Global Perspectives on Accounting Education
Volume 3, 2006, 1-21

USING ACTION RESEARCH TO PROMOTE INCREASED ACADEMIC SUCCESS FOR EDUCATIONALLY DISADVANTAGED STUDENTS

C. Richard Baker
Adelphi University
Garden City, New York
USA

Lawrence B. Logan
University of Massachusetts - Dartmouth
North Dartmouth, Massachusetts
USA

ABSTRACT

This paper has two objectives. The first is to advocate that "action research" be considered as a methodology for research in accounting education. The second is to describe an on-going Action Research Project (the Project), the purpose of which has been to increase the academic success rates of educationally disadvantaged students in accounting and business courses. The Project is part of an Alternative Admissions Program (AAP) located at a mid-sized public university in the Northeast United States. The Project has involved a small sub-set of students in the AAP who expressed an interest in majoring in business or accounting. The Project description covers a period of eight years during which time the authors engaged in a cyclical series of action steps including planning, acting, observing and reflecting (Grundy, 1988). Based upon qualitative data gathering through observation of student behavior, and through completion of certain assessment forms, frequent changes were made to teaching methods and the general conduct of the Project. The Project's success has been attributable in part to smaller class sizes and individual attention. However, engaging students in positive learning experiences has also been important. While the numbers are small, we feel that the Project has contributed to improving the lives of the students involved. Throughout this Project, our hope has been that as the expectation levels of educationally disadvantaged students grow, they will in turn be motivated towards higher levels of academic achievement, thus permanently removing the educationally disadvantaged stigma.

Key words: action research, accounting education, educationally disadvantaged students, minority students

INTRODUCTION

This paper describes an Action Research Project (ARP, or the Project) to promote increased academic success for educationally disadvantaged[1] students in accounting and business courses. The Project was part of an Alternative Admissions Program (AAP) at a mid-sized public university located in the Northeast United States. The overall purpose of the AAP was to help educationally disadvantaged students, primarily students of color, achieve greater success in college and university programs. As Hammond points out (Hammond, 1985, 1997; Hammond and Streeter, 1994), there has been a lack of persons of color in both academic accounting and the accounting profession. The reasons for this can be attributed in part to inadequate educational resources and opportunities in urban neighborhoods, thus leading to reduced expectations regarding academic success in college and university for students coming from such backgrounds.[2] While it is clear that educational opportunities should be made available to all students regardless of economic or ethnic background, it is important to recognize that there is disparity in educational opportunities among school districts in the United States which often leads to lower expectations for success in college and university programs for students coming from educationally disadvantaged backgrounds. Despite these disparities in educational opportunities, it is important to recognize that students coming from educationally disadvantaged backgrounds can achieve academic success. This paper advocates action research as one way of promoting increased academic success for educationally disadvantaged students in accounting and business courses.

The remainder of the paper is organized as follows. The next section briefly discusses the role of action research in the social sciences and higher education. The section following describes

[1]Educationally disadvantaged students are defined in general as students who attended secondary schools prior to college or university where the learning environment was inadequate or below that of other students. Operationally, educationally disadvantaged students are defined to include persons who have at least one of the following characteristics: low income; member of an ethic minority group; non-native English speaker; physical or mental disability.

[2]The New England Juvenile Defender's Center has provided statistics showing that a disproportionate number of minority youth are excluded from public schools for disciplinary reasons and that these numbers have been increasing. Being suspended or expelled from public school is one of the primary reasons for students dropping out of the educational process and thereby becoming persistently economically disadvantaged. The difficulties encountered by dropouts entering the job market are highlighted by examining labor force and unemployment participation. The US Department of Labor, Bureau of Labor Statistics revealed that while 68% of the 1999–2000 dropouts were in the labor force (employed or looking for work), over 28 % were unemployed (Bureau of Labor Statistics, 2000). Of the high school graduates in year 2000 who were not in college, 80% were in the labor force, and 13% of these were unemployed. Those who dropped out of high school earned an average of $20,000 annually, barely above the poverty level, while those with a bachelor's degree doubled that annual earnings level (Bureau of the Census, 1999).

the AAP. The specifics of the Project will then be discussed. Findings and recommendations from the Project will then be presented in a final section which summarizes and concludes the paper.

ACTION RESEARCH

Action research encompasses several models of interpretive and qualitative research which are specifically characterized by their twin objectives of engaging in the pursuit of useful knowledge and seeking to facilitate social or organizational change. Action research has features which resemble change agency, and some which resemble field research. Action research is often described as being cyclical, participative, qualitative, reflective and responsive (Dick, 1993).

Background of Action Research

Action research has been used in the social sciences for over a century. McKernan (1991) indicates that action research in educational curriculum development can be traced to the Science in Education Movement of the late nineteenth and early twentieth centuries. He also suggests that the work of American philosopher, John Dewey, was a precursor of action research through his use of inductive methods to solve practical problems in fields like education, psychology, aesthetics, and philosophy (McKernan, 1991). McKernan also states that the Group Dynamics movement in social psychology during the first half of the twentieth century was a type of action research which addressed social problems through qualitative methods. Action research was employed in the 1940s to address various kinds of social problems (e.g. the severe dislocations caused by World War II; inter-group conflict; racial prejudice).

