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## A description and analysis of an academic enrichment program at Bennett College

Reynolds, Amy Armstrong, Ed.D.

The University of North Carolina at Greensboro, 1986


# A DESCRIPTION AND ANALYSIS OF AN ACADEMIC ENRICHMENT PROGRAM <br> <br> AT BENNETT COLLEGE 

 <br> <br> AT BENNETT COLLEGE}

by

Amy A. Reynolds

A Dissertation Submitted to the Faculty of the Graduate School at The University of North Carolina at Greensboro
in Partial Fulfillment
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Doctor of Education

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## Approved by



## APPROVAL PAGE

This dissertation has been approved by the following committee of the Graduate School at The University of North Carolina at Greensboro.


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The purpose of this study was to describe and analyze an Academic Enrichment Program (AEP) implemented at Bennett College in 1981 and continuing for three years, and to evaluate the program's impact on students' (a) study habits, (b) academic performance, and (c) persistence at the college. Eighty-five black female students were the subjects, and their combined scores on the verbal and mathematical portions of the SAT ranged between $400-580$.

Data was obtained from a questionnaire constructed by the researcher based on a five-point Likert Scale, and from transcripts, attrition records, academic probation lists, and course outlines.

The findings revealed that the program was successful in helping students adjust, academically, their freshman year with at least over fifty percent of the students returning for their sophomore year. At this level there was a decline in students ${ }^{1}$ academic performance, and the attrition rate was high. Based on the results obtained from the questionnaire, students ranked "support given by the AEP faculty" as the most important aspect of the program in helping them adjust to the college.

Students performed satisfactorily at the freshman level through reduced course load, increased contact hours with instructors, and seminar for learning class but they (a) apparently did not transfer the skills learned at the sophomore level, (b) continued to need reduced course loads, and (c) continued to need emotional support beyond the freshman level.

The writer would like to express sincere appreciation to her Committee Chairman, Dr. Lois V. Edinger, for her support, encouragement and invaluable assistance in the writing of this dissertation.

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## CHAPTER I

## INTRODUCTION

## Background of the Study

Since the 1960 's, minority students have been entering postsecondary institutions in unprecedented numbers. Astin (1982) pointed out that the minority representation among freshmen entering college increased by 50-100 percent from the mid-1960's to the mid-1970's with a maintenance of status quo thereafter. Prior to that time, emphas is was placed on the development of manifest talent rather than to the development of latent talent. Manifest talent refers to talent that has already been developed or exhibited in some kind of achievement while latent talent can operationally be defined as a set of special skills, aptitudes and other attributes that enable a person to perform successfully in ways that are valued by society (Astin, Astin, Bisconti and Frankel, 1972).

Rouche and Rouche (1977) noted that traditionally colleges and universities engaged in "selective service" education -- education for those who could meet specified admission standards, or, as put in another way by Astin et al. (1972), educating those individuals whose talent was already manifest and as a result could meet specified admission standards. Individuals were therefore sought, who, by virtue of their background and previous training had already proven to be higher achievers (Astin, et al. (1972).

Astin et al. (1972) further observed that beginning in the 1960's, a new growth of social consciousness -- and conscience -- in the United States was evident. Institutions of higher education found themselves challenged by an increased discrepancy between democratic principle and national practice.

Campus unrest and the black revolution have underscored our failure to provide adequate educational opportunities to the disadvantaged and minority population (Astin et al. 1972 p. 4).

Many colleges and universities took steps to make a place for minorities and other historically underprepared students. Such a move was sanctioned by the federal government as evidenced by funding that was made available to those institutions and by the various Acts that were passed. Gordon and George (1975) explained that the Civil Rights Act of 1964 under Title VI mandated that for federal monies to be allocated, institutions of higher learning had to submit enrollment figures according to ethnic breakdown which was viewed as an index to the diversification of studert population. A corollary to this Act was the Higher Education Act of 1965, which was designed to provide direct or indirect assistance to disadvantaged minority students through Supplemental Opportunity Grants, Work Study, Talent Search and Upwardbound. As a consequence, there was a proliferation of "special programs" for these students.

Following the initiative of community colleges, many senior colleges and universities attempted, through the open-door concept (the removal of obstacles or academic screening), to respond to the demand that latent talent be identified and developed. However, as put by Rouche and Rouche
(1977), in reality the open-door policy proved to be a revolving door as individuals with hopes for a higher educational experience were confronted with traditional services and ultimately with poor academic performance or failure. Subsequently, many colleges and universities instituted culturally sensitive practices and services aimed at "remediating" or "developing" skilis deficiences or weaknesses in entering students.

In the 70 's remedial programs were catapulted into national prominence and moved to center stage in higher education. Prior to this, remediation was a low-key approach on campuses. Although remedi.al efforts were ostensibly created as a result of large numbers of minorities entering higher education, Cross (1976) indicated that the overwhelming number of low achievers admitted were not minorities. Instead, they were predominantly the sons and daughters of white blue-collar workers.

In general the terms minority or disadvantaged connote blacks. As stated by Gordon and Wilkerson (1966):

Although Negro children do not constitute the largest segment of the poverty-stricken population in this country they have come to represent one of the major focuses of attention in the antipoverty and compensatory education (p. 28).

Whatever the racial origin of these students, the significant fact is that the problem and the need existed to educate students who presented diverse learning styles and backgrounds.

As colleges and universities responded to this challenge, students who were previously denied access to college because of such limitations as socioeconomic status, ethnicity, poor elementary and secondary
experience or previous academic performance records, were given the opportunity for postsecondary education. Donovan (1984) pointed out that over the past decade, many colleges and uriversities have created a cluster of related "special services" that are programs designed to handle students who have been generically and variously called the "high risk," "the developmental," "the non-traditional," or "the remedial student."

## Rationale and Purpose for the Study

While there has been some effort put forth to study special programs to assist minority students in adjustment and persistence at the college level, large-scale studies of special programs are still in the embryonic stage. Additionally, Donovan (1984) stated that most studies pertaining to persistence at the college level have not focused directly on low income or minority populations. While the last decade has seen dramatic shifts in enrollment of minority and low income students, access to programs cannot be the sole criteria for evaluating society's achievement and educational opportunity. Persistence must also be assessed. Braddock (1981) addressed the fact that a paucity of substantial data exists regarding that sufficient studies of an empirical nature to explain differential patterns of black students' persistence across segregated and desegregated environments have not been conducted.

Historically, black institutions have worked with the spectrum of both talented and untalented students. Smith (1981) cited the following:
...Traditionally, predominantly black institutions have educated the spectrum of talented and untalented. Whatever the pool of black students created by society, predominantly black institutions have worked with them all. They did not admit and educate the talented tenth. These institutions not only enrolled the upper third or the upper quarter of their classes but also those students in the lower percent of their class...(Ed 217409 Apr. 1981).

Braddock (1981) pointed out that as late as 1965 black colleges accounted for less than $3 \%$ of the nation's college students but provided education for half of all black students. Presently, although more than $50 \%$ of black students in higher education attend predominately white colleges (Braddock estimates $72 \%$ ), it is the predominately black college that serves a disproportionate number of students in developmental or compensatory programs. It is, therefore, the responsibility of these institutions to investigate, through systematic analysis and evaluation, the various programs that have been initiated for the purpose of helping students achieve their postsecondary goals. Hilton (1982) stated that not only should traditional methodological designs (longitudinal studies and surveys) be used, but also alternative research strategies: case studies, computer simulations of the persistence process, and the experiments wherein supposed causative variables are systematically varied.

As a predominantly black institution, Bennett College is no exception to the practice of providing compensatory and developmental programs. This fact is exemplified in its philosophical tenet:
...A need to provide for students a unique and flexible program supplemented by rich experiences in group participation and community involvement and designed to meet the needs of an everchanging society... (Bennett College Catalog, Bennett Vol. 11, Jan. 1984 p. 8).
A retrospective overview of Bennett's endeavor to provide a unique and flexible program of instruction is evidenced by the various academic support services that have been in place since the 30 's. These support
services listed in the order of implementation include 1930's - 1940's: Remedial Reading and Writing Instruction; 1960's: Developmental Reading and Study-Skills; 1970's: Special Services Program, Computer Assisted Instruction, Learning Resource Center; 1980 's: Academic Enrichment Program and Developmental Studies Program. As is evident, the earlier programs focused on improved reading and writing skills predicated on a deficit model. Since the 1960's, the model has been developmental, more comprehensive and included basic reading, writing and mathematical skills. In the early 1970 's tutorial assistance in social studies and biological science was added along with counseling.

The purpose of this study is to describe and analyze an Academic Enrichment Program (AEP) implemented at Bennett College in 1981 as a pilot program and to evaluate the program's impact on students' study habits, academic performance, and persistence at the college.

Among some of the questions that will be addressed by the reseacher are:

1. Is academic success affected by student empowerment?
2. Do students perceive the program as being instrumental in helping them remain at the college?
3. What specific aspect of the program is most beneficial?
4. As a result of this experience what specific attitudes or behaviors do the students change?
5. Would students recommend the program to other students?
6. Does inability to participate in extracurricular activities have an effect on students' attitude toward the college in general?
7. Do subsequent opportunities to participate in extracurricular activities have an effect on bonding with the college?
8. Does the ability to take one content-area course the second semester change their attitude about the college?
9. Do students feel better-prepared and confident about their ability to function in other courses?

These questions may be summarized under three broad categories to give focus to the study:

1. Did the AEP program impact on the academic performance of the participants in the program?
2. What effect did the program have on the persistence of students at the college?
3. What was the effect of the Seminar for Learning on students ' attitudes and study habits?

Method and Procedure

## The Study Population

The Academic Enrichment Program was instituted to provide academic support and guidance for a select group of entering freshmen students each year between 1981 and 1983. Approximately 90 students were in the program. All students participating in this program were black females.

Their verbal scores and their mathematical scores on the Scholastic Aptitude Test (SAT) ranged between 200-580. In addition to low scores on the SAT, many of them had other characteristics in common: poor academic records in high school, low aspirations, poor study habits and family backgrounds, which did not provide adequate educational support. These variables have been shown to result in students dropping out of school altogether or, if they stayed, experiencing considerable difficulty.

## Instrumentation

Prevalent among prior attrition or persistence studies has been the utilization of the path model with longitudinal data based information collected for analysis. As a consequence, exogenous variables, such as academic ability and endogenous variables, such as academic aspirations, were analyzed and correlated. Donovan (1984) suggested that research based on college experience would have valuable practical implications. This study is'designed to determine and analyze the effect of the Academic Enrichment Program with its unique component, a Seminar for Learning, on the following variables: (1) students' study habits, (2) students' academic performance, and (3) students' persistence at the college. A review of the literature was conducted to find a questionnaire with valid content for this particular study. Because a suitable instrument was not found, the researcher constructed a questionnaire based on a five-point Likert Scale (Appendix A) to elicit the desired information from the study population. The questions appearing on the questionnaire were based on information obtained from an interview of the program coordinator, knowledge of the program objectives, and the experience of the researcher. Two students from each group entering the program between 1981 and 1983 were randomly selected for interviews and field testing of the instrument. As a result of this procedure, four questions were altered for clarity of meaning. The modified questionnaire became the instrument used for this study.

Other pertinent information for the study was obtained from documents of the college, program proposal, transcripts, attrition records, academic probation lists, and course outlines.

## Procedure for Collection and Treatment of Data

A formal letter was sent by the investigator to the academic dean of the college explaining her interest in conducting this study and requesting permission to conduct the study.

Students who were in the AEP and still enrolled at the college were identified and sent a cover letter explaining the purpose of the study along with a questionnaire. Two follow-up mailings were sent to all non-res pondents.

Data from the questionnaire based on a five-point Likert Scale were classified as positive or negative and were reported in terms of percentages. Data obtained from other documents of the college were reported in terms of percentages and frequency distribution. Tables and Charts were used to summarize appropriate information.

## Significance of Study

From a review of the literature it appears that a common denominator agreed upon by prognosticators or futurists is the invariability of social change during the next decades. Many students, therefore, will find the need to change their vocation because of job obsolescence. The concept of "life-long learning" also amplifies the significance of the capacity and skill to learn independently, for essential to dealing with change successfully, is the capacity for effective learning. Individuals having competencies and confidence in their own learning skills will be able to cope in a constructive manner with the rapid transformation in our society.

Another significant factor is that in the next twenty years there is an expected decrease in enrollment at colleges and universities. Tracey (1980) noted that retention has become one of the most important issues that administrators must face now and in coming decades. Hilton (1982) proposed that due to the expected decline in enrollment in the next decade (and, thus, the increased need to maintain enrollments) research on causes of withdrawal from higher education should continue to be given priority. Efforts must, therefore, be made to bolster sagging enrollments by going beyond a simple recruitment of new and non-traditional students. This study is significant first of all to Bennett College because of the commitment of the College to constantly seek knowledge about helping underprepared students improve their academic performances and helping them persist through graduation. Additionally and more specifically, it can provide Bennett College with documented data that can be useful to the president of the college, academic dean and administrator of the Developmental Studies Program in decision-making policy regarding future program improvement. It can also provide information that can serve as a basis for analytical study of administrative procedures, illuminate possible areas that may lead to attrition, and suggest areas for improving retention and pers istence. Care should be used in generalizing the researcher's findings beyond Bennett College since the sample is small and peculiar to Bennett College. On the other hand, the findings of the study may have heuristic value and can serve as a basis for additional research. From a broader perspective, the findings from this investigation may have broader implications for public policy makers and
planners as they begin to look at other ways to meet the needs of the underprepared students as well as the improvement of education in general in higher education.

Below is a list of terms and their definitions as used in the context of this study.

## Definition of Terms

1. Remedial Program: A program designed to overcome academic deficiencies.
2. Developmental/Compensatory Education: A program designed to develop diverse talent of students whether academic or not.
3. Underprepared student: Underprepared students are those students whose skills, knowledge and academic ability are significantly below those of the "typical" student in the college or curriculum in which they are enrolled.
4. Empowerment: The teaching of study skills to facilitate independent learning.

