# Classroom Strategies in Vocational Programs --- Classroom Based Research on the Implementation of Effective Teacher Behaviors for Underrepresented Students

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<th>FISCAL YEAR</th>
<th>ID NUMBER</th>
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<td>1990-91</td>
<td>90-0062</td>
<td>De Anza</td>
<td>Foothill-De Anza</td>
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**Project Title**

This project proposes to improve the retention and student success rates of under-represented minorities in vocational programs by establishing a new method of delivering support systems to them and by increasing the involvement of vocational instructors in student advisement. An adjunct basic/study-skills would be aligned with an Accounting 1A course. As a result of the project students will become more active learners with an understanding of how they personally learn. Awareness of campus services and vocational options will increase as vocational faculty mentoring increases.
Classroom Based Research on the Implementation of Effective Teacher Behaviors for Underrepresented Students

Educational program or services being addressed:

This project seeks to improve the retention and student success rates of underrepresented minorities in vocational programs by establishing a new method of delivering support systems to them and by increasing the involvement of vocational instructors in student advisement. This would be done by establishing an adjunct basic skills/study skills course for an Accounting 1A course.

Specific problem(s) being addressed:

The number of students, especially underrepresented minorities, who complete career programs at DeAnza is abysmally small; and of those the number who decide to transfer is below the community college average. Although this population would probably benefit most from existing support services, they are largely unaware of or are reticent to take advantage of those services. We need to increase our efforts to connect career students to the services which would help them succeed. In addition, faculty have not been encouraged to use classroom assessment techniques to adapt to the needs of the changing student population; teaching methodology has not been modified appreciably over the years. We also need to provide faculty with data so they may participate in student advisement.

Population(s) to be served:

The targeted population is the rapidly growing group of underrepresented minorities in vocational programs (presently 840), but all students enrolled in the accounting courses will benefit from the program.

Work statement:

The instructors of the skills and accounting courses will meet during the Fall quarter, 1990, to plan the program and select a learning styles inventory. The accounting course would be modified as necessary, the learning styles inventory will be computerized, and preliminary testing will be done on classes in the Winter quarter, 1991. The plan will be fully implemented by the Spring of 1991. The cost of the project is anticipated to be $32,100. Evaluation will be
collected from instructors and students, grades and retention rates for the accounting class will be compared to previous quarters, and referrals to other service areas will be documented.

Expected outcomes:

Students will become more active learners with an understanding of how they personally learn. Awareness of campus services and vocational options will increase as vocational faculty mentoring increases. The use of adjunct courses and classroom assessment techniques in vocational courses should increase. The program’s effectiveness will be measured by evaluations, by improved retention and success rates, and by referrals to other campus services. The program will be advertised in appropriate educational journals and at conferences.
Classroom Based Research on the Implementation of Effective Teacher Behaviors for Underrepresented Students

1. Specific Educational Program Being Addressed

DE ANZA COLLEGE: Career and Technical Education, Business Division, College Readiness and Tutorial Programs cooperatively propose a classroom based research to develop and implement effective teacher behaviors that will increase the success of underrepresented students enrolled in vocational programs.

The project is designed to help De Anza College’s Career and Technical Education Office improve the success rate of underrepresented minorities in vocational programs in several ways:

(1) to identify effective alternative teaching strategies for the delivery of instruction,

(2) to create an adjunct basic skills/study skills course which would teach students "learning to learn" strategies for a vocational course,

(3) to utilize classroom research and classroom assessment techniques to monitor student learning, and

(4) to improve the ability of teachers to participate in the advisement process.

What specific educational program or services the proposal is addressing.

De Anza College has been actively addressing the needs of underrepresented groups through various support services on campus such as: Remedial Classes, College Readiness, Tutorial Services and many more. However, underrepresented students continue to have a lower success rate in their academic work. According to Ida Beal Harding, University of Wisconsin, 1981, "These programs are generally unsatisfactory for three reasons: First, remedial courses are typically non-credit and, as a result, students tend to give them low priority. Second, students don't seem to transfer skills learned over to their content courses. Finally, because students simultaneously enrolled in regular content courses requiring skills they haven't yet
developed, they often fail out of college before remedial courses can be effective." The main objective of this proposal is to identify "high risk" underrepresented students on campus, develop "adjunct courses" that will help them succeed academically, and to train teachers on effective methods developed across the various vocational programs at De Anza.
2. Specific Problems Being Addressed

What specific problem(s) is being addressed in the proposal.