Kurt Lewin was an important figure in action research during the 1940s and 1950s (Lewin, 1947). Lewin viewed action research as an experimental form of inquiry focused on groups that were experiencing social difficulties. Lewin often maintained that social problems should be the primary focus of all research in the social sciences. Lewin's approach to action research included a series of cycles including: analysis; fact-finding; conceptualization; planning; implementation; and evaluation. During the 1950s and early 1960s action research was frequently used to study companies and business organizations. The methodology became popular in the United States at the Massachusetts Institute of Technology and in the United Kingdom at the Tavistock Institute (Masters, 1995; McKernan, 1991). Towards the end of the 1960s, action research more or less disappeared from mainstream social science research because of an increasing emphasis on quantitative methods (Baskerville and Wood-Harper, 1998). One notable exception was Argyris, who advocated a type of action research which he called action science. Argyris stressed integration of theory with practice in a cyclical process of problem diagnosis, intervention and reflective learning. Argyris promoted action science in a series of books and articles, many of which were written in collaboration with Daniel Schön (e.g. Arygris and Schön, 1978, 1991).

Action Research in Education

Some of the earliest applications of action research were in the field of education, and it has been in the field of education where action research has become a well-accepted methodology (see Paisey and Paisey, 2005 for a review). Paisey and Paisey (2005) state that action research "has been advocated as a research method particularly suited to classroom inquiry where time, cost or the

small-scale nature of an investigation might render other methods unsuitable" (p. 3). They also indicate that while action research in education was originally focused on primary and secondary schools, in recent years there has been a growing use of action research in higher education (Schratz,1992; Apsland and Brooker, 1998; Atweh et al., 1998; Hand, 1998; Winter, 1998). In their particular use of action research, Paisey and Paisey (2005) focused on the problem of increasing accounting students' use of original accounting pronouncements in advanced accounting courses at a Scottish university. Paisey and Paisey's model of action research is discussed more in the following section and compared with a model of action research proposed by Grundy and Kemmis (1981).

Models of Action Research

Action research focuses on a problem, or particular practice, occurring within a specific social setting. The purpose of action research is to alleviate the problem or increase the effectiveness of the practice. Action research typically involves a cyclical series of steps such as: planning, acting, observing and reflecting (Masters, 1995; Stringer, 1996). Based on Bassey (1998) and Hand (2001), Paisey and Paisey (2005) suggest a model of action research for higher education which involves five steps, including:

1. Defining the problem and framing research questions.
2. Collecting data and deciding how teaching could be changed.
3. Implementing the selected changes to teaching.
4. Monitoring and evaluating the changes made.
5. Reviewing and reflecting upon the changes, repeating cycle if necessary.

The Paisey and Paisey model has a number of advantages, particularly in terms of its emphasis on data collection prior to taking action, and in the step of monitoring and evaluation. However, when we began our Project, we were unfamiliar with this approach; consequently, we based our research on another model of action research derived from Grundy and Kemmis (1981, as cited in Grundy, 1988). As compared with the Paisey and Paisey model, the Grundy and Kemmis approach places a somewhat greater emphasis on taking action first and then evaluating the results of the action through observation and reflection. Observation is defined by Grundy and Kemmis primarily in terms of qualitative data, such as observing and noting changes in the behavior of participants in the social setting after taking an action (Grundy, 1988). The Grundy and Kemmis approach has certain similarities with "participant observation" as a method of social science research, in that the researcher is a participant in the social setting and he or she gathers data primarily through observation of other participants in the social setting (see Diesing, 1991; Baker, 1977). The principal difference between participant observation and action research is that action research seeks to change the social setting in order to facilitate improvement in a perceived social problem. Table 1 compares the Grundy and Kemmis model of action research to the Paisey and Paisey model.

TABLE 1

A Comparison of Models of Action Research

Grundy and Kemmis	Paisey and Paisey
1. Planning	1. Define the problem and frame research questions. 2. Collect data and decide how teaching could be changed.
2. Acting	3. Implement the selected changes to teaching.
3. Observing	4. Monitor and evaluate the changes made.
4. Reflecting	5. Review and reflect upon the changes. Repeat cycle if necessary.

Sources: Grundy and Kemmis (1988) and Paisey and Paisey (2005)

In the Grundy and Kemmis model, Step 1 (Planning) can be compared with Step 1 (Defining the Problem) and Step 2 (Collecting Data) of the Paisey and Paisey model, while in the Grundy and Kemmis model, Step 2 (Acting) can be compared with the Step 3 (Implementing Changes) of the Paisey and Paisey model. Step 3 (Observing) in the Grundy and Kemmis model, can be compared with Step 4 (Monitoring and Evaluating) in the Paisey and Paisey model. Step 4 (Reflecting) in the Grundy and Kemmis model can be compared with Step 5 (Reviewing and Reflecting) of Paisey and Paisey. Regardless of the differences between the models of action research, it should be emphasized that in both models the overall purpose is to improve the social setting.

THE ALTERNATIVE ADMISSIONS PROGRAM

This section describes the background of the Project within the setting of the AAP. It should be noted that the Project comprised a small portion of the AAP. The authors had no direct responsibility for the design and implementation of the AAP. Their only involvement in the AAP was with regard to the Project. While the purpose of the AAP was to increase the general level of academic success of educationally disadvantaged students in the university as a whole, the purpose of the Project was limited to increasing the level of academic success of students in business and accounting courses. "Academic Success" for the AAP was defined to be graduation from the university, or continuation in good academic standing and making normal progress. This measure was also adopted as the measure of academic success for the Project.

The Problem of Educationally Disadvantaged Students in Higher Education

Prior research has examined race and class-based factors that affect academic success in higher education in the United States. These studies indicate that as early as at pre-school levels, African-American and Hispanic students have lower achievement test scores in vocabulary, arithmetic skills and general knowledge, as compared to white and Asian students. Kober (2001) maintains that while family income and parent education account for approximately one-third of the lower performance scores, the remaining two-thirds is attributable a combination of the following factors:

- A lack of access to high-quality preschools.
- A lack of experienced teachers.
- Lower teacher expectations.
- Resource disparities between schools.
- Less rigorous courses.