The remaining chapters of the study are organized in the following manner: Chapter II, Review of the Literature; Chapter III, Program Description: Chapter IV, Analysis and Intrepretation of Data; and Chapter V, Summary, Conclusions, and Recommendations.

## CHAPTER II

## REVIEW OF THE LITERATURE

A review of the literature was undertaken to establish a historical perspective of remedial and compensatory or developmental programs to examine theoretical assumptions underlying compensatory programs, to determine program types presently in use, and to summarize results of persistence studies which have been done.

## Historical Perspective

As society continues to move into the 1980's and beyond, steps must be taken to provide educational programs to meet the needs of all students seeking postsecondary education. The maximum development of human potential is a national problem of social, economic, and educational significance. During the early 1960's providing access to postsecondary education was paramount. Today, while reducing attrition rate has always been a concern of colleges and universities, it is now assuming greater importance because of declining enrollments. Nelson, et al. (1984) stated that, "College presidents ranked maintaining student enrollments second in importance on a list of 20 critical issues facing higher education." (p. 50).

Presently, retention research is being conducted to find the most effective methods for providing reading and study skill instruction and the development of programs based on sound developmental theory.

Accordingly, various approaches are being researched such as achievement motivation training and study orientation (Kelsey 1980); expansion of reading and study skills programs to include learning resource centers for students at all levels (Gretchen 1982); reading instruction in the content area (Gaus 1982); analytical reading programs (Scale 1982); and adjunct reading and study skills within content courses (Soyder 1984). In retrospect, it can be seen that providing adjunctive assistance in reading and study skills is historical in nature.

Remedial education programs are not contemporary innovations instituted during the 1960's as is popularly believed. Higher education has been engaged in remedial education for almost a century (Cross 1976). In chronicling milestones indicative of students' underpreparedness to function at the college level, Maxwell (1979) stated that in 1852 Henry P. Tapping, president of Michigan State, lamented the backgrounds of entering students, and the fact that American colleges were too much involved in teaching rudimentary courses. In 1862, following the Morrill Act, Iowa developed college preparatory departments to teach reading, writing, and arithmetic, a practice followed soon by many other colleges. In 1874 Harvard offered freshman English at the request of faculty members who voiced dissatisfaction with students' writing skills.

Cross (1976) noted that the first remediation course for academic deficiency was introduced at Wellesley College in 1894. Since that time, colleges have accepted the notion that they bear some responsibility for helping students overcome weaknesses in academic backgrounds and skills.

Further, in analyzing this trend, Cross found that the perceived causes of poor academic performance have changed over the years, with one or another of the causes tending to be predominant at certain periods in history. Cross (1976) cited the fact that there appear to be five perceived causes of poor academic performance linked to admission policies and the nature of the students served by the college of a given era. These causes include poor study habits, inadequate mastery of basic academic skills, low ability or IQ, psychologicalmotivational blocks to learning, and sociocultural factors relating to deprived family and school background.

Efforts designed to ameliorate articulated causes of poor academic performance fall under three categories: how-to-study courses, remedial reading and compensatory or development programs. Sharp (1942) stated that "one of the most serious problems recognized by colleges and universities today is the number of potentially good students who are failures because they do not know how to study" p. 9. A how-to-study course was offered to 67 students at Stanford which treated the following topics: the value of time and its proper distribution, efficient procedures in reading and notetaking, preparation for various types of exams, and suggestions for studying specific subjects. The students attending the class regularly during the winter and spring quarters of 1939-40 and 1940-41 made a net improvement of plus 9.07 grade-points in their marks in the quarter in which they were taking the course as compared with their records for the previous quarter. In comparison with a control group an improvement was made of 11.37 grade-points. Concomitantly, during this period, remedial reading programs were
emphasized in the public schools and in some colleges and universities. New York University's Reading Laboratory began in 1936. Harvard instituted a remedial reading course for its students in 1938 and during the same year, Francis Triggs founded a reading clinic at the University of Minnesota. Between the 40's and 50's governmental funding facilitated the establishment of veterans' guidance centers, reading and study skills programs, and tutoring services. As the veteran population declined, these services became institutionalized as counseling centers and were open to all students (Maxwell, 1979).

It was not until the $1960^{\prime}$ s that a collosal initiative was advanced by colleges and universities to provide special assistance to disadvantaged and underprepared college students. Roueche (1977) found that these students did not fit into a well-defined category. They were not limited to the underprivileged, but were found throughout the entire population.

In describing this category of "new" students, Roueche (1977) suggested that "new" students, unlike their traditional counterparts,
...educationally, have not acquired the verbal, mathematical, and full range of cognitive skills required for collegiate level work. Generally he is a student whose grades place him at the bottom half of his high school class, who has not earned a (college preparatory) diploma and is assigned to a high school which has a poor academic record for student achievement or who has been tracked into a general, commercial, or vocational high school program.... Such a student will generally rank low on such traditional measures of collegiate admissions as the SAT Board scores, high school average class standing or (state) examination (p. 15).

Ethnic minorities, especially blacks, deserve special consideration because of past discriminatory practices and injustices which left many of them with inferiority complexes. Tollefson (1975) commented
that in terms of disadvantaged whites, the problem was basically that of learning how to adapt to work habits, customs, and the general behavior patterns of the social and professional class to which they aspired; some, however, did encounter emotional problems because of social identification. Tollefson (1975) clearly indicated that for racial minorities, and in particular blacks, the problem was more complex. Only a few aspects of African culture, such as music, persist in the black culture of the United States. "Otherwise most of what is identified as black culture is a derivation of the general 'bottom of the ladder', socioeconomic status" (Tollefson, 1975, p. 43). The decades between the 1960's and 1980's can be viewed as a period during which many institutions sought to rectify these ills; as a result of commitment and creativity, they developed a broad range of academic experiences to challenge each category of students, to facilitate their growth, and to satisfy their educational needs.

## Theoretical Framework

An outgrowth of the impetus given to compensatory education during the 1960's was the attention given to the needs of students as individuals; hence, concern for individualization of instruction became paramount. Gordon and Wilkerson (1966) pointed out that a serious concern with the problem of individual differences in intelligence and learning ability was established around the turn of the century when Binet advanced the position that several aspects of intellectual function could be trained. Ginsbury (1972) noted that intelligence in Binet's view, was not a test of a single faculty of intelligence. Rather, it
is a test which elicits different mental operations which are only a part of human intellectual functioning or "intelligence." Although an interest in intellectual ability was initially kindled by Binet, it was short lived and was extinguished by concerns for procedures by which children could be classified or grouped in school and later how men could be selected and grouped for military training.

Interest in the ability to train the intellect and the graduated step-by-step development of intellectual function was rekindled out of serious concern for the eduational problems of mentally, physically or neurologically handicapped people. Gordon and Wilkerson (1966) credited Kephart, Kirt, Gallagher, and others as being instrumental in sensitizing educators to the fact that intel lectual functioning did not necessarily reflect subnormal intellectual potential. During the decade between 1950 and 1960 these men, while working with handicapped children, produced results which in large measures began to change preconceived concepts of intellectual function and the role of educational experiences.

Traditional educational practices were dominated by earlier views of the origin and nature of intelligence. Theoretical support for assumptions were based on instinctive behavior and genetic limitations. The antithesis was true in terms of compensatory education which, as many studies indicate, was influenced by the interactionist's view of behavioral and intellectual development. Interactionists posit that all patterned behaviors are the reflection of the interaction between living things and their environment. For example, Turkewitz, Gordon, and Birch (1965) found the head turning of neonates not to be
sterotypic or patterned as previous experiments suggested but characterized by variability in terms of ampliture, frequence, and sequence. Biological characteristics are primarily determined by genes while patterned behavior traits and quality of function are regulated by interaction between the individual and his environment. Sell (1963) stressed that behavior at a primitive level results from a mediated transaction between the organism and the environment and is an adaptive process rather than the encounter between inner and outer forces.

An interactionist position with respect to the organization of behavior leads one to view the developmental process as mallable, to regard intelligence as nonstatic and variable, to see motives and attitudes as determined and modifiable by experience and to recognize all achievement as the product of the individual's characteristics in continuous and dynamic interaction with the elements of the environment which are effective at a given time (Gordon, 1966, p. 48).

Support abounds in the literature demonstrating the efficacy of assumptions espoused by interactionists: Klinebery (1965) substantiated the fact that intelligence test scores can be changed by modifications in the environment such as acculturation, migration and adequate educational programs; Lee (1961) demonstrated the length of residency in northern cities where quality education was found also improved test scores; where poor quality of education prevailed resulting from de facto segregation and other problems, the converse was true (Hunt, 1961). Using a sample of 26 Negro children, Brazziel, (1962) supported the hypothesis that a guidance approach to registration, school induction, and an intensified teacher-parent approach to the creation of reading and number readiness would overcome the ravages of the cultural heritage of disadvantaged groups of first grade children.

Contemporary evaluation of programs designed to improve the experential background of disadvantaged children also support the interactionists' theory. Since the implementation of Head Start Programs throughout the country in 1965, continued evaluation of the programs has shown their effectiveness in helping children improve their ability to deal with their present environment, in providing coping skills essential for later life, and in bridging the gap between disadvantaged children and other children who were not deprived of appropriate environmental experience that enhance adjustment in school (Griffin 1980; Hubell 1983). Four-year-old disadvantaged children enrolled in a Happy Talk Early Childhood Education Program made greater gains on the Peabody Picture Vocabulary Test than the control group. In this experiment, paraprofessionals visited their homes and modeled educational activities for the children and their mothers. The parents repeated the activity during the week with their children (Austin Independent School District, Texas Office of Research, 1984). Parker (1980) reported that five-year-olds participating in the Baptist Hill Kindergarten for disadvantaged children were more advanced in upper grades than those who had not attended. Through a heavy enrichment and experience program these children were introduced to books, pencils and crayons, and were permitted to see, taste, touch, and smell things they had not experienced at home.

In a review of Title I Programs, Robinson (1981), described a three component program that successfully changed the self-esteem and academic acuity of Compton Unified School district's high school students. One of the components was an educational summer camp where
participants were trained to be tutors in mathematics, reading and communication skills. Another component involved the training of parents as teaching partners (parents were given specific materials to assist children at home). Thirdly, parental education was provided on a variety of topics -- nutrition, family care, ethnic history and so on. Ethnic students attending this school consisted of Hispanics, Samoans and blacks, twenty-six percent of whom were receiving Aid To Dependent Families.

Pasamanicie (1978) captured the essense of the interactionist's theory by concluding that:
...We believe that it is now possible to entertain a new tabla rasa theory which posits that, except for a few quite rare hereditary, neurological defects resulting in mental deficiency at conception, individuals are quite alike and become different consequent to their experience... p. 8.

On the other hand, Klienbery (1965) cautioned that while there is no scientifically acceptable basis for a genetic hierarchy among ethnic groups this is not the same as saying there is no ethnic difference.

## Contemporary Organizational Patterns

Historically and theoretically the decision of a college or university to institute a compensatory or developmental studies program can be viewed as sagacious. Every student must be looked upon as a precious entity to be brought to the fullest realization of his potential. Grant (1958) stated that "every student must have at least a fighting chance to succeed in college" p. 463. Continuing, he advised that every college is not expected to meet the needs of all high school graduates but that society has the responsibility of providing diversified types of higher education that will harmonize with the expanding needs of civilization.

In responding to the need to provide diverse postsecondary educational opportunity for all, varied program types have emerged at the college or university level.

In surveying various organizational patterns or structures designed to meet the needs of students from diverse backgrounds, a continuum of organizational patterns was found. These patterns ranged from isolated teachers, counselors, or directors working on a particular course or program to an integrated team of special ists who gave complete services within a division or department. Because of the diverse needs of students, Cross (1976) found that the trend is "toward remediation or developmental efforts embedded in a total program that includes cognitive, social and economic components." (p. 21)

According to Roueche and Snow (1977), four major plans for developmental studies are evident:

1. The addition of isolated developmental courses in disciplined curricula, that is, adding developmental reading to the list of approved courses in English.
2. Working with an interdisciplinary group of instructors who remain attached to their disciplines organizationally, and who coordinate with instructors from other disciplines and with counselors assigned to compensatory students.
3. Establishment of a division or department of developmental studies which plans, coordinates, and allocates funds for instruction, counseling and other support services.
4. Other categories consisting of (1) A combination of one through three, (2) development of core disciplinary courses, and (3) tutorial and individual help to all students through a learning assistance center (p. 29).

Lester and Brogdon (1983) discovered in a nationwide survey of four-year traditionally black institutions that provisions were made for students
to acquire basic and developmental reading skills. Most programs were placed under the aegies of the English department or basic/developmental studies education.

The researcher conducted a survey of junior and senior colleges having developmental studies programs. Information was obtained pertaining to the history of the program, recruitment and selection of students, program implementation and curriculum, faculty and staff, and evaluative procedures. Sixteen senior and junior colleges were queried. Of this number three responded -- two community colleges and one predominately black (senior) institution.

The purpose of the program at the black institution was to provide developmental studies for students who came to the university with underdeveloped basic skills in reading. Pedagogical strategies designed to improve English/writing and mathematics skills included tutorial assistance, Learning Center, and decreased course load. While there was no formal on-going evaluation of the program, the worth of the program was determined by grade point average, social adjustment, ability to move out of the program, and progress toward graduation. Five hundred students from all ethnic backgrounds in the program were primarily from low socioeconomic backgrounds with low SAT scores and poor performance on placement examinations.

The Division Director, Developmental Studies, of one of the community colleges, which is located out west, stated that the college had an open door policy and that "It was inevitable that women students who entered the College would not be prepared for college level work." The program was therefore established to prepare students for their
program requirements. The curriculum included English, mathematics, reading, memory development, and study skill. Classes were set up for classroom instruction with a lab for supplementation. Program evaluation was informal with instructors reporting on adequacy of preparation of their students. However, more formal methods of evaluation were being planned to determine attrition rate of students in the program as compared to those who took onlv developmental skills (DS) courses with those who take some DS and other courses. Approximately 460 students were in the program, of whom $17-22 \%$ were minority. The average age was between 25 and 28. Placement tests are used as the criterion for admission to the program.

