

A STUDY OF AN EVALUATION, ADVISEMENT  
AND PLACEMENT PROGRAM IN A  
TWO-YEAR INSTITUTION

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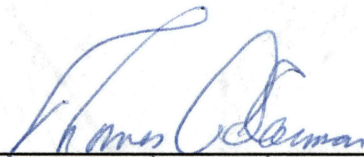
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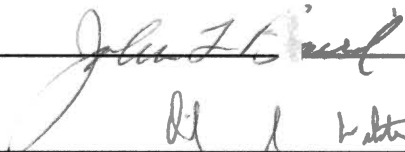
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## CHAPTER I

### INTRODUCTION

This research was undertaken with the intent of describing the results of a program of remediation in a public two-year institution in the southwest. The program was designed to provide remediation of academic deficiencies through pre-collegiate coursework. The study was concerned with the extent to which students participating in the program were successful when looking at: 1) the academic success of the first cohort of students, and 2) the enrollment of the cohort students beyond the first semester.

The study may provide a new perspective for viewing the components and outcomes of a program of remediation in an open-access two-year public institution of higher education. Two-year colleges are referred to in the literature as a "democratizing force in higher education" (Roueche and Baker, 1987). However, an egalitarian philosophy may not mean that much more than lip-service has been paid to the idea of equality of opportunity. Cross (1976) emphasized that equal opportunity is not just gaining admission. "Educational opportunity," according to Cross, "means more

than the right to meet minimal standards; it means the right to develop one's talents to maximize effectiveness" (3).

The study of one institution's efforts to meet student needs through the identification and correction of academic deficiencies is important since it provides information which may be useful to other institutions. Roueche and Baker (1987) supported the view that:

A qualitative, descriptive study...is probably more valid and presents a more accurate picture of the interrelated components that result in the effective delivery of educational systems...than any other kind... (iv, preface).

If qualitative, descriptive research is conducted in an institutional context, it may well provide a more complete picture of the efforts of higher education in the realm of remedial education.

#### Statement of the Problem

The problem to be addressed through this research is: to what extent does a remedial program succeed when looking at participating students' 1) earned grade point average, 2) persistence in college, and 3) graduation rate.



## Research Questions

In order to proceed in an orderly way, research questions have been formulated to provide the focus.

1. To what extent did students participating in the program succeed in remediating certain academic deficiencies, as measured by grade point average (satisfactory academic progress)?

2. To what extent did students participating in the program succeed in remediating certain academic deficiencies, as measured by consecutive semesters of enrollment in college?

3. To what extent did students participating in the program graduate after two years?

## Context of the Problem

### External Context

In 1988, the State Board of Regents for Higher Education adopted a policy requiring the completion of certain high school units before a student would be eligible for admission to four-year institutions of higher education in the state. These requirements were: four units of English, three units of algebra and geometry, two units of history, and two units of a laboratory science.

They further required that students lacking specified credits were deficient and could only make up those deficiencies and qualify for admission to the comprehensive

universities and four-year colleges in one of the following ways: 1) removal of the deficiency by completing coursework in the area of the deficiency, or 2) passing an examination of course content in the area of the deficiency. Furthermore, the comprehensive universities and four-year colleges were only allowed to teach remedial courses in summer sessions.

The date for the policy to go into effect was July 1, 1988, the beginning of a new fiscal year for institutions of higher education. The Regents' policy allowed students enrolled before July 1, 1988, to be "grandfathered" into institutions of higher education in the state and thus declared to have no deficiencies.

The policy changed only one aspect of admission to junior and community colleges in the state. This was that students could not take coursework for college credit until all deficiencies, if any, were removed. Essentially, the admission policy remained unchanged, since junior and community colleges were still "open-admissions" institutions. Two-year colleges continued to be responsible for the quality of their students transferring to four-year colleges and universities, yet they were required to admit students regardless of the students' academic qualifications. Also, funding was not changed to provide either for hiring experts in developmental education or for smaller classes to aid in this remediation effort.