Prior research also indicates that four factors reliably lead to academic success: (1) smaller schools where students are well known (300 to 500 students is optimal); (2) smaller class sizes (especially at the elementary level); (3) challenging curricula; (4) academically qualified teachers (Kober, 2001). Educationally disadvantaged students are less likely to have experienced these resources. In schools attended predominantly by students of color, class sizes are large, curriculum offerings and materials are lower in quality, and teachers are less qualified in terms of levels of education, certification, and training in the fields that they teach (Darling-Hammond, 1998). Darling-Hammond (1998) maintains that in the US educational system, students routinely experience unequal learning opportunities based on their social and class status. It is therefore not unexpected that students from educationally disadvantaged backgrounds may enter the university on an unequal footing, if they enter at all.

Beyond the disparities in prior educational opportunities, there has been another challenge in dealing with the problem of increasing the level of academic success for educationally disadvantaged students, in that the overall graduation rate of university students in the US is about 56% (Thomas et al., 2003). This low graduation rate is considered to be a social problem, particularly for public universities and universities where admission standards are less stringent than others. The problem of low graduation rates differs somewhat from the situations in other developed countries, such as the UK, Canada and Australia, where there have also been efforts made to increase the levels of higher education participation by disadvantaged groups (Thomas et al., 2003). While the problem in the US has been defined primarily in terms of increasing overall retention and graduation rates, the problem in the UK and other developed countries has frequently been defined in terms of increased social inclusion through implementation of educational practices that improve the academic performance of disadvantaged groups (see for example: Bassey, 1998; Winter, 1998; Naidoo, 2000; Thomas et al. 2003; Houston and Rimmer, 2005 for a further discussion of this issue). It must be acknowledged there has been a largely instrumental approach taken towards the problem in the US, which tends to focus on measuring academic success in terms of increased retention rates rather than achieving increased learning or greater social inclusion. The Project described in this paper has sought to combine the two efforts by focusing on changes in teaching which help to improve student learning which will then result in improved graduation rates.

One area of common concern among educators in the US and the UK is student motivation (see Ottewill and Macfarlane, 2003; Paisey and Paisey, 2005). One of the greatest challenges in teaching accounting and business subjects to any student is to help the student appreciate the relevance of the curriculum for their future lives and careers. Many college-age students do not read

TABLE 2

Secondary School Requirements for Admission to Alternative Admissions Program

English	4 courses
Mathematics	3 courses (Algebra I and II and Geometry or Trigonometry, or comparable coursework)
Sciences	3 courses (including 2 courses with lab work)
Social Sciences	2 courses (including 1 course in U.S. history)
Foreign Languages	2 courses (in a single language)
Electives	2 courses (from the above subjects or from the Arts and Humanities or Computer Sciences)

newspapers or access other types of information about business and economic subjects, and they are often unfamiliar with business practices. A major focus of our Project has been on how to increase student motivation. The data gathered in the Project have primarily consisted of observations of student behavior such as class attendance, class participation, homework preparation and test performance, all of which are surrogate measures of student motivation. The changes made to the Project as a result of these data have been focused on increasing student motivation. In this sense, the goals and purposes of our Project have been similar to the types of action research conducted in the UK and other countries in recent years (see for example Adler and Milne, 1997; Hand, 1998; Paisey and Paisey, 2005).

Description of the Alternative Admissions Program

The mission of the AAP is expressed as follows: "To empower educationally disadvantaged students by providing them an opportunity to pursue a college education and by providing support for their academic and personal development" (Alternative Admissions Program, 2003). The state in which the university is located has adopted the requirements shown in Table 2 for entry into the university (Board of Higher Education, 2002). A student must pass the courses shown in Table 2 with a secondary school grade point average of 3.0 on a 4.0 scale. Educationally disadvantaged students often do not meet these requirements because of inadequacies in their prior educations. Even if they meet the requirements, the courses they have taken may not have been at the same level of rigor as those taken by other students entering the university. Consequently, students who are evaluated as being close to meeting the requirements may gain admission to the university through the AAP.

The objectives of the AAP, as established by the staff of the program and approved by the university administration, are as follows:

1. Recruit and admit 60-100 disadvantaged students per year, as defined by the following criteria:
   a) not less than 55% low income and/or first generation to attend college;
   b) not less than 50% ethnic minority;

c) not less than 20% English as Second Language;
d) not less than 8% students with disabilities.

2. Recommend for traditional coursework 75% of those admitted.
3. Graduate 49% of the students who successfully complete Fall Academic Program (initial semester) within five years.

For the academic year 2004, 79% of the students participating in the AAP qualified in more than one category. From an ethnic perspective, 31% were African-American, 24% were Cape Verdean, and the remainder came from other minority and non-minority groups.

Students accepted into the AAP received conditional admission to the university. Before entering fully matriculated status, the students had to be complete the Fall Academic Program which provided an orientation to university study. To remain enrolled, the students must maintain a 2.0 or better grade point average on a 4.0 scale and otherwise make normal academic progress (Alternative Admissions Program, 2003).

Table 3 provides a statistical summary of the AAP for the Class Entry Years 1993 to 2003. The variation in the number of applications submitted to the Program on an annual basis was not under the control of the program staff, however, the staff sought to meet the program objective of achieving between 60 and 100 students who were accepted, were enrolled, and had completed the preliminary Fall Academic Program. Completion of the Fall Academic Program is a pre-requisite for full admission to the university. The actual number of fully matriculated students have been in the range of 60 to 70 students per year, with a gradual increase after class admission year 2000. Of those who gain full admission to the university, 52% have either graduated or remain in good standing. We believe that the Project may have contributed in part to the recent increase in success rates of the AAP.