The division director of a community college in central North Carolina indicated that an Advancement Studies Division was designed to offer instructional services to enable students to learn or re-learn basic skills (mathematics, English, science), and study skills. The program served a diverse population -- international, non-hearing, non-sighted, physically handicapped, blacks, and whites. Self-paced, individualized, competency-based instruction was given, facilitated by computer assisted instruction and tutorial assistance. Evaluation was based on a detailed follow-up to measure success in curricular courses. Statistical data was obtained and yearly evaluation was done. Computerized quarterly data included demographic profile of students, completion and return data, placement test scores and exit scores. There were 1,546 students in the program.

Providing developmental assistance is a comprehensive adventure and is institutional and programmatic in nature. A description of the
developmental studies program at the University of Akron clearly delineates this fact. As described by Hampton (1979) the program is as follows. The program is designed to service "disadvantaged" students in the areas of (1) recruitment, (2) programming for developmental assistance, (3) provision for tutorial assistance, (4) academic and psychological counseling, (5) opportunities for workshop experience, (6) learning laboratory experience, and (7) provision for financial assistance. Students who participate in the program were recruited from "disadvantaged" high schools and from university freshmen experiencing academic problems.

## Persistence Studies

Knowledge of the attrition process is extremely inadequate although it has been investigated for almost half a century. Munro (1981) pointed out that despite the fact that attrition studies have been conducted for the past forty years, our knowledge of the attrition process is surprisingly limited. Studies that have been conducted have been descriptive or correlational and have identified relationships between attrition and demographic, sociological, psychological and social psychological attributes of students, as well as various institutional characteristics.

As a result of reviewing retention research, Pantages and Creedon (1978) found that attrition studies concentrated on factors related to the academic achievement of college students on the assumption that achievement is positively related to persistence. They also found that many studies focused on characteristics of either persisting students or those who drop out.

In summarizing the various types of persistence studies Tracey and Sadleck (1980) identified three: (1) those which correlate traditional variables (high school rank, SAT scores and so on) with freshmen grades, (2) those concerned with understanding characteristics associated with those who do well in school and how they differ from those who do not, and (3) research which tends to center on how students can be aided. Such an approach usually involves a program evaluation and focuses on whether or not a specific program helped in aiding retention by either continued enrollment or increased GPA. They noted that often in these studies specific characteristics (personality and/or attitudinal variables) of those helped or those not helped by the program are often ignored.

## Academic Studies

A study conducted by Astin (1975) unequivocally stated that the greatest predictor of students' persistence was the student's past academic record and academic ability. Pantages and Creedon (1975) found that the majority of the attrition studies associated with academic factors (high school GPA and class rank in high school) differentiated potential dropouts from persisters. Students in the top fifth of their high school class were twice as likely to graduate as were students in the second fifth, and eight times more likely to graduate than students in the lower fifth.

On the other hand, Pantages and Creedon (1978) found several studies that showed the antithesis. Some researchers detected no significant differences in high school GPA and class rank between dropouts
and nondropouts. Other researchers cautioned that although measures on scholastic aptitude and ability (as measured by SAT and ACT tests) were found to be significant in most studies, it should be noted that though lower than nondropouts, dropouts' scores were sufficiently high to have predicted success in college.

Pano and Astin (1968) conducted a follow-up study of entering freshmen students $(129,212)$ drawn from a national sample of 248 colleges and universities in 1961 for a study conducted by Astin in 1965. A random sample of original students $(60,000)$ showed that $65 \%$ completed college and $35 \%$ dropped out. The data clearly indicated that high school grades are monotonically related to completing four or more years of college.

Little (1959) reported that based on a comparison of two groups (1,949 students entering in 1953 and a similar group of students graduating in 1957) the majority of the top ranking students graduated in four year. Five out of six students who graduated with honors came from this group and half continued in graduate school. Variables used in ranking students were mental test scores (Hermon-Nelson) and rank in high school class.

## Characteristics of Persisters/non-persisters Studies

A conceptual framework presented by Elliot, Harwin, and Wendling (1966) explaining why students drop out, indicated that when a lack of educational support from home and the association with dropouts are found in combination with status deprivation for which the individual assumes personal responsibility in the academic and informal systems of the
school, the possibility of dropping out of school is maximized. Conversely, if individuals come from homes which provide strong socialpsychological support for completing high school, has no meaningful association with dropouts, and does not face social deprivation in school, the chances of him leaving school is minimized.

Dresher (1954), after studying a population of 622 pupils in 18 high schools in Detroit, identified the following variables as holding factors: out-of-school employment, participation in extra-curricular activities, having school spirit, good attitude of parents toward high school and teachers, pupils having a career plan, and the desire to complete high school. Those identified as having hastening power include elementary failure, absences in the ninth grade, low scholastic aptitude, being a discipline case, having a skilled father in preference to an unskilled father, living with both natural parents, high school failures, and physical defect.

Peng and Fetters (1978) studied variables involved in withdrawal during the first two years of college. The data used were from the base-year and the first second follow-up data of the National Longitudinal Study of the High School Class 1972 (NLSHSC). The sample population included 4,539 black and white students enrolled at 1,800 institutions. The result of this study showed that persisters had higher socio-economic status, higher aspiration, ability and achievement than withdrawals. Additionally, persisters took an academic high school program and fewer worked. in 1972 than withdrawals.

Nelson, et al. (1984) demonstrated that persistence among freshmen can be predicted early in their first semester using precollege and
entrance characteristics and self-report of early college experiences. Persisters reported greater satisfaction with their academic performance, spent more hours a week studying, and interacted more informally with instructors and other students outside the classroom.

## Program Evaluations Studies

Abrams and Jernigan (1984) stated that the literature fails to address the combined effects of low preadmission credentials and participation in postadmission support services. However, in a study conducted by Abrams and Jernigan at Eastern Michigan University, it was concluded that high-risk entering students' willingness to seek assistance from either reading teachers or tutors is the most accurate predictor of their first semester college GPAs. They found that the more active participants enjoyed greater academic success.

In a follow-up study comparing basic skills and non-basic skills students at Queensborough Community College (over 2,000 students), Bergean and Roberts (1974) found the results to be comparable. Basic skill students were required to take reading and/or writing courses. The basis of comparison was grades made in introductory academic courses taken one semester after remedial students had finished their requisite courses.

Minnich and Toitelbaum (1980) noted that a basic skills program implemented at the University of New Mexico was found to increase student retention. A developmental program in the areas of English, mathematics, social studies and natural science was offered within each department. The study evaluated the social studies and natural
science programs. Program objectives were to raise students' ability to read, analyze, and evaluate social studies and natural science materials, and secondarily to enhance knowledge in a particular subject. Program evaluation showed that students participating in the program had a return rate of $80.3 \%$ the following semester. An equilivancy group based on students who would have been placed in the program had it existed the year before, had a return rate of $77.2 \%$ the second semester.

Using a pretest/posttest control group design on the relative effects of a "Block" vs "Non-Block" schedule of students at Boyce Campus Community College, Baylis (1983) found significant differences between the two groups as follows: dropout rate ( $20 \%$ vs $32.5 \%$ ), absentee rate ( $4.2 \%$ vs $13.5 \%$ ) and GPA (2.31 vs 1.31). Block students participated in a program consisting of three integrated courses: social science elective; basic writing technique, developmental English and college reading and study skills.

## Minority Attrition Studies

Although some minorities have been included in prior attrition studies, Donovan (1984) states that "most studies of college withdrawal have not focused directly on low income or minority populations." While sparse in number, these studies in the main support the assumtion that non-cognative variables have significant import on the retention of black students. Houston (1980) stated that in spite of relatively low entrance examination scores, minority students admitted to predominantly white colleges and universities have consistently done well academically.

In a study conducted by Houston (1980) of 82 specially admitted black females at Rutgers University, he found that $52 \%$ ( 43 of 82 ) graduated within 8 consecutive semesters, $27 \%$ (22 of 82 ) were dismissed because of academic reasons and $19 \%$ (16 of 82) withdrew for unexplained reasons and one student in good standing transferred to another university.

A summary of noncognitive predictors useful in predicting minority persistence include seven key non-cognitive variables: (1) positive self-concept (2) understands and deals with racism (3) realistic self-appraisal (4) prefers long-range goals to short-term or immediate needs (5) availability of a strong support person (6) successful leadership experience and (7) demonstrated community service (Sedlacek and Webster 1982; Tracey et a1. 1980; Nisbet, et al. 1982; Cesare et al. 1980; Tracey and Sedlacek 1978). The availability of a strong support person and a person functioning as a role model, according to Walton (1979), are perhaps the single most important keys to retention. Pratt (1984) suggested that ambition, study habits, father's and mother's education and occupation, efforts to do well, evaluation by peers (hard worker, persistence), importance of getting good grades, educational aspirations and career direction were variables of paramount importance. While a preponderance of the literature supports the significance of non-tradition variables in predicting student attrition among blacks, some studies point to other variables.

Donovan (1984) used a path analysis to examine the persistence process of a sample of 403 low-income blacks among youth attending a variety of institutions throughout the United States. The model
was based on Tinto's path analysis in which certain variables consistently associated with persistence are included in an interactionist theory of persistence. Consequently, focus was on the individuals' integration into the academic and social systems of the college. Additionally, consistent with Tinto's model, persistence was viewed as a longitudional process. Donovan found that persistence among the students in the sample population was similar to the process for college students in general and by far the most important direct determinant of persistence was the academic grades attained by the student. Munro (1981) reached a similar conclusion in which a path analysis was used to test Tinto's model using a sample drawn from the NLSHSC 1972. Hilton (1982) replicated these findings in a study conducted using the NLSHSC 1972 as the data base.

## Summary

The notion that college students need intensive basic skills service is not a contemporary one, for it has deep historical roots. Efforts to assist underprepared students have been in evidence since the turn of the century. Over the past years, etiological factors attributable to poor academic performance have been found to include poor study habits, deficit mastery of basic skills, low academic ability or IQ, psychological-motivational blocks to learning, and sociocultural factors based on deprivation. Efforts to mainstream students in need of assistance did not occur en masse until the early 60 's when community colleges sought to provide postsecondary education for a diversed population. Many senior colleges and universities subsequently followed.

An array of developmental programs, designed to provide assistance to nontraditional students found throughout the society but focusing on minority students, emerged. Theoretical assumptions undergirding compensatory programs were predicated on interactionist's postulates. As a consequence, since the environment interacts with the innate endowment of an individual, programs designed to enhance student experiential backgrounds are theoretically sound.

The problem of persistence is a complex one and is receiving top priority by college presidents. The complexity of the problem arises from the fact that persistence is multidimensional in nature and appropriate methodology must be used in studying the problem. Research should be as inclusive as possible for better representation of the complexity of the problem.

## CHAPTER III

DESCRIPTION OF ACADEMIC ENRICHMENT PROGRAM AT BENNETT COLLEGE

Bennett College is a predominately black women's senior, churchrelated college. It is located in Greensboro, North Carolina and was established in 1873 as a coeducational institution in the basement of St. Matthews Methodist Episcopal Church. Support was given to the school by the Freedman's Aid and Southern Education Society of the Methodist Episcopal Church. Lyman Bennett, for whom the college was named, contributed the first ten thousand dollars for the purchase of land and erection of a large building which served both as a classroom and dormitory.

The college was reorganized in 1926 as a college for women and has achieved high accreditation since that time. Upon graduating its first young women with the bachelor of arts degree in 1930, the "A" rating was granted to the college by the North Carolina State Department of Education. An "A" rating was also granted by the Southern Association of Colleges and Secondary Schools. Too, it was one of the first black colleges to be admitted into full membership in the Southern Association of Colleges and Secondary Schools in 1959.

To date, since 1930 , over 3,500 young women have graduated from the college.

The basic philosophy of Bennett College is to provide for students a unique and flexible program of instruction that is enhanced by rich group participation and community involvement, and designed to meet the
needs of an ever-changing society. In addition, its programs encourage the development of critical and analytical thinking necessary for students to continue to educate themselves.

The college is committed to a rigorous treatment of the fundamentals of specific subject matter areas and a sound liberal education designed to prepare students for a career, and to help them develop a value system and philosophy around which they can organize their lives.

In 1981 an administrative decision was made at Bennett College to implement a pilot program to provide academic support for a select group of students because there had been an increasing rate of decline in preparedness of entry level students due to a variety of circumstances. Unquestionably, this predicament was not peculiar to Bennet College for there was a general "common-knowledge" agreement that college entry level preparedness suffered because of declines in high school exit preparedness. An array of reasons were cited as contributing factors: higher school absenteeism, lower reading levels in high school textbooks, fewer English courses being required, less homework being assigned, inflated grades and automatic promotion, less motivation to do well on standarized tests, breakdown of families, increased television watching, a general decline in academic motivation, and social confusion. Other studies based on student's perspective show that many advance the position that their high school preparation was less than adequate. Further, there is sufficient documentation supporting the observation that minority students' and poor white students' problems are compounded, and as a result, they fall further and further behind other students the longer they persist in school. Black students' problems are further exacerbated
because they are often both disadvantaged as well as minority, and because they comprise perhaps the largest and most identifiable groups in society to have received special attention.

Philosophically, Bennett College is committed to assisting students of diversed backgrounds while administratively, it is recognized that there is a correlation between decreased underpreparedness and an increase in academic probation, and attrition or lowered persistence rate. The administrative position espoused at Bennett College is that if a college admits students who demonstrably show they will be placed in jeopardy at the outset of their collegiate experience, efforts must be directed at ameliorating those conditions which serve to negate goal attainment.

It is further recognized that such an endeavor is institutional and programmatic, consequently, appropriate funding is considered vital along with decision making policy and the attitude engendered by the administrative staff.