The specific problem being addressed is the need to implement effective teacher behaviors that will increase the success and learning abilities of underrepresented groups. The classroom based research being proposed will utilize "adjunct classes" as a method to increase the successful completion of underrepresented groups. The project proposed will also develop new avenues for content and skills instructors to work together in ensuring that skills needed in content courses are identified, adjunct classes developed and implemented, results be disseminated to improve the quality of teaching across campus and an increased awareness of the needs of underrepresented students by all staff.

The number of students, especially underrepresented minorities who complete career programs at De Anza is abysmally small (one vocational entry level course, Accounting 1A, has a drop rate often above 50% out of an enrollment of over 500 per quarter); and of those the number who decide to transfer is below the community college average.

The low success rate in many entry level courses such as Accounting 1A may be attributed to one of the following reasons: (1) Many community college courses do not have prescribed prerequisites, (2) many career students are anxious to acquire their skills and find employment, and (3) basic skills courses are often filled before the new student who lacks adequate reading, writing, math, or study skills can enroll. Even when students are able to take skills courses before entering other college courses, Patricia Cross and others have found that skills training often does not transfer. She concludes that skills training should be integrated into other experiences of the student and that skills instruction should be offered in a way that would enhance, rather than inhibit the development of a positive self concept.

Additionally, members of the target group often have learning styles much different from that best served by the traditional methods used in many vocational classrooms today. Alternative instructional delivery strategies are called for, but vocational instructors feel inadequate when attempting major changes without the help of learning resource specialists. Contact between the learning specialists and vocational instructors occur informally or through presentations to large groups of instructors. There is presently no mechanism in place which encourages long-term relationships between learning skills specialists and vocational instructors. The proposed project will develop these relationships and allow the cooperative development of new classroom based learning assessment techniques.
3. Population To Be Served

Identify the population(s) to be served by the project.

The target population is the at-risk, underrepresented minority students enrolled in an entry-level vocational course. For the purpose of research, Accounting 1A will be the targeted content course for this project. The target group includes students from underrepresented ethnic and language minorities, disadvantaged, and disabled students who lack the confidence or skills necessary to succeed in college level courses such as accounting. Through classroom assessment, identified high risk underrepresented students will be encouraged to voluntarily attend the adjunct classes. This group will be identified as Group A. A similar group in another section of Accounting IA, without the "adjunct" component, will be identified as Group B.

DeAnza has instituted an active recruitment program to attract underrepresented minorities. New teaching styles and methodology are needed to better serve and retain them in the educational system. Minority students with good study skills will do well and may join the De Anza Transfer Project, which offers considerable support for minority students with transfer as a goal. Those who have more barriers to education will need critical support services in order to succeed. This targeted group once identified will be provided the classroom support by both content and skills instructors to ensure their successful completion and possible participation in the transfer project.
4. Objectives

Project Objectives:
1. To develop, test, and disseminate alternative teaching strategies for the delivery of accounting instruction.
2. To create a model for developing an adjunct basic skills/study skills course to accompany vocational courses.
3. To adapt various classroom assessment techniques applicable for Accounting courses.
4. To develop materials which will encourage and assist instructors in student advisement for college readiness and vocational placement.

This program strives to improve the retention and success rate of underrepresented minority students by developing and disseminating special learning and teaching strategies for the accounting classroom and by increasing faculty advisement. Once a student has completed this program, the skills acquired should carry over to other courses, especially to subsequent accounting courses.

An adjunct basic skills/study skills course will be offered for an existing entry-level accounting course. Since students learn best when they see a meaningful purpose in what they do, the course content of the adjunct course would be directly related to the accounting assignments. Self-esteem will be enhanced while basic skills and study skills, including an understanding of their learning style, are developed while learning accounting. A computerized learning style inventory will be developed for quick analysis of results.

The study skills instructor involved with this project, Barbara Travis, is presently taking the Classroom Research course from Patricia Cross at the University of California at Berkeley and will work with the accounting instructor to develop alternative instructional delivery strategies in the classroom and to utilize classroom assessment techniques to evaluate their success. Since these assessment techniques can be performed quickly, the instructor will be able to change teaching behavior, instructional delivery, or communication strategy during that instructional quarter. The use of classroom assessment techniques will cause both the instructor and the student to constantly reevaluate what they are doing in the teaching/learning environment of the classroom. As a result, the student will become a more active learner.