THE PROJECT

This section describes the first eight years of the Project, spanning the period from class entry year 1996 through class entry year 2003.

Methodology

Grundy and Kemmis (1981) indicate that an action research project should consist of four steps which are cyclically repeated as long as necessary to change or correct the problem. The steps are: planning; taking action; observing; reflecting. During the eight years of the Project, there have been a number of cycles of taking action, observing, reflecting and making changes. Effectively, each year of the Project is a cycle of action research. For purposes of explanation, the eight years of the Project are divided into three phases as described below.

TABLE 3

Alternative Admissions Program Statistics

Entry Class Year	Complete Applications	Accepted, Enrolled and Completed Fall Academic Program*	Yield Percent	Graduated or Remaining in Good Standing	Success Percent**
1993	168	59	35%	33	56%
1994	167	73	44%	26	36%
1995	128	59	46%	26	44%
1996	137	59	43%	25	42%
1997	117	55	47%	22	40%
1998	124	64	52%	25	39%
1999	144	64	44%	35	55%
2000	173	78	45%	44	56%
2001	166	74	45%	45	61%
2002	144	76	53%	53	70%
2003	174	80	46%	55	69%
Total	1,642	741	45%	389	52%
Means	149	67	45%	35	52%

Source: Alternative Admissions Program (2003).
* Completion of the Fall Academic Program indicates fully matriculated status.
** Success defined as graduation or remaining in good academic standing.

Phase I-Problem Definition and Planning

When the AAP was established in 1993, it quickly became apparent that few of the students were choosing business as a major field of study. This was considered to be a problem by the staff of the AAP, the university administration, and the faculty of the College of Business. Therefore, a decision was made in 1995 to develop an experimental, non-credit course which would form the basis of the Project. The purpose of the experimental course was to interest students in majoring in business. This purpose was not just to achieve a better balance between departments; it was also felt that students would benefit by majoring in business by having an increased probability of obtaining well-paid employment after university graduation. An accounting professor with an African-American background became the course instructor and the primary investigator for the Project.

Participants were initially selected for the Project by the advisors of the AAP based on the student's interest in considering business as a major field of study. Approximately 14 students per year (i.e. about one fourth of the students in the AAP) participated in the Project. While this number represented the actual number students who demonstrated an interest in participating in the Project, it was also felt to be an appropriate number because the course was originally intended to be remedial; therefore, a limit of 15 students was established, except for the years in which there was

greater demand (see Table 4). More than 60 percent of the participants were members of ethnic minorities (e.g. African American, Cape Verdean, Hispanic, Native American or non-native English speaking Asian). The setting of the Project was an introductory financial accounting course. Upon completion of the financial accounting course, students were permitted to enroll in a comparable managerial accounting course. Other than in these two courses, students were not segregated from other students in the university in any way. A College of Business requirement regarding attainment of sophomore standing prior to being permitted to take these courses was waived by the college curriculum committee. This waiver allowed students to experience the business curriculum prior to choosing a major field of study.

During the first three years of the Project, students did not receive credit towards graduation for taking the courses. Based upon initial planning decisions, which in retrospect may have been erroneous, the course was designed to be remedial in nature, involving three hours per week of basic skill building in reading, writing and arithmetic. The remaining six hours per week were devoted to viewing and discussing videos focusing on accounting and business topics: study skills; dressing appropriately for business; and accounting principles. Teaching assistants (TAs) were employed to work with students outside of class in their university residences and to help the students with their homework. The TAs also provided information to the instructor about the progress and cooperative learning activities of the students.

TABLE 4

Action Research Project Graduation and Retention Rates

Class Entry Year	Students Participating in the Project	Students Graduated or in Good Standing in Business	Students Graduated or in Good Standing Non-Business	Total Students Graduated or in Good Standing	Percentage Success*
1996	14	4	1	5	36%
1997	6	2	1	3	50%
1998	15	9	1	10	67%
1999	14	5	3	8	57%
2000	20	6	1	7	35%
2001	16	8	0	8	50%
2002	14	4	4	8	57%
2003	13	6	5	11	85%
Total	112	44	16	60	54%
Means	14	6	2	8	55%

Source: Alternative Admissions Program (2003)

* Success defined as graduation or remaining in good academic standing.

Taking Action

Year 1 (first cycle). Among the action steps taken during the first year of the Project was to have students view videos. As an example, one video portrayed a group of male and female students from different racial backgrounds who were discussing accounting. The purpose was to introduce students of color to opportunities in the business world and to the topic of accounting. Another video focused on the need for financial statements and how they are used in business settings. This video portrayed individuals dressed in professional attire. This was a planned action to focus students' attention on appropriate attire in the business world. Another planned action was to require students to read newspaper articles about topics with which they could easily relate. The articles included ones that discussed fast food enterprises such as McDonald's and others relating to sports enterprises such as Nike. Most of the students were employed, and some of them were employed in the fast food industry. Many of the students were interested in sports. The selection of articles had two purposes: to encourage students' interest in business topics, and to demonstrate the extent to which business is connected with various aspects of their lives.

Every class meeting opened with a group discussion of the assigned articles, which allowed students to express their ideas freely. For example, a discussion about the fast food industry might lead to a better understanding of accounting concepts such as inventory, return on assets, payroll expense and employee benefits. When discussing sports, the salaries of athletes and their potential investment opportunities might lead to a discussion of the need for financial statements and how investment decisions are based on accounting information. During the class meetings, homework assignments were reviewed and discussed using a team approach. The class was divided into two teams. Each team would select a member from the opposite team and ask questions about the homework. If a team member was unable to answer a question, he or she was penalized by having to write a paragraph about a business article which they could select from the Wall Street Journal.