The pilot program, renamed the Academic Enrichment Program, in the second of its third year was one of many programs designed to meet the needs of "high risk" students entering Bennett College. Historically, the college has provided ancillary services for a diversed population, but, the decade between the $70^{\prime} \mathrm{s}$ and $80^{\prime} \mathrm{s}$, as is generally true of many predominately black colleges and many predominately white colleges, resulted in renewed commitment to search for more effective means to serve students identified as underprepared as they attempted to continue their education at the postsecondary level. The AEP was targeted to serve a group of students whose SAT scores ranged between 200-290 on the verbal or mathematical section for a combined score of 400-580 on this test.

## Program Features

On the premise that additional time was needed by these students for study, preparation of assignments, and the development of skills needed for subsequent college level courses, students could only take twelve semester hours as follows: communication skills (instruction in English and reading), mathematics, orientation, Seminar for Learning, and two physical education activities as is illustrated in Table 1.

Table 1
List of Courses, Contact Hours and Credit Hours of AEP Students

| Course | Contact Hours | Credit Hours |
| :---: | :---: | :---: |
| Communication Skills 101-*02 (English/Reading) | 5 | 4 |
| Mathematics 100 | 4 | 3 |
| Orientation | 1-*0 | $1-* 0$ |
| Seminar For Learning 100 | 2-*3 | $2-* 3$ |
| Two (2) Physical Education Activities | 4 | 2 |
| Totals | 16 | 12 |

* Second Semester

Obviously, only two academic courses were allowed (communication skills and mathematics) the first semester. At the end of the first semester students who obtained a 2.50 average or above had the option, the second semester, to take an additional general education course and to participate in one extracurricular activity. In order to be eligible to carry an additional hour or to participate in an extracurricular activity, students were required to pass their communication skills
classes and mathematics class with a minimum grade of $B$ and have a cumulative average of at least 2.50. Unlike regular students, AEP students had increased contact hours with their communication skills instructors and mathematics instructor which was facilitated by a Seminar for Learning class. Additionally, regular students met three hours weekly with their English instructor; however, one of these hours was spent in the Computer Assisted Instruction (CAI) Lab. AEP students did not receive CAI but met three times a week in the regular class room with their English instructor. Another variance was that regular students met once a week with their reading instructor and AEP students met biweekly.

Increased contact hours was a means of providing more flexibility in the classroom thus accommodating, to some extent, the fact that students learn at different rates, one of the bedrock principles regarding growth and development. Students were, therefore, afforded the opportunity to move at a slower pace which made easier the acquisition of predetermined competencies; enhanced students' comprehension; provided more time for clarification of concepts and questions raised and provided more time between presentation of concepts and evaluation to determine if a particular objective had been met.

The Seminar for Learning (SFL) was the major abberation of the AEP for in comparison with other developmental programs, two commorialities found among this and many other developmental programs were reduced course loads and increased contact hours with content matter either through tutorial assistance or the availability of Learning Resource Center services or CAI. The Seminar for Learning was structured specifically for AEP students to assist them in the acquisition of study skills and to reinforce as well as correlate classroon assignments and activities.

## Course Descriptions

Communication Skills 101-102:
This course combined three days in the English classroom with two days in the reading classroom. The English component was designed to stimulate and promote effective writing skills through encouraging students to exercise their syntactic ingenuity and experiment with stylistic options. Basic units included in this class were sentence structure, sentence combining, mechanics and usage, and paragraph/ essay theory and practice. A total of 31 competencies were to be mastered with $75 \%$ accuracy in some instances or in the case of paragraphs or essay writing (five) a minimum grade of C -. Students were given two opportunities to demonstrate mastery of skills related competencies during the semester.

For competencies related to homework, students had to complete $85 \%$ of their homework by mid-term and the-end-of-the-semester grading period. Grades were based on the percent of competencies demonstrated, i.e., 31 competencies $=100 \%$ and a letter grade of $A+, 30$ competencies $=96.8 \%$ and a letter grade of $A$, and so on through 22 competencies which equaled a $71 \%$ or a letter grade of $D+$. A grade of $D+$ or below necessitated repeating the course in regularly structured classes.

Communication Skills 102 provided further instruction in the areas delineated for Communication Skills 101 and introduced advanced problems and approaches in essay writing with the central goal being to write effective, well-organized, expository essays. Class activities included demonstrations and lectures by the instructor along
with group discussion and individual presentations by students. Writing assignments were a result of ideas expressed in prose and poetry selections and student's personal reaction to everyday life, people, places, objects and events. Evaluation was based on the students' participation in class activities, homework, assignments, quizzes, tests, essays, and the final examination.

Communication Skills Reading 101-102:
The reading component of the Communication Skills class was designed to enhance students' reading and study skills and to promote critical reading and thinking skills based on formal and informal assessment during the first and second semester and to promote interest in leisure reading. The instrument used for formal assessment was the Nelson-Denny Reading Test Form B.

Specific skills taught were classified under Study Skills, Vocabulary Development/Word Recognition and Comprehension (Appendix B). No structured outline was followed since skills taught were based on a diagnostic-prescriptive approach as needed individually and collectively. Each student had an individual folder with specific assignments.made. Although all students had to purchase the same textbook, it served as a reference book and students could move in the book at their own pace and according to their particular needs. Supplementary materials were used freely and students were given a vocabulary list of twenty words to learn each week. It was recommended that students use vocabulary cards for the purpose of writing the word, part of speech, syllabication pronounciation, antonym, and to use the
word in a sentence. Follow-up exercises, consisting of matching exercises and use of words in context, were given after each set of twenty words. As a means of fostering interest in reading as a leisure pasttime, each student was required to read two novels of her choice and to do a written as well as oral presentation of the books chosen. The oral presentation was made during several periods, so designated, at the Seminar for Learning.

Instructional strategies were constituted by individual and group activities consisting of lectures, discussions, and oral presentations. Students had two semesters to satisfactorily meet the course requirements. Performance of students was determined by averaging grades made on assignments; quizzes, tests, mid-term and final examinations. In order to satisfactorily complete the course a letter grade of $D$ each semester was required and those who did not satisfactorily complete the course had to repeat the course with regular students.

## Mathematics 100:

A competency based approach was also used in this course with students having to show mastery of skills with integers, fractions, decimals, percents, algebraic expression, solving linear equations, polynominals, simple factoring, graphing and measurement. Units to be taught were classified under Arithmetic (Unit One), Elementary Algebra (Unit Two), and other Algebra topics (Unit Three). Instruction and drill occurred through classwork, CAI Lab, and tutoring sessions. Topics in Unit One were principally taught via the computer with brief review in class; Unit Two topics were presented in class with
supplementation and reinforcement by CAI lessons and Unit Three topics were in the main presented and tested in class. A total of twelve units comprised the class and they had to be mastered at least at the 75 percent level on tests given either in class or the lab covering a particular topic. Tests were given at designated class periods or on the CAI terminals in management systems or separately from materials supplied by the instructor. Pretests were given on the topics subsummed under Unit One.

Time allocation for satisfactorily completing this course was two semesters. If the course was not completed by the end of the first semester, students received a grade of $U$ (Unfinished) in the course and subsequently continued in the course the second semester and received a letter grade of $F$ if the course was not satisfactorily completed at the end of this semester. Passing this course was a prerequisite to moving to more advanced levels of mathematics. Even though a letter grade was given for this course and it appeared on the college transcript, it did not count toward the student's GPA. The grading procedure was as follows:

| Topic test scores average | $65 \%$ |
| :--- | :--- |
| Homework | $10 \%$ |
| Comprehensive final exam | $25 \%$ |

It is significant to note that all students - regular and AEP were expected to develop the same competencies and they both used the same textbooks in English and mathematics.

## Orientation:

The orientation course was designed to acquaint students with various cultural and academic resources on and off campus, to assist
them in understanding themselves, to provide general information as well as the opportunity to investigate career interests and to assist them in acquiring skills and competencies required for success in college. Students met on a weekly basis, where information was presented through lecture, small and large group discussion, library visitation, seminars (persons from community and faculty members participated), and oral presentation by students. Evaluation was determined by averaging grades made on assignments, quizzes, oral presentations and the final examination. If the course was failed it had to be repeated with regular students.

## Physical Education:

Students in this program had the opportunity to select two physical education activities from such courses as tennis, dancing, swimming, physical fitness, and golf among others. These classes were the same as those taken by other students with activities being designed to provide students with neuromuscular skills unique to leisure activities. Since all students are required to satisfactorily complete four semesters of Physical Education prior to graduation, such an adjustment in scheduling can be viewed as a creative one. Students could earn legitimate credits toward graduation while at the same time not be overwhelmed with academic courses requiring skills for which they lack the necessary prerequisites.

Seminar for Learning 100-102:
Because of the instructional staff, course content, and structure of this class, the Seminar for Learning can be cited as the salient
feature of the AEP. This course was designed to help students improve study skills, develop positive attitudes, improve critical thinking and comprehension skills, develop test taking strategies, and to set personal and professional goals. Specifir goals included:

1. To teach students how to set goals
2. To teach students how to develop productive attitudes for success
3. To help students identify improper study habits
4. To assist students in planning their time more effectively
5. To familiarize students with taking standardized objective and subjective tests
6. To improve students' critical thinking skills by improving students' comprehension and vocabulary skills
7. To help students transfer knowledge gained in one area to present and future course work
8. To increase the students' ability to master the basic skill in grammar, sentence structure and paragraph development
9. To help students overcome "math anxiety" in dealing with mathematical concepts
10. To improve reading comprehension in solving mathematical word problems.

The Seminar for Learning class was team taught by those instructors who also taught students in their communication skills, mathematics, and orientation classes. During the first semester, classes were held biweekly and were composed primarily of one formal or structured session and one informal or problem solving session. The formal sessions were designed for the presentation of a concept by one of the four instructors team teaching the class as a whole and was usually followed by an informal or problem solving session in which
students were assigned to a group of not more than eleven. These groups, led by one of four members of the AEP instructional staff, allowed time for student participation and further clarification of previously presented concepts. Follow-up activities, guidelines, and materials were provided by the instructor presenting the information during the formal sessions (Appendix C). Student evaluation was also a joint venture because interim and final examinations were a composite of questions submitted by each instructor.

Realizing that students' learning styles or modalities differ, various materials such as films, filmstrips, cassette tapes and handouts were used to disseminate information. Faculty members in the area of biology and history were invited to give minilectures to afford practice opportunity for notetaking skills learned and to help students understand the concept of knowledge transfer not only in communication skills and mathematics but other areas as well.

Two hours credit was given for this class with letter grades being given based on student's performance which was predicated on the following procedure:

| Homework | $20 \%$ |
| :--- | :--- |
| Interim Examination | $50 \%$ |
| Final Examination | $30 \%$ |

The configuration of the Seminar Class, the spring semester, was completely different from the first semester. During this semester, the class was divided into four units and it yielded three credit hours as opposed to two credit hours given during the first semester. Classes met three times a week and each of the four instructors assigned to the AEP were responsible for supervising one of four units,
as shown on Table 2, for a period of three to four weeks. Unlike the first semester, all instructors were not required to be present during sessions presented by other team members.

Table 2
Spring Semester Units, Grading Procedure and Concepts

| Units | Grade | Concept |
| :---: | :--- | :--- |
| I | $20 \%$ | Revising the Essay; Review <br> of Basic Grammar Fundamentals |
| II | $20 \%$ | Learning and Problem Solving <br> in Mathematics |
| III | $20 \%$ | Reading in Content Area; <br> Paragraph structure |
| IV | Final Examination | $20 \%$ |

Additional information is found in Appendix C .

## Program Evaluation

Based on a final summary report of the AEP 1982, a statistical analysis demonstrated that the program had a significant impact on students who participated in the program. A comparison was made between 1981-82 Academic Enrichment students (called Pilot Program students) with their counterparts of the previous class - freshmen students who enrolled in 1980-81 and had similar characteristics as AEP students. Variables used for comparison were the SAT and GPA. A duplicate summary of the findings from this report is shown in Table 3.

## Table 3

## Entering SAT and Freshmen GPA

|  | $\begin{aligned} & \text { 1980-81 } \\ & \text { Freshmen Class } \end{aligned}$ |  |  | 1981-82 <br> Freshmen Class |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AE Equivalence | Non-AE <br> Equiva- <br> lence | Entire Class | AE | Non-AE | Entire <br> Class |
| Number | 55 | 102 | 157 | 31 | 126 | 157 |
| Mean SAT | 511 | 652 | 602 | 511 | 648 | 621 |
| Mean GPA | 1.9 | 2.29 | 2.16 | 2.31 | 2.28 | 2.28 |
| Stand. Dev. SAT | 40 | 111 | 115 | 60 | 125 | 127 |
| Stand. Dev. GPA | 0.66 | 0.79 | 0.79 | 0.60 | 0.83 | 0.73 |

Comparisons of note are that the Mean SAT Score (511) is the same for both groups with twenty-four more students satisfying the criteria for membership in 1980 than 1981. However, the Mean GPA Score for students in the Pilot/AEP group was higher than for the Pilot-equivalent students in 1980-81: 2.31 compared to 1.9. Additionally, it was found from this report that nearly $71 \%$ of the Pilot/AEP students in 1981-82 earned a GPA of 2.00 or better and almost $13 \%$ earned a GPA of 3.00 or better, while only $47 \%$ of the Pilot-equivalent group of 1980-81 earned better than 2.00 and $3.64 \%$ earned better than a 3.00 GPA as shown in Table 4.

Table 4
Percent of Grade Point Averages Within Each Group 1980-81 \& 1981-82
 Average

Pilot non-Pilot $\frac{\text { Equivalence }}{3.64 \%} \frac{\text { Equivalence }}{22.55 \%}$ 46.08\%
25.49\% 5.88\%


1980-81 3.64\% 43.64\% 43.64\%
9.10\%
.