With the assessment and intervention techniques used in the program, the accounting instructor involved will have more tools with which to provide advisement. Since the instructor will have a good background in the Accounting and Business fields, vocational advisement will be greatly facilitated and talented underrepresented students can be identified and encouraged to pursue higher degrees. The instructor can refer the student to or initiate
contacts with appropriate student services (especially financial aid, placement, and the transfer projects) when appropriate.
5. Workplan Narrative

WORKPLAN

Dates of Scheduled activities:

Alternative teaching strategies for accounting will be developed and classroom assessment of those techniques will be utilized beginning in the Fall quarter of 1990. An appropriate learning skills inventory test will be identified in the Fall quarter, 1990, the questionnaire will be designed and printed during the Winter quarter, 1991, a program to analyze the results will be developed in the Winter quarter, 1991, and the completed questionnaires will be in use by the Spring quarter, 1991.

Planning for the adjunct course will begin during the Fall quarter of 1990, ideas will be tested in the Winter quarter, and the coordinated courses will be taught in the Spring of 1991. The students for the adjunct course will be drawn from the accounting class(es) of one instructor. Enrollment will be voluntary and largely determined by student surveys, availability at the assigned hour, and interest.

Budget amount that will be spent by objective

1. To develop, test, and disseminate alternative teaching strategies for the delivery of accounting instruction. Budget requested: $8,400

2. To create a model for developing an adjunct basic skills/study skills course to accompany vocational courses. Budget requested: $15,400

3. To adapt various classroom assessment techniques applicable for Accounting courses. Budget requested: $4,300

4. To develop materials which will encourage and assist instructors in student advisement for college readiness and vocational placement. Budget requested: $4,000

Personnel required:

Instructor for pilot basic skills course:
Barbara Travis, who is the Assistant Director of the College Readiness Program, is currently a participant in Pat Cross’ Classroom Research program at the University of California at Berkeley,
Instructor for accounting course:
Phyllis Yasuda, who has been teaching accounting at De Anza and Foothill Colleges for over fifteen years. She has co-authored a supplemental computer-accounting text, and has been given a campus Research and Innovations grant to develop methods of using computer graphics in classroom presentations to improve teaching and learning.

Design and implementation of scanned system for analyzing learning styles:
John Wanlass, who has been teaching accounting at De Anza for over fifteen years, has authored a general ledger accounting program, has written numerous supplemental computer accounting texts, and appointed to the position of De Anza College’s Endowed Chair in 1988-89.

Equipment/Materials required:
IBM PS/2 and scanner will be an in-kind matching contribution from the College. Additional office equipment are already in place and will also be a portion of the in-kind contribution.

Evaluation process:
Evaluation of the success of this project will be done by comparing the drop rates and the grades from the accounting course to those of prior years and by soliciting evaluations from the students involved. The success rate of these students the following quarter in Accounting 1B can be compared to that of similar students having no exposure to the adjunct course.
6. Expected Outcomes

The expected outcomes of project activities, in terms of:

Project objective(s)

The students in the accounting course selected will have basic skills and study skills opportunities delivered to them. As a result, the retention and success rates of underrepresented minority students should improve in the accounting course. The adjunct skills component will enable participating students to develop their own learning strategies which they can directly transfer to succeeding accounting courses but should also be adapted to the rest of their academic and vocational program. Because of the increased exposure to the instructors, these students will benefit from more faculty advisement. Their increased understanding of how they learn and the increased faculty contact should result in increased self-esteem.

Impact of the Project

Teaching and learning strategies developed would be shared with other vocational programs. The research done through this project should result in some classroom assessment techniques particularly appropriate to accounting courses. This adjunct skills course can serve as a model upon which similar skills courses can be developed to accompany other vocational programs.

Potential for continued support after the expiration of the grant

DeAnza College has an excellent record of supporting programs which have been shown to be successful; we expect that to continue.

Potential for adaptation to other institutions or programs

Once in place, this program would be adaptable to other vocational or academic courses at DeAnza or at other community colleges.
7. Evaluation Plan

Evaluation plan

Evaluations of the program by participants and by colleagues will demonstrate the potential of adjunct courses for vocational programs, learning styles as a study aid, and classroom assessment techniques as an aid for improving instruction.
8. Dissemination Plan

Dissemination plan, including recommendations for appropriate dissemination for the project

All interested individuals at DeAnza will be kept informed of the progress of the project by the office of the Dean of Career and Technical Programs. We will invite any persons, on or off campus, to observe the program. We will also submit reports for publication or for presentation at conferences to the Chancellor’s Office and various learning resource and business/accounting education groups. We plan to make information about this program available to all other interested community colleges.
9. Budget Narrative

[NO "BUDGET NARRATIVE" ACCOMPANIES THIS DOCUMENT.]