Data Collection and Observation

During the first year (first cycle) of the Project, the instructor gathered qualitative and quantitative data, primarily through observations of student behavior, but also through the completion of assessment forms required by the staff of the AAP and the College of Business. The assessment forms were completed for each student at three points during the semester (after 5 weeks, after 10 weeks, and at the end of the semester). The data collected on these forms included assessments of: level of class attendance; level of class participation; level of timely submission of assignments; and ability to pass tests (see Exhibit 1). While these forms were not specifically designed for the Project, they were used by the Project to make changes in the way that the course was conducted. In addition, at the end of each semester, all students in the College of Business were required to complete a Student Evaluation of Faculty form, which provided qualitative and quantitative assessments of courses and instructors along several dimensions, and provided space for free form comments from students (see Exhibit 2). Again, this form was not specifically designed for the Project, but was used by the Project to make changes in the conduct of the course.

EXHIBIT 1 - STUDENT PROGRESS ASSESSMENT

This report is used as a counseling tool to assist the student. Your quick response will aid us in our service to the student.

Instructor:
Date:

Course:

Student:

PLEASE CHECK THE FOLLOWING CATEGORIES WHERE APPROPRIATE.

5	**10**	**F**	**5**	**10**	**F**
( )	( )	( ) attends class regularly	( )	( )	( ) is often late to class
( )	( )	( ) actively participates in class	( )	( )	( ) misses class often
( )	( )	( ) hands in assignments on time	( )	( )	( ) displays poor study habits
( )	( )	( ) is able to pass tests	( )	( )	( ) lacks adequate course background
( )	( )	( ) other:	( )	( )	( ) in danger of failing
			( )	( )	( ) other:

COMMENTS

5th WEEK: (Please address the following:)

Quality of Work: _____

Skill Level: _____

Comments: _____

10th WEEK:

Grade Thus Far: _____

Changes Since 5th Week Evaluation: _____

Course Recommendation for Spring Semester _____

Final Recommendation: (If different from 10th week evaluation:)

Is this student ready for university level work academically and behaviorally? _____

Is there any further skill development needed? _____

If yes, please describe. _____

Course recommendation: _____

Return first assessment after 5 weeks; second assessment after 10 weeks and final assessment as soon as possible after final exam.

EXHIBIT 2 - COLLEGE OF BUSINESS STUDENT EVALUATION OF FACULTY

Please use the computer answer sheet to rate your instructor's performance for each of the following items using these codes.

1	2	3	4	5
UNSATISFACTORY				OUTSTANDING

(* If a question is not applicable, then do not place an answer for that question # on the answer sheet).

1. Instructor uses time effectively.
2. Instructor was able to transmit knowledge clearly.
3. Instructor was able to generate student interest in the course material.
4. Instructor was well prepared for class sessions.
5. Instructor attended classes regularly.
6. Instructor was open to relevant discussion in class.
7. Instructor was concerned that students learn and understand.
8. Instructor showed an interest in and respect for me as an individual.
9. Objectives and topics of the course were made clear.
10. My course responsibilities were well defined.
11. Course was well organized.
12. Teaching materials required for the course were helpful.
13. Projects, if assigned, were appropriate to the course subject matter and/or objectives.
14. Exam content was representative of the course content and objectives.
15. Exam items were clear and well written.
16. Exams, homework, and projects were graded fairly.
17. I learned a lot in this course.

Feel free to add comments in the box on the computer form. Do not write your name.

Reflection on the Data and Changes Made

Year 2 (cycle 2). As a result of evaluating the data and reflecting on the changes that might be make to the Project, several changes were made during the second year. For example, the data indicated that class attendance, class participation, homework submission and test passing rates were a problem. There was a relationship between these variables, in that students who did not attend regularly or participate in class, or who did not turn in homework assignments on time or in a complete fashion, scored less well on tests and exams. After reflecting on this issue, a decision was made to change the class size from 14 to 6 in order to allow more time to be devoted to each student. Another change involved asking each student to go to the blackboard and explain a problem or an

exercise that had been assigned as homework rather than doing homework in a team approach (which might allow a student to rely on the other members of the team, rather than doing the work him or herself). This change caused more active participation on the part of students in terms of asking questions and offering comments, both during class and at other times outside of the class (as observed by TAs in the student residences and by the instructor during office hours). Another change involved the creation of a study group which met in the instructor's office three times per week to discuss homework assignments. This change produced an unexpected new piece of data. Through first hand observation of students' ability to understand complex accounting material, the instructor realized that the students were able to learn the same material as required of all business majors. This led to another change in the type of material covered, and in the way in which it was covered. There was less remedial material given and more time devoted to accounting material. Through this change, the students were challenged to learn at a higher level of complexity.

Year 3 (cycle 3). Because the instructor observed that students were capable of learning more complex material (as determined through greater participation, homework submission and test performance, as well as through periodic student assessment forms as shown in Exhibit 1), the instructor was able to convince the staff and advisors of the AAP to become more aggressive in their recruitment efforts. Instead of simply permitting students to participate in the Project on an arbitrary basis, they explained the objectives of the Project and encouraged students to consider participating. The instructor addressed all students entering the AAP prior to their selection of courses. In these presentations, a video was shown, and potential participants were urged to consider the Project. As a result, students in the Project's third year were better prepared for the course, particularly from the perspective of the amount of work effort that was expected of them. These changes allowed a return to the initial intended course size (14 to 15 students) and a return to a team-based approach to homework discussion and review.