Year 1981-82
3.00-4.00
2.00-2.99
1.00-1.99
0.00-0.99

Subjective observations highlighted in this summary report were:
(1) Students felt better about themselves
(2) Students felt they were better able to handle other college courses, such as history, biological science, etc.
(3) Guest faculty remarked that the students appeared to be more attentive and responsive than other first year students; that they (faculty) were happy to participate in a class room activity; they felt the program was helpful especially with emphasis on notetaking skills, and
(4) The enrichment staff got to know the strengths and weaknesses of each student in the program.

## Summary

Instituted in 1981, the Academic Enrichment Program can be viewed as a comprehensive endeavor to provide academic support for a select group of students. Based on traditional predictors of academic success and in particular low SAT scores (verbal and mathematical), these students in all probability would have experienced anxiety producing situations, academic failure or nonpresistence at the college. Consistent with other Developmental Studies Programs it was mandated that students be allowed to take a reduced course load and have increased contact hours in academic courses. Students were allowed to take twelve hours with only two academic courses permitted (communication skills and mathematics). Increased contact hours was achieved through increased contact hours with instructors in these areas and by a Seminar for Learning which was also the unique component of the program. The goal of the Seminar for Learning was to foster independent learning skills through improved study skills acquisition and to correlate assignments in their academic
courses as well as in their orientation class. Students took two physical education classes each semester, thereby, completing the four semester requirements of the college. Each course taken by students in the program carried academic credits, although all were not applicable toward graduation credits. Students within the program used the same textbooks as those students outside of the program and were expected to master the same competencies during their one year participation in the Academic Enrichment Program.

CHAPTER IV
METHODOLOGY

Topics to be discussed in this chapter are as follows: population of the study, attitude inventory, other sources of data, and analys is and treatment of the data.

The descriptive method of research was used in this study which concerned the description and analysis of a pilot program instituted at Bennett College in 1981. Specifically the study was designed to analyze the impact of the Pilot/Academic Enrichment Program on students' academic status, study habits, attitudes, and persistence at the college.

Data for analysis were obtained from an attitudional inventory, transcripts, admission records, withdrawal records, academic probation records, course outlines, and a final AEP report.

The study was guided by the following questions posed by the researcher:

1. What impact did the AEP have on students' academic performance?
2. What impact did the AEP have on student persistence?
3. Did the AEP have an impact on students' attitude and study habits?

## Population of Study

The study population consisted of all students who participated in the AEP since its inception in 1981. Subjects (41) were those who
responded to the attitudinal survey. A list of students who had participated in the AEP was obtained from the Freshmen Studies Office. The student directory was used to locate the names, addresses, and classification of all students who were currently enrolled at the college.

## Instrument for Attitude Survey

A search was made for an instrument that would provide valid feedback concerning students' attitude toward the program but to no avail. The researcher developed an instrument based on the information obtained from an interview with the program coordinator, and from personal experience with and knowledge of the program. Sixteen items were included on the inventory. As a result of field testing, four items were modified for clarification.

The responses on the inventory were divided into three categories: positive, negative, and uncertain. All items were considered positive if they were scored "agree" or "strongly agree." Items that were scored "disagree" or "strongly disagree" were considered as negative. For the purpose of analysis, data obtained from the questionnaire were rank ordered by percentages only in terms of positive responses.

## Collection and Treatment of Other Data

The subjects of this study were divided into three groups:
(1) Group I, students (34) enrolling at Bennett (1981-82), were followed for four years; (2) Group II, students (27) entering (1982-83), were followed for three years, and (3) Group III, students (24) entering in 1983-84, were followed for two years. In reporting the data no
comparison was made with a control group but similarities or dissimilarities of note were made between and within groups. This was done to determine if a particular trend or pattern emerged.

Academic impact was analyzed in terms of letter grade, grade point average, number of students placed on academic probation, and academic performance based on major or area of concentration which was reported in terms of percentages and frequency. At the freshman level letter grades in mathematics, English, reading, orientation and Learning Seminar for both semesters were analyzed in addition to cumulative averages, academic probation, and attrition rates. At the sophomore level in addition to cumulative grade point average, probationary status and attrition status, the distribution of letter grades in English and mathematics was analyzed. Cumulative grade points, probationary status, and attrition status of students classified as juniors and seniors were analyzed. An appraisal was made of area of concentration or majors of Group I and data obtained were ranked according to the area in which students were most successful -- science, interdisciplinary studies (IDS), music, and sociology. The persistence of all three groups was described using percentage in terms of returning students and the number of students in Group I who graduated in eight semesters.

Percentage tables and frequency charts were presented to facilitate presentation of data. The Visicalk computer software package was used in the compilation of data.

Summary
One method of determining factors contributing to retention or attrition of students is to study the impact a particular program had on students' behavior. This study was designed to determine the effects the AEP had on the study population's academic performance, study habits, attitude, and persistence at the college.

CHAPTER V
PRESENTATION AND DISCUSSION OF DATA

This study, summative in nature, was designed to describe and analyze the impact of the Academic Enrichment Program (AEP) on students' academic status, study habits, attitude, and persistence at Bennett College. Data describing outcome or program impact were collected from transcripts, withdrawal records, academic probation lists, admission records, computer printouts, course outlines and final AEP report. An instrument designed by the researcher was used to determine students' attitudes toward the program. At the outset, the researcher posed several questions to guide the investigation. These questions were categorized under the headings of (1) academic performance -- the attainment of a requisite grade point average (2) student persistence (student advancement toward degree attainment) and (3) student empowerment, which addressed the effects of efforts put forth to help students develop independent learning skills and positive attitudes toward learning and studying.

## Academic Performance

Data for analysis consisted of all courses taken the freshman year that were not a part of the regular curriculum. These were communication skills (English/reading), mathematics, orientation, and Seminar for Learning. Beyond the freshman level, all courses taken by students whose records (transcripts) were currently on file in the
records office are included in the data. The one exception made was the academic performance of students entering the program initially in 1981-82. Academic performance of this group was obtained from a report submitted by the program coordinator to the academic dean. Data pertaining to the calculation of GPAs for this year and subsequent years were based on the transcripts of students who completed both semesters of the years being presented (1981-1985).

The grades of all students in the program who completed both semesters at the freshman level were analyzed, and a comparison of these grades was made to determine whether or not a particular trend emerged. As shown in Table 5 there was a decrease in the percent of $A$ grades made during the first and second semester in English (96\%), reading (100\%), mathematics (78\%), and Seminar for Learning ( $88 \%$ ). There was also a decrease in the

## Table 5

Percent of Distribution of Letter Grades of Entering Students 1981-82 $N=34$ First Semester $-N=32$ Second Semester

| Grade | A |  | B |  | C |  | D |  | F |  | I |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Semester |  | Semester |  | Semester |  | Semester |  | Semester |  | Semester |  |
|  | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1 st | 2nd |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| English | 24 | 1 | 44 | 39 | 18 | 43 | 0 | 0 | 3 | 7 | 11 | 7 |
| Mathematics | 18 | 4 | 24 | 11 | 3 | 21 | 0 | 21 | 0 | 25 | 0 | 18 |
| Reading | 21 | 0 | 29 | 25 | 18 | 39 | 18 | 14 | 3 | 4 | 11 | 5 |
| Seminar | 32 | 4 | 35 | 18 | 18 | 46 | 12 | 14 | 3 | 7 | - | 11 |
| Orientation* | 26 | - | 44 | - | 15 | - | 9 | - | 3 | - | 3 | - |

*Not taken Second Semester.
number of B grades made in English (11\%), reading (14\%), mathematics (54\%), and Seminar for Learning (49\%). The letter grade C increased in all courses the second semester. Specific attention is called to the Seminar Class since it was during this semester that the class was not team taught, but divided into four units which concentrated on presentation of material peculiar to a given topic by one of four instructors. No grade below $C$ was given in mathematics since students were given two semesters to complete the course; however, it should be noted that the largest percent of $F$ grades the second semester was made in mathematics. Additionally, the largest percent (18\%) of I grades was also made in mathematics.

Twenty-seven students initially entered the program for the academic year of 1982-83. Table 6 shows considerable similarity in grade distribution as in the previous year. Second semester Seminar grades continued

Table 6
Percent of Distribution of Letter Grades of Entering AEP Freshmen 1982-83
$N=27$ First Semester $-N=19$ Second Semester

| Grade | A |  | B |  | C |  | D |  | F |  | I |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Semester Semester |  |  |  | Semester |  | Semester |  | Semester |  | Semester |  |
|  | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| English | 12 | 23 | 48 | 32 | 16 | 18 | 8 | 14 | 8 | 5 | 8 | 9 |
| Mathematics | 4 | 0 | 16 | 9 | 4 | 32 | 0 | 27 | 0 | 14 | 76 | 18 |
| Reading | 12 | 9 | 44 | 50 | 32 | 27 | 4 | 0 | 0 | 0 | 8 | 14 |
| Seminar | 12 | 0 | 24 | 0 | 28 | 18 | 24 | 36 | 0 | 14 | 12 | 32 |
| Orientation | 16 | - | 20 | - | 32 | - | 16 | - | 4 | - | 12 | - |

to be constituted by a high percent of $C$ grades (18\%) and a higher percent of D grades (36\%) with over a $50 \%$ increase in I grades. At the end of the first semester a large percent (78\%) received I grades in mathematics but decreased to $18 \%$ by the end of the second semester. An appreciable decrease was also seen in the number of $F$ grades made in mathematics in 1981-82 and 1982-83 - from $25 \%$ to $14 \%$. Dissimilarity of note was that a larger percent of students (25\%) made A grades in English the second semester than the first semester.

Table 7 shows that for the first time no $F$ grades were made in English or Seminar. The pattern in mathematics continued as previously with a high percent of I grades ( $87 \%$ ) the first semester but subsequently reduced to $13 \%$ by the end of the second semester. As was indicated for 1981-82 and 1982-83, students made the largest percent of $F$ grades in mathematics $(30 \%)$. The overwhelming number of low grades received by students in mathematics can be cited as the only definite pattern that clearly emerged.

Table 7
Percent of Distribution of Letter Grades of Entering AEP students 1983-84
$N=24$ First Semester - $N=23$ Second Semester

| Grade | A |  | B | B | C | C |  | D | F | F | 1 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Semester |  | Semester |  | Semester |  | Semester |  | Semester |  | Semester |  |
|  | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd | 1st | 2nd |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| English | 17 | 9 | 35 | 26 | 22 | 57 | 13 | 9 | 13 | 0 | 0 | 0 |
| Mathematics | 9 | 9 | 4 | 9 | 0 | 26 | 0 | 13 | 0 | 30 | 87 | 13 |
| Reading | 4 | 4 | 30 | 35 | 48 | 57 | 13 | 0 | 0 | 0 | 4 | 4 |
| Seminar | 0 | 4 | 16 | 30 | 4 | 9 | 4 | 0 | 4 | 0 | 0 | 9 |
| Orientation | 4 | - | 26 | - | 35 | - | 17 | - | 4 | - | 0 | - |

A summary of grade point averages for freshmen AEP students also fails to identify a definite pattern; however, as shown in Table 8 over $50 \%$ of the AEP students in their freshman year achieved a grade point average of 2.0 or above.

Table 8
Percent of Distribution of GPAs of Freshmen Students 1981-82-83

|  | Grade Point Average <br> Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $1981-82$ | $00-0.99$ | $1.0-1.99$ | $2.0-2.99$ | $3.0-3.99$ |
| $N=28$ | $3 \%$ | $29 \%$ | $57 \%$ | $11 \%$ |
| $1982-83$ | $5 \%$ | $41 \%$ | $32 \%$ | $22 \%$ |
| $N=22$ |  |  |  |  |
| $1983-84$ | - | $35 \%$ | $56 \%$ | $9 \%$ |
| $N=21$ |  |  |  |  |

The observation that over $50 \%$ of the freshmen students who participated in the AEP earned a 2.00 grade point average or above was substantiated by a 1983 summary report on the AEP. The report indicated that based on a comparative analys is of students' performance who entered the program in 1981-82 and a Pilot (AEP) equivalency group students who would have qualified for the program had it existed in 1980-81, 1981-82 AEP students achieved statistically better than their counterparts. Over $58 \%$ of the AEP (1982-83) students earned a C average (2.00-2.99) compared to the $43.64 \%$ in the Pilot equivalence group in 1980-81.

A follow-up of all Pilot/AEP students (1981-83) who took at least one mathematics and/or English course their sophomore years showed that students enrolled in a mathematics course continued to do poorly or to fail as shown in Table 9.

## Table 9

Percent of Distribution of English and Mathematics Grades of the Sophomores for all Groups by Semesters Note: See Withdrawal Tables 16, 17, and 18

Year 1982
Group I
GRADES
Courses:
English
First Semester $N=17 \quad 18 \% \quad 52 \% \quad 18 \% \quad 12 \%$

Second Semester $N=11$ $9 \% \quad 27 \%$ 46\% 18\%

Mathematics
First Semester $N=7 \quad 14 \% \quad 14 \% \quad 43 \% \quad 29 \%$

Second Semester
$N=4$
$25 \%$ $75 \%$

Year 1983 Group II

English
First Semester
$N=9$
$11 \% \quad 78 \% \quad 11 \%$
Second Semester
$N=8$
Mathematics
First Semester
$N=5$ 100\%
Second Semester
$N=8 \quad 25 \% \quad 25 \% \quad 50 \%$
(Table 9 continued)

| Year 1984 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group III | A | B | GRADES C | D | F | 1 |
| Courses: |  |  |  |  |  |  |
| English |  |  |  |  |  |  |
| $\begin{aligned} & \text { First Semester } \\ & N=7 \end{aligned}$ | 43\% | 29\% |  | 14\% | 14\% |  |
| Second Semester $N=5$ | 20\% | 60\% |  |  | 20\% |  |
| Mathematics |  |  |  |  |  |  |
| First Semester $N=7$ | 14\% | 42\% | 14\% | 14\% | 14\% |  |
| Second Semester $N=5$ |  | 60\% | 20\% | 20\% |  |  |

In Group I (1981-82 students), although $18 \%$ received $D$ grades in English, none received $F$ grades. However, in mathematics $43 \%$ received F grades the first semester with $14 \%$ receiving D grades, and $75 \%$ received F grades the second semester. In Group II (1982-83) $11 \%$ of the students received $D$ grades in English the first semester and $13 \% \mathrm{~F}$ grades the second semester. The first semester in mathematics $100 \%$ received F grades and the second semester, $25 \%$ received D grades and $50 \% \mathrm{~F}$ grades. English grades for Group III (1983-84) students were as follows: first semester $14 \%$ D grades and $14 \%$ F grades; no D grades were received the second semester but $20 \%$ received $F$ grades. For the first time the percentages of $D$ and $F$ grades in mathematics and English were the same the first semester (14\%), and represented a decline in failing grades in mathematics. The second semester was even more startling because no $F$ grades were made in mathematics.

