas for help in tracking this initial group of students, it was not until Summer, 1995, that the MCC administration made institutional assessment a priority. A tremendous amount of baseline information and feedback has been permanently lost.
6. Grading students for skill-based competencies continues to be a challenge. Most faculty have experimented with new and different ways to grade assignments each semester. Accounting faculty continue to collaborate not only with each other, but also with faculty in other disciplines such as English and Speech Communications. It was discovered early in the implementation phase that group grades only create more challenges. As a result, students work in groups, but are individually assessed. This creates a significant amount of grading for the instructor, but ensures individual accountability. It also solves the problem of forcing students to work outside the class in groups. This is a serious concern of community college students since many work full-time and have families in addition to attending school.
7. No perfect textbook exists to use with the new accounting courses. Several textbooks are currently being used. These books work well as references and for background material. However, as more faculty begin to teach the new courses, it is hard to dissuade them from allowing textbooks to be the driver of the course.
8. Many periodical articles are used to supplement the accounting courses. Copyright laws have made this a challenge. Most academic accounting journals are cooperative; however, other

business periodicals have refused permission requests unless exorbitant fees are paid to reproduce articles for classroom use. Sending students to the library would solve this problem, but MCC's library is presently in need of resources for additional staff. Understaffing has resulted in problems which make it hard for students to obtain needed materials.

Unexpected Benefits from Change Activities

The most exciting benefit which has occurred from the changes implemented has been in student attitude. Student motivation, fewer absences, and lower attrition rates make teaching more enjoyable than it had been in the traditional accounting courses. A student comment often heard is that ACC230 or ACC240 "was the hardest class I took, but it was also the most enjoyable."

Increased respect from ASU faculty and staff has resulted because of the changes made by MCC. Often, potential MBA students are advised by staff at ASU to take the ACC230 and ACC240 courses at MCC prior to beginning the MBA program.

In Fall, 1995, the MCC management and marketing faculty requested that another new accounting course be developed for the two-year degree and certificate students in disciplines other than accounting. This course is currently being developed. It will be a three-credit course with a user focus, taught similarly to the ACC230 and ACC240 courses.

Measurement of the Effects of Changes Accomplished

As mentioned in a prior section, assessment has not been accomplished as hoped. Several assessment measures have been used and are summarized below:

1. Classroom research has been conducted on a continual basis since the first course offering of ACC230. Feedback from students is requested on a regular basis to determine the value of class discussions, team work, and effectiveness of assignments. The feedback received has been invaluable for purposes of continuous curriculum improvement.
2. Course and teacher evaluations are also conducted on a regular basis by peer faculty, the department chair, and the Associate Dean of Business. The written part of the evaluation filled out by students is dated, and the institution has not attempted to improve this document to meet changing classroom techniques. This type of evaluation offers only a minimal amount of feedback for the new accounting courses. The evaluations overall have been favorable, however.
3. The Dean of Instruction offered financial support in the Summer of 1995 to begin work on a more thorough assessment of the new accounting curriculum. MCC personnel have met on several occasions with ASU personnel to begin sharing information. It is hoped that a consistent effort on the part of both schools will result in information to help improve both programs. With the help of ASU, MCC was able to design and conduct a survey of students during the summer and fall of 1995. All students who had successfully completed ACC240 were mailed a survey. Of 256 surveys mailed, 62 students (24%) responded and 36 surveys were returned due to unknown addresses. Beginning in Fall, 1995, accounting faculty, with the help of the MCC Office of Planning and Research, will attempt to keep a file of permanent student addresses for future contact. The overall response from the survey was favorable. Of 62 students, 57 students indicated that they were satisfied or very satisfied with the new MCC accounting curriculum. Students attending ASU indicated they were well prepared for the ASU business program.
4. Attrition rates have been tracked in both the traditional and the new accounting sequence. For the academic year 1994-1995, 675 students enrolled in the traditional first semester accounting principles course, ACC111. Of this number, 321 students (47.5%) completed the course. During the same time period, 277 students enrolled in the new ACC230 course. The number of students completing the new course was 218 students (78.7%).

Special Insights from Carrying Out the AECG Grant

The AECC grant encouraged MCC accounting faculty to converse with each other on a regular basis. Valuable sharing of ideas has occurred. In addition, accounting faculty have been involved in campus activities to improve teaching and learning. This has encouraged interdisciplinary collaboration, which has also added value to the accounting program.

The MCC-ASU cooperative relationship resulting from the AECC grant should be a model for other disciplines as well as community colleges and universities nationwide. Articulation problems would not exist if faculty could work together toward quality education as have the MCC and ASU faculty.

The greatest outcome, however, has been the realization that students are capable of quality work. The new accounting curriculum demands a high level of performance from the student. MCC students have lived up to the higher expectations while maintaining a positive attitude. This, in turn, makes for a happier faculty.

Plans to Perpetuate the Changes that Worked Well

The ACC230, ACC240, and ACC250 courses will continue to improve. New ideas will be shared as more faculty begin to teach these courses. As evidenced already, other disciplines want to see the accounting faculty design new and better accounting courses for AAS degrees and certificate programs. The Office of Planning and Research has offered its help in properly assessing and therefore improving, the accounting curriculum. It is hoped that a permanent training program for adjunct faculty will be implemented. MCC faculty continue to disseminate information to their nine sister campuses, as well as to other campuses nationwide.

Major Reports and Articles Generated from Grant Activities

"Critical Thinking and the Introductory Accounting Curriculum," *American Accounting Association Communicator*, February, 1995, Charles E. Lewis, pp. 17-18.

Materials Available to Send to Others and How to Get Them

A packet of information including sample syllabi, handouts and exercises used in the new accounting curriculum can be obtained by contacting the Business Department at MCC.