Phase II- Taking Action, Observing and Reflecting

Based on the data gathered through observation of students' behavior and completion of assessment forms, at the end of the third year the instructor became convinced that students participating in the Project had recognized that university work was more difficult than secondary school, and that they had a willingness to work hard to achieve academic success. Students who had participated in Years 1 and 2 of the Project were asked to make presentations in which they discussed their experiences with potential new participants. Some of the participants in the first two years returned to their secondary schools and discussed their experiences with younger students and siblings. In addition, two former participants were hired by the instructor as class assistants. These assistants spoke favorably about the Project and encouraged participation. Discussions with students revealed that while there was recognition that the course material was difficult, they understood that it would be beneficial for their future careers. The participants expressed the view that it was desirable to pursue a degree in business because of its potential for future employment opportunities. Based on this data, the instructor petitioned the provost of the university to allow credit to be granted for the experimental course. This change was implemented in Year 4 of the Project.

Year 4 (cycle 4). The course continued to meet for nine hours per week, but it received credit as a normal three hour class. Because the participants earned full credit for the course, they had an incentive to devote the time and effort to achieve academic success. The remedial parts of the course were reduced and more time was added for team and group work. Previous participants in the Project were asked to visit and explain their experiences, and also their expectations for future employment opportunities. As a result of these student presentations, participants in the Project became aware that fast food employment could be succeeded by professional employment. In addition to the other changes previously mentioned, the textbook that was used in other accounting courses began to be used in the Project. The study guide for this textbook was made mandatory for the participants in the Project. In addition, completion of quizzes from the study guide was required.

Year 5 (cycle 5). By Year 5, the Project was proceeding in an established pattern. The only significant modification during Year 5 was to require participants to attend an annual job fair sponsored by the university to expose them to a wide range of potential employment opportunities.

Year 6 (cycle 6). Teaching assistants (TAs) attended class meetings on a regular basis in order to observe how students performed in class. This change helped the TAs to be more effective in assisting students during their evening study sessions at the residences. The TAs were able to observe how the homework assignments were discussed and reviewed in class. This provided them with a better framework to explain solutions to problems.

Years 7 and 8 (cycles 7 and 8). During these years, few significant changes were made to the Project, except that some ordinary university students were allowed to register for the course. These non-AAP students had heard about the Project and it interested them. Having participants in the Project work along-side students who had been admitted to the university through normal channels was unexpectedly beneficial. The younger students in the Project were able to observe how older students behaved in class, how they prepared for assignments, and other forms of behavior, such as what it meant to be on time when coming to class. They were also able to talk with these students about possible future courses and instructors.

Phase III

The Action Research Project is on-going. Table 4 shows the number of students who have participated in the Project and who have successfully graduated from the College of Business or who continue to remain in good standing through class admission year 2003. The success rate by year may not be a particularly meaningful figure because it compares the number of students entering the Project in a given year with the number of students graduating or remaining in good standing for that year. Since the students participate in the Project in their freshman year, it is at least three years before they graduate or drop out of the university. Thus, the success rates by year may not be as meaningful as the total success rate over the eight year time period (54%).

Additional changes in the Project are being considered, such as requiring participants to attend tutorial meetings three times per week. Now that a history for the Project has been created, the incoming participants often have friends or relatives who have completed their university

degrees and obtained meaningful employment. This provides role models and examples for the incoming participants. As mentioned previously, every semester students in the College of Business are asked to complete a Student Evaluation of Faculty form. While the data derived from this form are largely quantitative in nature, a selection of the comments received from the participants in the Project is shown in Exhibit 3.

FINDINGS FROM THE PROJECT

Although the initial purpose of the Project was to increase the level of student interest in majoring in business, the ultimate findings have been more pedagogical in nature, focusing on the themes of cultivation, self-control and agreed-upon rules. These themes are discussed below.

Cultivation

Cultivation involves encouraging students to recognize that to a significant extent they determine their own futures (including their future personal and economic success). Low expectations and low self-esteem acquired in pre-college years was often difficult to overcome. Through cyclical observation and reflection of participants by the researcher, it was felt that these attitudes needed to be modified if students were to achieve academic success. Action was taken to engage students with activities that demanded the use of new skills, such as investigating and reporting on a company's progress. This resulted in participants demonstrating their ability to apply latent skills to new situations. Students were encouraged to construct new knowledge from their own experiences by connecting university learning with current places of employment.[3] Achievable academic challenges were presented to the participants, along with the help needed to inspire their self confidence. As the students began to realize how accounting connects with their everyday lives, they were able to transfer their latent knowledge of people and situations[4] to an understanding of how corporations use comparable techniques to convince customers to buy products.

In a metaphorical sense, cultivation is like cultivating a garden. The gardener must loosen the soil so that the seed can germinate, take root, and grow. A similar experience happens when the instructor loosens the metaphorical soil of the mind and plants the seed of achievement. Students blossom when they realize that the instructor expects them to do well, and they are challenged by this expectation. The instructor is rewarded when the students return to say that they are on the honor list, or they will be graduating soon, or they have obtained a position in a company. This is especially the case when the instructor knows that as educationally disadvantaged students, they were initially stigmatized as being unlikely to succeed when they entered the university.

Self-Control

[3]Most students in the university, even those who are not educationally disadvantaged, are involved in some type of non-university related employment.

[4]Sometimes referred to "getting over" in urban parlance.