Cumulative GPAs revealed in comparison to the freshman year that for all three groups at the sophomore level, there was an increase in the number of students whose GPAs fell below the 2.0 level: 1981-82 (41\%), 1982-83 (57\%), and 1983-84 (50\%), as shown in Table 10.

Table 10
Percent of Distribution of Cumulative GPAs
of Sophomores by Groups

| Year | Group | N | $\begin{array}{r} \text { Grade } \\ 1.0-1.99 \end{array}$ | Point Average $2.0-2.99$ | $3.0-3.99$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1982 | I | 19 | 41\% | 53\% | 6\% |
| 1983 | II | 16 | 57\% | 43\% | -- |
| 1984 | II I | 13 | 50\% | 40\% | 10\% |

In Table 11 attention is called to the fact that the junior class consisted of three categories of students: (1) students in their fourth year at the college, 9 , ( $50 \%$ ); (2) rising juniors or students completing sufficient credit hours at the end of the 1984-85 academic year to be classified as juniors, 6 (33\%); hence, these students during the academic year (1984-85) would have been at the college for four years; and (3) 3 (17\%) students who are "on track."

Table 12 shows that the first AEP senior class consisted of three students. One student had a GPA that was below 2.0 and two students had GPAs above 2.0.

Table 11
Percentage Analysis of Cumulative Grade Point Averages of Students Classified as Juniors


Table 12
Percentage Analys is of Cumulative.GPAs of Seniors


Table 13
Frequency Distribution and Percentages of Students'
Major or Area of Concentration Who Have Been at the College Since 1981

| Major/Concentration | Total | Percentage |
| :--- | :---: | :---: |
| Science | $N$ | $(27 \%)$ |
| Social Science | 3 | $(9 \%)$ |
| Business | 1 | $(27 \%)$ |
| IDS (Communications) | 3 | $(19 \%)$ |
| Music | 2 | $(9 \%)$ |
| Engl ish | 1 | $(1)$ |

In addition to determining the grade point averages, cumulative GPAs, percentages and frequency distribution of grades, additional insight to academic performance was gained from looking at general education courses taken by students beyond the sophomore level, their areas of concentration, attendance at summer school, and the frequency of course repetition. Particular attention was given to students who had been at the college since 1981. Eleven students who were admitted to the program at its inception were enrolled at the time of this investigation and were majoring/concentrating in the following areas: science - biology 3 (27\%); social science - social welfare 1 ( $9 \%$ ); business 3 (27\%); interdisciplinary studies (IDS) - communications 2 (19\%); music 1 (9\%) ; and English 1 (9\%), as shown above on Table 13.

An analysis of GPAs by areas of major/concentration revealed some interesting tendencies as shown in Table 14. This Table shows that, based on frequency distribution, students majoring/concentrating in science have a higher number of students with GPAs below 2.0. Not only this, but based on their transcripts, they have a higher percent of courses repeated and a higher percent of $F$ grades and $D$ grades in the advanced major courses. Only two students in IDS (Communications: Journalism and Mass Media) graduated in 8 semesters as is expected for most areas and of these two students, only one took a science course beyond the second semester of her freshman year and in this course received a letter grade of $F$. No mathematics courses were taken by either of these students at any level. All business majors had a 2.0 point average or above with one student having maintained a 3.0 or above average since her freshman year.

Table 14
Frequencies and Percentages of GPAs Distribution by Major/Concentration of Group I (1981-82 entry)

| Major or Concentration | $\begin{array}{r} \text { Grad } \\ 0.1-1.99 \\ \hline \end{array}$ | Point Average $2.0-2.99$ | 3.0-3.99 |
| :---: | :---: | :---: | :---: |
| Science $N=3$ | 2 (67\%) | 1 (33\%) |  |
| Business $N=3$ |  | 2 (67\%) | *1 (33\%) |
| $\begin{aligned} & \text { English } \\ & N=1 \end{aligned}$ | 1 (100\%) |  |  |
| $\begin{aligned} & \text { IDS(Communications) } \\ & N=2 \end{aligned}$ |  | **2 (100\%) |  |
| Music $N=1$ |  | 1 (100\%) |  |
| Sociology $N=1$ |  | 1 (100\%) |  |
| * Maintained since 1s <br> ** Graduated on time. |  |  |  |

## Academic Probation:

Another barometer of program effectiveness was the number of students who were in the program that were placed on academic probation. An analysis of the academic probation lists for the academic years between 1981-1985 showed the following: In 1981-82 both semesters $3(9 \%)$ AEP students were placed on academic probation with only one (3.3\%) of these students being placed on academic probation both semesters. In 1982-83 during the first semester 3 (12\%) freshmen students were on academic
probation and 5 (11\%) during the second semester. Two of the original students continued on probation and three new students were added. Data analys is of the 1983-84 academic year showed that during the first semester 3 ( $9 \%$ ) of the entering students were placed on probation; second semester $2(5 \%)$. One of the three original students was able to get off probation.

In the first AEP sophomore class (1982-83) 7 students (18\%) were on academic probation the first semester. Only $1(3 \%)$ of these students had been on academic probation previously. The second semester 7 (18\%) were on probation with $1(3 \%)$ continuing on academic probation who was previously on probation the first and second semester of 1981-82. In 1983-84 first semester 12 (19\%) sophomores were AEP students; four (33\%) of these students were in their third year but did not have sufficient hours to be classified as juniors, and of this number, 3 ( $25 \%$ ) had been previously placed on academic probation. The other $8(1.5 \%)$ were in their second year and were placed on academic probation for the first time.

AEP students on probation the second semester totaled 12 (23\%). One of these students was in her third year at the college but was classified as a sophomore, based on credits earned; another student was in her second or sophomore year. Two students (one in each category) were removed. These observations are shown in Table 15.

Table 15

## Number and Percent of All Students on Academic Probation by Semesters 1981-1985

| Year \& Semesters | Classification |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1981-82 |  | - | - | - |
| First Semester | $N=3$ |  |  |  |
| Percent | 9\% |  |  |  |
| Second Semester | $N=3$ |  |  |  |
| Percent | 9\% |  |  |  |
| 1982-83 |  |  | - | - |
| First Semester | $N=3$ | $N=7$ |  |  |
| Percent | 12\% | 18\% |  |  |
| Second Semester | $N=5$ | $N=8$ | - | - |
| Percent | 11\% | 17\% |  |  |
| 1983-84 |  |  |  |  |
| First Semester | $N=3$ | $N=12$ |  |  |
| Percent | 9\% | 19\% |  |  |
| Second Semester | $N=2$ | $\mathrm{N}=12$ |  |  |
| Percent | 5\% | 23\% |  |  |
| 1984-85 |  |  |  |  |
| First Semester | - | $N=10$ | $N=2$ | - |
| Percent |  | 14\% | 13\% |  |
| Second Semester* |  |  |  |  |
| Percent* |  |  |  |  |
| *Second Semester information not available. |  |  |  |  |

From this table it is clearly seen that students begin to show the potential for experiencing academic difficulty at the time that they have increased course loads and have the need to apply a variety of study techniques. During their freshman year they had reduced course loads and no content areas courses requiring extensive reading and research skills. Beyond this level, unless they were on academic probation, they took a minimum load of 15 hours.

## Persistence Rate

In 1981-82, the first semester, 34 students (Group I) were admitted to the "Pilot Program." At the end of the first semester one student (3\%) withdrew, and two (5\%) were exempted from the program. In 1982-83, 19 (61\%) of these students returned to the college the first semester of their sophomore year. Two (10\%) withdrew at the end of the first semester while 17 ( $50 \%$ ) completed the second semester. Fifteen ( $44 \%$ ) of this group returned the first semester of their third year, and of this group, 2 (13\%) withdrew and 13 ( $38 \%$ ) completed both semesters. In 1984-85, the fourth year for this group, $13(38 \%)$ returned the first semester and during the second semester, 2 ( $13 \%$ ) withdrew, leaving eleven ( $36 \%$ ) completing both semesters. Of this number, $2(6 \%)$ of the original students graduated, as is shown on Table 16.

Table 16
Total Number and Percent of Group I (1981-82) by Semesters and Frequencies and Percentages of Withdrawals and Persistence Through Graduation

| Academic Year $\quad$ Total $N$ | Withdrawals | Percent | Graduated | Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |

(Table 16 continued)

| Academic Year | Total $N$ | Withdrawals | Percent | Graduated | Percent |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $1984-85$ (Group I) |  |  |  |  |  |
| First Semester | 13 | - | - | - | - |
| Percent | $38 \%$ |  | $6 \%$ | 2 | $6 \%$ |
| Second Semester | 13 | 3 |  |  |  |
| Percent | $38 \%$ |  |  |  |  |
| *Two exempted from program. |  |  |  |  |  |

Tables 17 and 18 show the numbers, withdrawals and percentage rates for Group II (1982-83) and Group III (1983-84).

Table 17
Total Number and Percent of Group II by Semesters 1982-1985 and Number/Percent of Withdrawals

| Academic Year | Total N | Withdrawals | Percent |
| :---: | :---: | :---: | :---: |
| 1982-83 (Group II) |  |  |  |
| First Semester | 27 | 5 | 19\% |
| Percent | 100\% |  |  |
| Second Semester | 19 | 1 | 5\% |
| Percent | 70\% |  |  |
| 1983-84 |  |  |  |
| First Semester | 16 | 2 | 13\% |
| Percent | 59\% |  |  |
| Second Semester | 14 | - | - |
| Percent | 52\% |  |  |
| 1984-85 |  |  |  |
| First Semester | 9 | - | - |
| Percent | 33\% |  |  |
| Second Semester | 9 | 1 | 11\% |
| Percent | 33\% |  |  |

Table 18
Total Number and Percent of Group III by Semesters 1983-85 and Number/Percent of Withdrawals

|  |  |  |  |
| :--- | :---: | :---: | :---: |
| Academic Year | Total N | Withdrawals | Percent |
| $1983-85$ (Group III) |  |  |  |
| First Semester | 24 | - | - |
| Percent | $100 \%$ | 1 | $4 \%$ |
| Second Semester | 24 |  |  |
| Percent | $100 \%$ |  |  |
| 1984-85 |  | 3 | $23 \%$ |
| First Semester | 13 | $20 \%$ |  |
| Percent | $54 \%$ |  |  |
| Second Semester | 10 |  |  |
| Percent | $42 \%$ |  |  |

In 1982-83 twenty-seven students were in the program and five (19\%) withdrew the first semester. Nineteen (79\%) began the second semester with one ( $5 \%$ ) withdrawing. Sixteen students ( $59 \%$ ) returned for the first semester of their sophomore year with two (13\%) withdrawing. Fourteen (52\%) completed both semesters. Nine students (26\%) in Group II returned for the first semester of their third year (1984-85) with one student (11\%) withdrawing the second semester.

Group III (1983-84) consisted of twenty-four students and thirteen (54\%) of whom returned the first semester of their sophomore year; three (23\%) withdrew in this semester. Of the remaining students - ten (29\%) two (20\%) withdrew in the second semester. By the time these students reached their junior year, this percentage was down by 10-20 percent.

With the exception of the first semester of Group II, the withdrawal pattern is consistent. A larger percent (24\%) of this group withdrew the first semester as compared to approximately $3-4 \%$ for Groups I and III. While 13 (38\%) of Group I returned the first semester of their fourth year, $2(6 \%)$ of the original thirty-four students graduated in four years. The remaining 9 students (36\%) applied for graduation in December of 1985.

Group III (1983-84) consisted of twenty-four students. Twenty-three ( $95 \%$ ) completed both semesters. One student ( $4 \%$ ) withdrew the second semester. Thirteen (54\%) of these students returned for their sophomore year. Three (23\%) withdrew the first semester and of the 10 (42\%) returning, the second semester, 2 ( $10 \%$ ) withdrew.

An observation that can be made upon examining Tables 16,17 , and 18 is that just over $50 \%$ of the students in each group returned for their sophomore year and completed it. For Groups I and II this percentage is down by at least $20 \%$ at the junior year.

## Student Attitude and Study Skills

The Seminar for Learning was a unique class designed to ass ist students in the acquisition of study skills prerequisite to successful academic performance at the college level. In an effort to determine the students' attitudes regarding the efficacy of the Seminar for Learning class in particular, and the AEP in general, a sixteen item questionnaire, designed by the researcher, was administered to a group of students identified as having participated in the Academic Enrichment Program.

The sample population was drawn from students who were currently enrolled at Bennett College and were members of the AEP. A total of forty-one students were identified as having enrolled the first semester of the academic year of 1984-85. Each of these students was sent a questionnaire. Only $8(20 \%)$ responded to the first mailing. In order to improve the response rate a follow-up questionnaire and two letters were sent to nonrespondents, which resulted in a $30 \%$ response return rate. Subsequently, three assistants were sent to the dormitories to collect additional unreturned questionnaires. This effort resulted in an $18 \%$ response return rate as is shown in Table 19.