The challenge, then, for the junior and community colleges, was to identify, place, and remediate students deficient in one or more of the four core areas of English, mathematics, history and science. Each institution in the state wrestled with the problem in its own way, and the solutions they arrived at reflected the uniqueness of their history, character, and mission.

The situation facing two-year colleges in the state during the spring semester of 1988 was that they had to develop a response to the external mandate, continue to maintain academic strength, absorb additional programmatic costs, and retain the students who entered their institutions even though some of those students were poorly prepared academically.

### Internal Context

The college in this study is described in its publications as a state-supported comprehensive college offering associate degrees and/or certificates while remaining sensitive to the specialized educational needs of the local community. In order to accomplish its mission, the college states that it provides developmental programs for students whose tests, academic records, and other factors indicate potential difficulty in doing satisfactory academic work.

The college is accredited by the North Central Association of Colleges and Schools and in 1987 received a

ten-year re-accreditation with no stipulations. The institution has been continuously accredited since 1925.

The college has expressed the goal of facilitating student learning, and its written goals state that students are prepared either to enter the workforce or to transfer to other institutions to complete their undergraduate degrees. The demographics of the institution are unique due to the geographic location, the cultural mix, the economic situation in the area, and the comprehensive climate of the institution itself.

Although located in the extreme northeastern corner of the state, the college draws students from as many as 65 of the state's 77 counties and has numerous students coming from adjoining states. Founded in 1919, the institution has developed into a two-year college with residential halls and competitive varsity athletics in many sports. Its enrollment peaked in 1983-84 at 2,400 FTE, declined in 1987-88 to around 2,100 students, and has remained fairly stable in enrollment since then. The average age of the student body is 19, but there are over 820 students aged 21 or over. There is also a racial mix, with 16% of the students documented as American Indian and 8% as Black, plus some Oriental, Micronesian, and other international students.

According to the 1989 application for institutional eligibility for Title III grant competition, approximately one-third of the student population received financial aid

of one type or another. In addition, the institution has been concerned with its attrition rate for some time, and programs have been developed to help improve its thirty-two to forty percent retention rate to Associate Degree graduation rate.

### Rationale

The problems of standards, quality, and equity are endemic to all institutions of higher education but are particularly acute for junior and community colleges which have historically provided equality of opportunity for all, regardless of prior academic preparation. Debate continues over questions of opportunity and access to higher education, but these have largely been answered by federal funding (student aid) programs and "open-admissions" policies of two-year colleges.

However, the question remains whether opportunity of access equals equity. Access and equity are not synonymous, and their definitions, as well as the accompanying assumptions, need clarification. One assumption often made is that equality of opportunity, or access, should also be equality of treatment. This assumption is not always valid. However, ideally, equality of opportunity for success must become a part of the meaning of equality.

Many contend, Cross (1976), Astin (1984), and Tinto (1987) among others, that people must be treated differently

when they are different and the same when they are the same. Such a system of social justice would insure that equality, within some newly defined parameters, can equal equity. Equity implies fairness, and indeed this is what is needed in higher education. Standards, both of admission and graduation, are important in order to maintain the integrity of the degrees awarded by an institution. However, the right to seek an education is an important right in the United States and is nationally supported. In fact, the community college movement itself is a visible, historical landmark of this support.

If equality of opportunity is all that is needed, then the "open-admissions" policy would be the answer. It must be asked, however, what does "opportunity" mean? Is it the opportunity for failure due to inadequate preparation for the collegiate experience? Is it the opportunity for failure due to lack of responsiveness to human needs on the part of the institutions? Or is it the opportunity for social justice--the opportunity for success, through different treatment when different levels of preparation are found? Alexander Astin (1984) argued that equal education and excellence are not mutually incompatible and that--by adopting new and more valid conceptions of excellence--both are possible (Astin, 1984).