The principle of self-control was often difficult to sustain because students were not always comfortable with a rigorous program of study. They may not have been previously aware of how t o

EXHIBIT 3

FEEDBACK FROM PARTICIPANTS IN THE PROJECT

Year 1	This class was tough but tolerable. I learned a lot and the instructor provided the necessary information for me to do so.
	He pushed me to try and do my best and I learned a lot more.
Year 2	This course was well instructed, though if someone has not taken this class or any other accounting class then the course may be a little different, and ways of helping inexperienced people may be helpful if stressed more.
	This cat is way too hard on students. I would like to see his grade compared to other accounting teachers.
Year 3	He is an extremely hard professor. You have to be prepared for class with all homework assignments and reading material. Despite the fact that the course was probably the hardest class I've ever taken at the university, I learned a lot because he pushes you to really learn. It is not the class to take if you want an easy A.
	He is one of the best teachers I ever had. He taught me with a hard style, but it made me learn. He is an outstanding professor.
Year 4	A wonderful instructor who enforced high standards and discipline. He generated a great interest in each student thoroughly learning all the course material. He held us responsible and accountable to ourselves. He was very open and willing to help all students at any time (office hours as well as calling him at home). There should be more instructors like him.
Year 5	He pushed me to use my time efficiently. I am a freshman and he is very helpful. He taught me to study and use my time accordingly. If it wasn't for him, I don't know how I would do my first year.
Year 6	I always learn a lot of material in his classes. I feel very well prepared for the next course.
Year 7	He is an excellent teacher. He is very concerned about teaching students. He is also always available when you need help. I wish he taught more accounting classes.
Year 8	E-mail: I just wanted to thank you and tell you that I thoroughly enjoyed your class and really appreciated you as a professor. Sometimes I need a kick in the butt to get going, and it was your pushing that got me back on track last year, and has still kept me going now. I know that it has almost been a year since I was in your class, but I figured that it was better late than never.

"play" the "academic game" (e.g. taking lecture notes; developing appropriate approaches to test taking; preparing homework; forming study groups; completing assignments on time; attending class punctually). When students began to realize that greater achievement resulted from hard work, the instructor's role became easier and the students began to progress. In addition, higher achieving students became role models for their lesser achieving peers.

Agreed Rules for Class Participation

Over several years of cyclical observation and reflection, it was found that encouraging self-control often required that the instructor obtain agreement on certain rules for class participation. For example, if a student was responding to a question, it was important that the instructor insist that all members of the class listen to the question, as well as the answer, and be ready to challenge the answer if they disagreed or did not understand the concept. This rule also necessitated that all students maintain quiet while listening to their peers and to the instructor. In order to assure that students were abiding by this rule, follow-up questions were asked. Interactive teaching strategies, including peer interaction and open questioning, resulted in higher levels of student interaction and active class discussion. Students were encouraged to pose questions to other students, which if not answered successfully, would provide additional credit for the student asking the question. As a form of peer pressure, this type of procedure encouraged students to study more and to come to class better prepared.

Other Factors

One of the greatest challenges in teaching accounting to any student is to help students appreciate the relevance of the course for their future lives and careers. Many college-age students have been exposed more to visual media than to textbooks. Consequently, textbooks that provide good visual images are important. A user-friendly textbook was chosen for the Project. The textbook included learning objectives for each chapter assigned, a tutorial disk which the students could use to learn at their own pace, and a workbook/study guide which summarized essential points in each chapter and tested the student's knowledge using self-test questions and exercises. Assignments were often completed during class in small groups. Each student in the group had to express agreement with the answer before it was presented to the class as a whole. This caused group members to teach each other. Instead of merely watching the instructor go through problems, a selected member from each group would be asked to explain the problem to the class. This aspect of cooperative learning carried over into the residences and study halls after class (determined based on reports from TAs). As the assurance and self-esteem of the groups increased, they began to ask for more immediate feedback on their performance. This type of feedback from the students led to modifications of the Project whereby examinations and homework assignments were discussed immediately, rather than forcing the students to wait several days or a week for feedback.

Final Points

Class sessions typically began with an overview of the topics to be discussed and ended with a review of the topics covered. The purpose was to cultivate the students' expectations about the importance of learning and using accounting in their lives. Every class would stress that students

were destined to be important people if they were academically prepared for the future. It was a key moment when students made the transition from feeling bad about their prior experiences, to gaining a positive attitude based on genuine achievement. As the students began to develop a positive attitude, they acquired increased confidence about their ability to learn as well as other students. The participants were then able to achieve more than they, their parents, and their previous teachers and counselors thought was possible.

SUMMARY

Since the inception of the Project in 1996, there has been a continual process of cyclical observation, reflection, and change (Grundy, 1988). Based upon data gathering through observation of Project participants, and through completion of forms required by the staff of the AAP and the College of Business, as well as discussions with students and listening to participant comments, frequent changes were made to the Project. The Project's success is attributable in part to smaller class sizes and individual attention. However, engaging students in a positive learning experience has also been important. It has been challenging, as well as gratifying, to work on this Project. While the numbers are small, we feel that the Project has contributed to improving the lives of the students involved. Another aspect of the Project, and one which helps make change more sustainable, is that as each student succeeds, they begin to help new students. As the new students observe the success of their predecessors, this promotes a pattern of success. Our hope is that as educationally disadvantaged students' expectations grow, they will in turn be motivated towards higher levels of achievement, thus permanently removing the educationally disadvantaged stigma.

REFERENCES

Adler, R. W., and M. J. Milne. 1997. Improving the Quality of Accounting Students' Learning through Action-oriented Learning Tasks. *Accounting Education* (Vol. 6, No. 3) 191-215.

Alternative Admissions Program. 2003. *Annual Report 2002-2003*. (North Dartmouth, MA: University of Massachusetts Dartmouth).