Table 19
Questionnaire Return Rate

| $N=41$ Sent | Mailed | Received | Total Percent |
| :---: | :---: | :---: | :---: |
| First Mailing | 41 | 8 | $19.5 \%$ |
| Second Mailing | 33 | 10 | $24.4 \%$ |
| Collectors | - | 6 | $14.6 \%$ |
| Total Return Rate |  | $58.5 \%$ |  |

The Visacalk statistical software package was used to describe students' attitudes by tabulation of percentages and frequencies of responses to items on the questionnaire. A study of the sixteen items included on the questionnaire indicated that positive responses (a combination of agree and strongly agree) outweighed negative responses (a combination of disagree and strongly disagree). An overwhelming majority
of respondents (92\%) felt that counseling and support given by AEP faculty was the most significant aspect of the program. Ranked second (79\%) was increased contact hours with English and mathematics teachers and the need to participate in extracurricular activities the first semester. Correlation of classroom assignments and Seminar for Learning class ranked third (75\%), which was followed by the opportunity to participate in classroom activities (64\%). Ranked fifth was the development of self-confidence and a positive attitude toward the college. A salient observation is that 5 of the 8 items ranked in the top five percent did not pertain to academic related areas but were social and psychological in nature. The two academic items receiving high ranking were increased contact hours with English and mathematical teachers and correlation of activities in the Seminar Class. Both increased contact hours with the reading teacher (53\%) and Seminar Class (50\%) fell below the median range (57\%). This occurrence perhaps can be explained by the fact that the majority of the students were not enrolled in academic courses other than English and mathematics until the first semester of their spohomore year. As a consequence, they did not have the need to apply skills learned in these classes to other content areas; hence, these skills were not immediately reinforced and transfer of these skills apparently did not take place. This observation can further be supported by the increased number of students placed on academic probation during their sophomore year, the increased number of students with a GPA below 2.0 and the high attrition rate during this year. Although item eleven on the questionnaire was psychological in nature (able to gain a better
understanding of self), it was also below the median range (49\%), which can be viewed as an inconsistency. Additional positive rankings are given in Appendix D. Of the sixteen items on the questionnaire, only one received a higher percent of negative responses ( $42 \%$ ) than positive responses $(38 \%)$, which was item two pertaining to the fact that the AEP was instrumental in helping "me" remain at the college. There was an equal number of positive and negative responses on item eight concerning reduced course load. Forty-six percent of the students returning questionnaires made written comments of which $42 \%$ were positive comments -$17 \%$ were unconditional, $25 \%$ were conditional--and $4 \%$ were negative, which is explicated in Table 20.

Table 20
Percentage Analysis of Positive and Negative Written Responses

| Attitude | N | Percentage |
| :--- | :---: | :---: |
| Unconditional Positive | 4 | $17 \%$ |
| Conditional Positive* | 6 | $25 \%$ |
| Negative | 1 | $4 \%$ |
| Total $N=$ | 11 | Total Percentage |
| *Concern for reduced course load. |  |  |

Summary
This chapter presented a statistical analysis of data related to the impact of the Academic Enrichment Program (AEP) on students in the program. Percentage tabulations and frequencies were primarily employed to determine the effect of the program on students' study habits, attitude, academic performance and persistence. The findings indicate that the sophomore year is the pivotal year for the majority of the students in the program for it is during this year that academic problems proliferate and there is a high attrition rate.

Chapter VI will elaborate on these findings, draw conclusions, make recommendations, and identify implications for further research.

## CHAPTER VI

## SUMMARY AND CONCLUSION

The purpose of this study was to describe and analyze a Pilot/ Academic Enrichment Program implemented at Bennett College in 1981 and continuing through 1983, and to evaluate the program's impact on students' study habits, academic performance, and persistence at the college.

## Summary

This investigation was guided primarily by three questions:

1. Did the AEP program impact on the academic performance of the participants in the program?
2. What effect did the program have on the persistence of students at the college?
3. What was the effect of the Seminar For Learning on students' attitudes and study habits?

Collection of data involved the description and analysis of records at the college which included transcripts, reports to the academic dean, attrition and academic probation reports. A survey devised to determine students' attitudes about the program and its effect on their study habits was utilized. This instrument, a questionnaire, was sent to a total of 41 students who were identified as being continuing students in the program since 1981-1982. Twenty four questionnaires were returned, representing a response rate of $58 \%$.

Descriptive statistical analysis techniques were utilized to calculate numerical distributions of data. Information from the questionnaire was reported in two categories of responses -- positive and negative. It was found that in all three groups, minimal academic difficulty was experienced by students in their freshman year. The area that caused the most difficulty for all three groups was mathematics where the largest percent of $F$ and I letter grades were made. A cumulative grade point average of 2.0 or above was made by over $50 \%$ of the students in Groups I, II, and III. A follow-up of subsequent performances of students taking mathematics courses beyond the 100 level revealed that students continued to do poorly in mathematics. A combined total of fifty-three students took additional courses in mathematics and/or English for one or two semesters. The dominant letter grade received in English was C (42\%) and in mathematics F (28\%).

The overall performance of students at the sophomore level, in comparison with freshmen level students, showed that the greatest percentage of sophomores had cumulative GPAs below 2.0. On the other hand, a greater percentage of freshmen than sophomores had GPAs above 3.0. Of the students classified as juniors, over $80 \%$ had cumulative GPAs above 2.0. Group I, who entered in 1981, was the only group who had been at the college long enough to have had students classified as seniors and 1 (33\%) had a cumulative GPA below 2.0. A follow-up of the group showed that in terms of majors or areas of concentration, business majors maintained a higher GPA than other majors, with science majors maintaining the lowest GPAs.

Academic probationary status was most acute during the sophomore years for each group. The composite percentage for all three groups was $91 \%$ at the sophomore level while at the freshman level it was only $27 \%$.

The persistence rate of all three groups was over $50 \%$ for the sophomore years. However, at the junior year, this rate was down $30-$ $40 \%$. At the senior year, the persistence rate was $100 \%$ for students completing the second semester of their junior year. Of this number, 6\% withdrew and $6 \%$ graduated. Twenty-six percent of this group anticipates graduating in the fall of 1985.

In response to the questionnaire regarding students' attitudes about the benefits derived from the program, positive attitudes prevailed.

Questions asked and the responses made are summarized below:

1. Is academic success affected by student empowerment? Fifty-three percent of the respondents gave positive responses that the development of their study skills helped them in other courses; thirtythree percent gave negative responses.
2. Do students perceive the program as being instrumental in helping them remain at the college? Thirty-eight percent of the responses were positive and forty-two percent were negative.
3. What aspect of the program was most beneficial? Counseling and support by AEP faculty received $92 \%$ positive responses and $8 \%$ negative responses.
4. Would students recommend that other students participate in the program? Fifty-seven percent of the responses were positive and $26 \%$ negative.
5. Does inability to participate in extracurricular activities have an effect on students' attitudes toward the college? Seventy-nine percent gave positive responses and $17 \%$ gave negative responses.
6. Do the subsequent opportunities to participate in extracurricular activities have an effect on bonding with the college? Sixty-nine percent responded positively and $24 \%$ responded negatively.

Written comments were also more positive than negative; in many instances, students reiterated the importance of support and counseling by faculty members. Some students felt that the course load should have been increased; one student felt isolated from the general college community. The only negative comment made centered around the fact that the course load was unsatisfactory because it would prevent students from graduating on schedule which would cause the cost of their education to be more expensive.

## Conclusions

The program succeeded in reaching its objective of helping freshmen make a satisfactory adjustment to the college through reduced course load, increased contact hours with their instructors, and the Seminar for Learning Class. Over $50 \%$ of the students in $a l l$ groups achieved GPAs of 2.0 , a very low percentage were on academic probation (less than $15 \%$ ), and there was a return rate in excess of $50 \%$ the sophomore year. A weakness of the program in each of these groups was that $25 \%$ of the students experienced difficulty in mathematics 100. Additionally, the majority of these students who enrolled in mathematics courses beyond the 100 level had not acquired the necessary skills for success
in succeeding mathematics courses and, therefore, continued to fail. A concomitant result of proficient academic performance was that a low percentage of students were placed on academic probation. Nevertheless, these observations could be misleading. It must be remembered that only two of the twelve hours taken by these students were academic courses, therefore one should not over generalize from this statement.

Based on the overall academic performance of the AEP students at the sophomore level it can be surmised that the majority of the students were not ready to function at this leve1. A greater percentage of students was placed on academic probation and the attrition rate was high. Predicated on these observations, it was clearly seen that the sophomore year could be viewed as the turning point for most students -- both academically and in terms of persistence.

A student's major or area of concentration also influenced academic performance and the number of years required for degree completion. Students in the area of science experienced more difficulty in their major than students majoring in other areas. More letter grades of $F$ were made and more courses were repeated by science majors than by other majors. Students concentrating in Interdisciplinary Studies (communication skills) in which mathematics and science courses were not required, were the only students to graduate in eight semesters.

The single most important aspect of the program, as subjectively expressed by students, was the support and counseling given by the AEP faculty.

Although it was not the intent of this study to make a compai ison with the general population, some comparison was made between
an equivalence group of freshmen admitted in 1980-81 and the freshmen students who entered the program in 1981-82. Based on this comparison, it was noted that AEP students achieved a mean GPA that was significantly higher than their counterpart. Additionally, it was found that over twice as many AEP students earned a GPA of 2.00 or above as did the equivalence group.

## Implications

The fact that the Academic Enrichment Program helped students adjust at the freshman level was patently clear but it did not have far reaching effects beyond this level. This fact underscores the position previously advanced that helping students persist in college through degree completion is difficult and complex. Efforts to enhance students' academic performance and persistence must therefore be approached from various facets -- environmentally, sociologically, psychologically, and academically. It has been well documented that academic integration, social integration, and study orientation are important variables in student persistence.

The literature abounds in research pertaining to academic and social integration of students but there appears to be a dearth of data derived from psychological studies. There is also a paucity of information concerning developmental studies programs in general as well as the processes of interaction of racial minorities. It is suggested, however, for blacks, traditional predictors of academic performance and persistence are inadequate. From this study, it can
be deduced that psychological factors are of primary importance in the behavior of students as reflected by students' responses to the survey questionnaire.

Realizing that academic performance is clearly the sine qua non by which a person is judged, continued emphasis must be placed on upgrading the academic performance of students through support efforts that are academic in nature. Since students performed satisfactorily in terms of their overall GPA as freshmen but experienced a decline in academic performance at the sophomore level, it can be inferred that while students had been afforded the opportunity to learn appropriate study skills, transfer of learning did not take place for many students. As a consequence, study skills learned were not applied in subsequent content courses. This was evident by the increased number of students placed on academic probation, the high attrition rate at the end of the sophomore year, the low grade point average of students especially those majoring in the sciences, and the small percent of students completing their curriculum in eight semesters.

## Recommendations

Certain limitations for the application of this study should be noted since it only involves a small group of students who participated in a program specifically designed for them at one college.

Based on the findings of this study and information obtained from the literature, the following recommendations are made in terms of recommendations peculiar to Bennett College and those that are generalizable to other institutions or populations.

Bennett College recommendations:

1. There should be a reevaluation of the lower level mathematics courses from a diagnostic frame of reference to determine if: (a) specific needs of the students have been identified and are being addressed, (b) appropriate instructional methodology is used in keeping with the learners' experiential background, and (c) concepts are made concrete before moving to the abstraction.
2. Student's should be given more than two semesters to develop prerequisite mathematical skills.
3. All science majors should be encouraged to take a reduced course load throughout their curriculum.

Other Institutions and Populations:
4. Workshops should be provided for content area teachers to teach them how to reinforce reading and study skills in the content area, to make them aware of the psychological needs of their students and accommodative strategies that can be employed.
5. Mentor relationships should be encouraged among faculty, staff, and students in order to provide emotional support as long as the students need it.
6. Students should be made aware of the fact they will possibly have to stay at the college more than 8 semesters.
7. Joint studies should be conducted concerning retention of students by colleges and universities.
8. Further research is needed on the significance of psychological factors and the adjustment of black students at the postsecondary level and the application of these findings to other minorities such as handicapped students.

In conclusion, from a historical perspective it can be conjectured that presently and in the future many students from all socioeconomic backgrounds will continue to be underprepared to successfully complete postsecondary level experiences. Thus, a broad based support system must be available for obviously as has been pointed out, the causes of underpreparedness vacillates with societal expectations and prevailing conditions. From a heuristic point of view, an implication to be drawn is that a promising area for further research is the conceptual domain of the psychological experience based on the culture and experential background of blacks.

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APPENDIX A.

INSTRUMENT FOR ATTITUDE SURVEY

NAME: $\qquad$ ADDRESS: $\qquad$ PHONE: $\qquad$
MAJOR: $\qquad$ CLASSIFICATION: $\qquad$ YEAR ENTERED PROGRAM: $\qquad$
Directions: Circle one response indicating your feeling: AGREE (A), STRONGLY AGREE (SA), DISAGREE (D), STRONGLY DISAGREE (SD), UNCERTAIN (U)

1. I felt I should have been placed in the Academic Enrichment Program (AEP).

A SA D SD U
2. The AEP was instrumental in helping me remain at the college.
$A \quad S A \quad D \quad S D \quad U$
3. Increased contact hours with my English teacher was beneficial in helping me understand English concepts.

A SA D SD U
4. Increased contact hours with my mathematics teacher was beneficial in helping me understand mathematical concepts.