Argyris, C., and D. Schön. 1978. *Organizational Learning: A Theory of Action Perspective*. (Reading, MA: Addison-Wesley).

_____, and _____. 1991. Participatory Action Research and Action Science Compared. In W. Whyte (Ed.) *Participatory Action Research*. (Newbury Park, NJ: Sage) 85-96.

Aspland, T., and R. Brooker. 1998. A Pathway for Postgraduate Teaching. In B. Atweh, A. Kemmis, and P. Weeks (Eds.) *Action Research in Practice.* (London: Routledge) 280-301.

Atweh, B., A. Kemmis, and P. Weeks. 1998. *Action Research in Practice.* (London: Routledge).

Baker, C. R. 1977. An Observation Study of a Large Public Accounting Firm. *Human Relations*. (Vol. 30, No. 11) 1005-1024.

Baskerville, R., and A. T. Wood-Harper. 1998. Diversity in Information Systems Action Research Methods. *European Journal of Information Systems*. (Vol. 7), pp. 90-107.

Bassey, M. 1998. Action Research for Improving Educational Performance. In R. Halsall (Ed.) *Teacher Research and School Improvement*. (Buckingham: Open University Press) 93-108.

Board of Higher Education. 2002. *Admissions Standards for the Massachusetts State Colleges and Universities.* (Boston: Commonwealth of Massachusetts).

Bureau of the Census. 1999. *Current Population Reports, and Money Income in the United States: 1999*. (Washington, DC: US Department of Commerce).

Bureau of Labor Statistics. 2000. *College Enrollment and Work Activity of 2000 High School Graduates*. (Washington, DC: United States Department of Labor).

Darling-Hammond, L. 1998. Unequal Opportunity, Race and Education. *Brookings Review* (Washington DC: Brookings Institute).

Dick, B. 1993. A Beginner's Guide to Action Research. *Arcs Newsletter* (Vol. 1, No. 1) 5-9.

Diesing, P. 1991. *How Does Social Science Work?: Reflections on Practice*. (Pittsburgh, Pa. : University of Pittsburgh Press).

Grundy, S. 1988. Three Modes of Action Research. In Kemmis, S., and R. McTaggert (Eds.) *The Action Research Reader*, *3rd edition*. (Geelong: Deakin University Press).

_____, and S. Kemmis. 1981. Educational Action Research in Australia: The State of the Art. Paper presented at the Annual Meeting of the Australian Association for Research in Education, Adelaide, as cited in S. Grundy (1988). Three Modes of Action Research. In S. Kemmis and R. McTaggert (Eds.) 1988. *The Action Research Reader, 3rd edition*. (Geelong: Deakin University Press).

Hammond, T. D. 1985. Some Considerations in Attracting and Retaining African-American Doctoral Candidates in Accounting. *Issues in Accounting Education* (Vol. 10, No. 1) 143-161.

_____. 1997. From Complete Exclusion To Minimal Inclusion: African Americans and the Public Accounting Industry, 1965-1988. *Accounting, Organizations and Society* (Vol. 22, No. 1) 29-45.

_____., and D.W. Streeter. 1994. Overcoming Barriers: Early African-American Certified Public Accountants. *Accounting, Organizations and Society* (Vol. 19, No. 3) 271-289.

Hand, L. 1998. Tackling an Accounting Coursework Assignment-Action Research on the Student Perspective. *Accounting Education* (Vol. 7, No. 4) 305-323.

_____. 2001. Action Research- A Way Forward for Accounting Educators. Paper presented at the *BAA Accounting Education Conference*. University of Glamorgan, 2-4 July 2001.

Houston, M., and R. Rimmer. 2005. A Comparison of Academic Outcomes for Business and Other Students. *International Journal of Management Education* (Vol. 4, No. 3) 11-19.

Kober, N. 2001. *It Takes More Than Testing: Closing The Achievement Gap* (Washington, DC: Center on Education Policy). (www.ctredpol.org/improvingpublicschools/closingachievementgap.htm).

Lewin, K. 1947. Frontiers in Group Dynamics. *Human Relations* (Vol. 1, No. 2) 143-153.

Masters, J. 1995. The History of Action Research. In I. Hughes (Ed.) *Action Research Electronic Reader.* (Sydney: University of Sydney). (http://www.scu.edu.au/schools/gcm/ar/arr/arow/rmasters.html#AR%20what).

McKernan, J. 1991. *Curriculum Action Research. A Handbook of Methods and Resources for the Reflective Practitioner.* (London: Kogan Page).

Naidoo, R. 2000. The 'Third Way' to Widening Participation and Maintaining Quality in Higher Education: Lessons from the United Kingdom. *Journal of Educational Enquiry* (Vol. 1, No. 2) 24-33.

Ottewill, R., and B. Macfarlane. 2003. Pedagogic Challenges Facing Business and Management Educators: Assessing the Evidence. *International Journal of Management Education* (Vol. 3, No. 3) 33-41.

Paisey, C., and N.J. Paisey. 2005. Improving Accounting Education through the Use of Action Research. *Journal of Accounting Education* (Vol. 23) 1-19.

Schratz, M. 1992. Researching While Teaching: An Action Research Approach in Higher Education. *Studies in Higher Education* (Vol. 17, No. 1) 81-95.

Stringer, E. 1996. *Action Research: A Handbook for Practitioners* (Newbury Park, NJ: Sage).

Thomas, L., M. Cooper, and J. Quinn (Eds.) 2003. *Improving Completion Rates among Disadvantaged Students.* (Stoke on Trent, UK: Trentham Books).

Winter, R. 1998. Finding a Voice- Thinking with Others: A Conception of Action Research. *Educational Action Research* (Vol. 6, No. 1) 53-68.