A SA D SD U
5. Increased contact hours with my reading teacher was beneficial in helping me improve my reading skills.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

6. The Seminar for Learning was important in helping me learn how to study.

$$
A \quad S A \quad D \quad S D \quad U
$$

7. Correlation of class room assignments and activities in the Seminar for Learning helped me understand much better the ideas being taught.
$A \quad S A \quad D \quad S D \quad U$
8. The reduced course load was an advantage.

$$
A \quad S A \quad D \quad S D \quad U
$$

9. My ability to perform well in other courses can be attributed to the AEP.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

10. The continuous counseling and support given by AEP faculty was beneficial.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

11. I was able to gain a better understanding of myself as a result of the AEP.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

12. The program helped me gain self-confidence.

$$
\begin{array}{lllll}
A & S A & D & S D
\end{array}
$$

13. The program helped me develop a positive attitude toward college.

$$
\text { A } \quad \text { SA } \quad D \quad S D \quad U
$$

14. I should have been allowed to participate in extracurricular activities during the first semester.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

15. The opportunity to participate in extracurricular activity the second semester made me feel more a part of college.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

16. I would recommend this program for other students.

$$
\begin{array}{lllll}
A & S A & D & S D & U
\end{array}
$$

Other Comments:

## APPENDIX B. <br> OUTLINE OF READING AND STUDY SKILLS

## I. Study Skills

A. Organization

1. Setting goals
2. Planning time schedule
3. Environment
B. Approach to textbook
4. Preview, Organize, Write, Evaluate, Review
5. Summarizing
6. Underlining text
C. Test taking
7. Objective
8. Essay
D. Notetaking
9. Principles of
10. Outlining
11. Summarizing
12. Listening skills
E. Locating information
13. Library
14. Table content
15. Index
II. Vocabulary
A. Structural Analysis
B. Context Clues
C. Sight words (20 words per week)
D. Dictionary
III. Comprehension
A. Sentence structure
B. Main idea
C. Detail
D. Paraphrasing
E. Transitional words
F. Critical reading
G. Organizational patterns
IV. Reading Content Area
A. History
B. Humanities
C. Science
D. Mathematics

## APPENDIX C .

## SCHEDULES OF CLASS ACTIVITIES

## AUGUST

26 - Overview and introduction to the course
30

- Setting Goals Toward Success in College - Pathways - Chapter 1


## SEPTEMBER

2 - Continued discussion - Chapter 1. Assignments 7 (p. 14) and Chapter Quiz (p. 24 - 26)

6 - Labor Day (No classes)
9 - Goal Setting - Film - "You Pack Your Own Chute"
13 - Controlling Time for Study - Chapter 2 - Assignment - complete study schedules

16 - Discussion of listening and concentrating - Chapters 3 and 4

- Continued Notetaking - test


## OCTOBER

4 - Mid-term Test

- Mathematics Study Skills (Math Textbook)
- Mathematics Study Skills continued
- Mathematics Study Skills continued
- Mathematics Study Skills continued
- Continued Test-Taking
- Guest Lecturer - Professor of Biology (Notetaking review)
- Test Taking - Essay, objective, standardized - Chapters 16 and 17


## NOVEMBER

1 - Continued Test-Taking
4 - Test on Essay and Objective Test
8 - Taking a Standardized Test
11 - Improving Your Math Attitude
15 - Improving Your Math Attitude continued
18 - Improving Your Math Attitude continued
22 - Improving Your Math Attitude continued
29 - Oral Presentations based on Reading Assignment

## DECEMBER

2 - Oral Presentation continued
6 - Open date
9 - Review for final examination
13-17 Final Examinations

Evaluation of the course: Final semester grade
Homework - 20\%

$$
\text { Tests - } 50 \%
$$

Final Exam - 30\%

## APPENDIX C.

## SPRING SEMESTER SCHEDULE 1984

UNIT I - Improving Writing Skills
January 10 - January 31, 1984
Materials: Handouts, CAI (Texas Materials), Handbook section of the textbook, From Idea to Essay.

This unit will involve the following projects:

1. Keeping a journal - keeping a journal will help the student to improve her skills and acquire more practice in writing beyond the classroom setting. Each student will be required to write in her journal outside the classroom for the duration of the unit. This type of exercise will also prepare the student for intensive essay writing in her various courses, especially Communication Skills 102.
2. Completing practice/drill exercise on sentence structure in the CAI-Lab using Texas Materials-Module 5 (embedded phrases or clauses, coordinated parts, punctuating series, and parallelism) and Module 6 (appositives, verbals, colons, and semicolons).
3. Learning grammatical terminology and proofreading symbols - in order for the student to improve her writing skills, she must understand the grammatical terms and know the meaning of the proofreading symbols (abbreviations of errors) that appear on her graded essay.

The unit grade will be based on the following evaluation:
1/3.....Completion of journal (to be passed in at the end of the unit)
$1 / 3 . .$. . Completion of Modules 5 and 6 in the CAI-Lab
1/3.....Test on grammatical terms and proofreading symbols

January 10 - Overview of Seminar units
January 12 - Introduction of Unit 1; discussion of course outline; discussion of handouts on grammatical terms and proofreading symbols
January 13 - CAI-1ab-Module 5-Embedded phrases or clauses
January 17 - CAI-1ab-Module 5-Coordinated parts
January 19 - CAI-lab-Module 5-Punctuating series and parrallelism
January 20 - Test on grammatical terms and proofreading symbols
January 24 - CAI-1ab-Module 6-Appositives
January 26 - CAI-1ab-Module 6-Verbals
January 27 - CAI-1ab-Module 6-Colons and semicolons
January 31 - Turn in journals; discussion and evaluation of the unit

UNIT II - Mathematical Thinking: Problem Solving and Comprehension
February 2 - February 28
Textbook: Arthur Whimbley and Jack Lochhead, Problem Solving and Comprehension: A Short Course in Analytical Reasoning (2nd Ed.). Philadelphia: Franklin Institute, 1981.

General Objectives: To give the student guidance and practice in solving a variety of problems including verbal reasoning problems, word problems, trends and patterns, and analogies. To help the student increase her ability to use analytical reasoning by solving a variety of problems.

Units
(A) Introduction and Inventory - Day 1
(B) Errors in Reasoning - discussion of some problem solutions. Check list for Problem Solving - Day 2
(C) Problem Solving Methods - Sample problems - Methods of good problem solvers. - Day 3
(D) Verbal Reasoning Problems - Days 3, 4, and 5
(E) Solving Mathematical Word Problems - Days 6, 7, and 8; Short Quiz Day 6
(F) Trends and Patterns - Days 10 and 11
(G) Unit Exam - Day 12

Grading: Homework 60\% - Quiz 10\% - Test 30\%

UNIT III - Reading in the Content Area: Literature
March 13 - March 30
Text: Animal Farm by George Orwell
March 13 - Overview and Introduction to Session
March 15 - "Studying the Humanities," Pathways, Chapter 12
(Assignment 1) p. 239 and Chapter Quiz pp. 248-249
March 16 - Discussion of Animal Farm - Chapters 1-4
Group I - Written Chapter Summaries due
March 20 - Mid Evaluation
March 22 - Discussion of Animal Farm - Chapters 5-7
Group II - Written Chapter Summaries due
March 23 - Discussion of Animal Farm - Chapters 8-10 Group III - Written Chapter Summaries due
March 27 - Movie: Animal Farm (Part I)
March 29 - Movie: Animal Farm (Part II)
March 30 - Final Examination

# APPENDIX C. <br> MATHEMATICS FOLLOW-UP ACTIVITIES 

Practice Objective Test on Studying Mathematics and Learning How to Work Word Problems

Place in the blank to the left the capital letter corresponding to the best answer.

1. Mathematics books are read the same way as
(A) a novel; (B) a history text book;
(C) a home economics book; (D) none of the above.
2. Which of the following is not true?
(A) Reading an example or two in a mathematics text is sufficient to learn how to do a problem.
(B) You should work enough of the harder problems so that you have confidence that you know how to work problems.
(C) Read the test at least twice--the first time to get the main ideas and how they are connected and the second time to work through all the details.
(D) Study the examples and then try to work them without looking at the book.
3. Translate the following into a mathematical sentence: Two sides of a triangle are equal and the third side is 4 inches smaller than the other two. The perimeter is 34 inches. If $x$ is the length of the two equal sides, then
(A) $2 x-4=34$
(C) $x-4+x+x=34$
(B) $3 x=34-4$
(D) $42 x$
4. LIST: List five procedures in reviewing and studying for a test in mathematics.
5. MATCHING: Match the following phrases with the corresponding algebraic expressions. Let $x$ stand for the number. Write the corresponding letter next to the Roman numeral.


5 more than twice a number
(A) $\frac{1}{2}(x+5)$

5 increased by one-half of a number
(B) $\frac{1}{2} x+5$ One-half of the sum of a number and five
(C) $2 x+5$ The sum of two and the product of five
(D) $5 x+2$ and a number

SHORT ANSWER: Fill in the blanks of the following table.
6. The cost of first-class postage is $20 \phi$ for the first ounce and $17 \$$ for each additional ounce. Also give the total cost. Number of ounces:

Cost:

| 1 | $20 \neq$ |
| :---: | ---: |
| 2 | $37 \phi$ |
| 3 | - |
| 5 | - |
| Total Cost: |  |

## Mathematics Section

1. Multiple Choice: Circle the letter corresponding to best answer. On this part, you do not need to show work.
A) Elephant is to small as $\qquad$ is to $\qquad$ .
A. large:little B. lion:timid C. turtle:slow D. hippopotamus:mouse
B) $3,6,4,2,5,9,1$ Add the second number to the sixth number and then divide by 3 unless this quotient is greater than 5 in which case add the first number to the next-to-1ast number and divide by 4 . What is your final answer?
A. 2 B. 3 C. 4 D. 5, E. Some other answer
C) Write the 3 letters which should come next in this series:

B A ACEEDIIEMMF $\qquad$
2. A) Write the two numbers which should appear next in the series.

39515113329 $\qquad$
B) A certain ball, when dropped from any height, bounces one-fourth of the original height. If the ball is dropped from a height of 192 feet, what is the total distance that the ball has traveled when it hits the ground for the third time? (Draw a diagram) Show work.

## Answer:

$\qquad$
3. The second side of a quadrilateral (four-side figure) is three times the length of the first. Another side is seven cm. longer than the first side and the fourth side is two cm . shorter than the second side. Let $x$ represent the length of the first side.
A. Write expressions for the lengths of each side in terms of $x$

First side_x Second $\qquad$ Third $\qquad$ Fourth
B. If the perimeter is 45 cm . find the length of each side. Show work.
First side $\qquad$ Second $\qquad$ Third $\qquad$ Fourth $\qquad$
4. A) List and discuss two of the five methods of good problem solvers. B) List and discuss any two of the suggestions or steps for solving mathematical work problems--with or without algebra.
5. Three women--Paula, Janet \& Nedra--have among them a total of 15 children. Paula has 3 boys and Janet has the same number of girls. Janet has 1 more child than Paula who has 4 children. Nedra has 4 more girls than boys and the same number of boys as Paula has girls. How many boys and how many girls do each of the three women have? (Set up work)

## APPENDIX C.

## PILOT SEMINAR FINAL EXAMINATION SPRING SEMESTER 1982

Career Exploration - (Essay Format--not less than three paragraphs).

It was Socrates who said, "the shortest and surest way to live with honor in this world, is to be in reality what we would appear to be." How does this statement relate to a job interview?

## ENGLISH SECTION

PART I - Correct Word Choice (2 each) Underline the correct term in each of the following sentences:

1. When they arrived at Bennett College, they received some practical (advise, advice) regarding the honor system.
2. Be careful not to (loose, lose) the keys.

PART II - Combine the sentences in each set into a single sentence. (6 each)

1. a. We are an exuberant people.
b. We are also careless and destructive.
c. We make powerful weapons, such as the atomic bomb.
d. We then use them to prove that they exist.
2. a. Television news casters are victims of the rating game.
b. They are hired and fired on the basis of how entertaining they make the news.
c. The rating game is controlled by anti-intellectual viewers.

PART III - Use each of the following punctuation marks correctly in a sentence: (3 each)

1. colon -
2. quotation marks -
3. semicolon -
(English Section continued)
ESSAY WRITING
4. Explain point of view briefly:
5. What are some errors in sentence structure that should be avoided? (a)
(b)
(c)
6. What style of language is used most in college writing?
7. What are some of the tones a writer might adopt?
(a)
(b)
(c)
8. What kinds of problems can vague and imprecise word choice cause? Give an example of a word in a sentence that is vague or misleading, and explain why another word would be more appropriate.

## READING SECTION

DIRECTIONS: True and False - If the statement is true write true, if false write false and tell WHY.

1. Reading in the content area is the same as reading a novel.
2. All content area material should be read at the same rate.
3. Using context clues is not a good way to determine the meaning of a word.
4. Vocabulary can be termed as labels for concept.
5. Specialized reading skills in the content areas are needed.
6. It is not untrue that structure analysis involve prefixes, roots, and suffixes.
7. Surveying material before reading it is a waste of time.
8. The introductory paragraph should not be read carefully because it contains irrelevant information.
9. Reading the summary paragraph before reading a chapter will facilitate comprehension.
10. Thinking while reading will deter one's ability to retain the information being read.

APPENDIX D.

## RANK ORDER OF POSITIVE RESPONSES TO QUESTIONNAIRE BY PERCENTAGES

1. The continuous counseling and support given by AEP faculty was beneficial.
2. Increased contact hours with my English teacher was beneficial in helping me understand English concepts. 79\%
3. Increased contact hours with my mathematics teacher was beneficial in helping me understand mathematical concepts. 79\%
4. I should have been allowed to participate in extracurricular activities during the first semester.
5. Correlation of classroom assignments and activities in the Seminar for Learning helped me better understand the ideas being taught.
6. The opportunity to participate in extracurricular activity the second semester made me feel more a part of college.
7. The program helped me gain self-confidence.
8. The progran helped me develop a positive attitude toward college.
9. I would recommend this program for other students. $57 \%$
10. Increased contact hours with my reading teacher was beneficial in helping me improve my reading skills.
11. The Seminar for Learning was important in helping me
learn how to study.
12. My ability to perform well in other courses can be
attributed to the AEP.
13. I felt I should have been placed in the AEP. $50 \%$
14. The reduced course load was an advantage. $50 \%$
15. I was able to gain a better understanding of myself as a result of the AEP. 49\%
16. The AEP was instrumental in helping me remain at the college.