According to a report of the Commission on the Future of Community Colleges (1988), enrollment at community,

technical and junior colleges grew 240 percent between 1965 and 1975. Today, 51 percent of all first-time entering freshmen enroll in community colleges. A mission statement for community colleges is found in the Commission's Report:

At their best, community colleges recognize and enhance the dignity and power of individuals ....Serving individual interests must remain a top priority of community colleges. But they can do much more. By offering quality education to all ages and social groups, community colleges can strengthen common goals as individuals are encouraged to see beyond private interests and place their own lives in larger context (6).

In order to offer quality education, colleges must address the issue of preparation for higher education. With open-door admission, two-year colleges have often been criticized as "revolving-doors." Much of this criticism is due to a lack of understanding of the differing motivations students have for entering, as well as leaving, institutions of higher education.

Two-year colleges can provide a valuable educational experience and must act to assure entering students that their skills will be evaluated, that they will be counseled, and that coursework will be provided appropriate to their abilities and their goals. This will meet their needs as

well as increase their chances of success. Thus, upon completion of their educational program, they will be better able both to "think globally" and to "act locally" for enrichment of their own lives and the betterment of their communities.

### Summary

The purpose of this study was to describe the academic progress of students participating in a remedial program. The students in the program were assigned to it by the college. The students who were admitted to the college in the fall of 1988 and who failed to meet State Board of Regents for Higher Education criteria for unqualified admission were the cohort group. Success was defined by the college as: a) making satisfactory academic progress according to college grade point average standards, and b) staying enrolled.

### Definition of Terms

Academic Progress: Satisfactory Academic Progress refers to the grade point average in relation to the number of credits attempted. Students making satisfactory progress have an average grade point at or above the requirement set by the college with the approval of the State Board of Regents. The College Catalog lists the following standards of satisfactory academic progress for the full time



undergraduate - 12 hours or more:

At the completion of this semester:	1	2	3	4	5	6	7	8	9	10
A student must have accrued at least this many credit hours:	10	20	30	40	50	62	74	86	98	110
With at least this GPA:	1.5	1.5	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.0

ACT Assessment: The ACT Assessment is the standardized achievement test developed and marketed by American College Testing. It is used to screen students for admission to many colleges and universities. In open-admission institutions, taking the ACT Assessment is required but there is no minimal score requirement for acceptance.

ASSET Assessment: The ASSET Program is an ACT-developed advising and planning tool designed specifically to serve students entering two-year institutions. It is a guidance-oriented assessment program combining measures of academic skills with educational planning information. The name is not an acronym, but is always printed in all-capital letters, according to the technical manual.

At-risk students: At-risk students, as identified in this study, are defined as those students who were identified by the college as being deficient in high school credits, course grades, or test scores. These students were identified by American College Testing as having less than a

70% chance of meeting institutional academic progress requirements in their first semester of enrollment in college.

Cohort: Cohort refers to a group defined by having a particular characteristic in common and is used to name the population under examination. For example, students entering an institution for the first time in a particular semester may be described as a cohort.

Developmental: Developmental is a frequently more acceptable term for basic, general studies, and remedial programs.

Performance Deficiency: A performance deficiency is defined as lack of performance--low ACT scores and/or high school grades, even though a student may have taken a number of high school courses in the discipline. Thus there is a low probability of success in college level courses based on the student's previous academic performance.

Pre-collegiate Course: A pre-collegiate course is a remedial course designed to develop students' basic skills to a level from which they can enter a regular beginning level college course. Tuition is paid for the course but no college credit is earned. The course is graded Satisfactory (S) and Unsatisfactory (U). If a grade of U is earned, the course must be repeated and must be satisfactorily completed before the student may take a college level course in the discipline.

Remedial: Remedial is the traditional term for special courses and programs initiated to improve the success of low-achieving students. These programs are designed to develop students' basic skills to a level from which they can enter regular college curriculum programs.

Technical Deficiency: A technical deficiency is a curricular deficiency--meaning the required number of credits in the discipline were not earned in high school.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

Higher education has been faced with the question of the underprepared student since the founding of Harvard. The preparatory units associated with institutions of higher education are examples of attempts to improve the academic qualifications of students desiring admission to college. Such programs have been the mainstay of higher education's response to its underprepared student clientele (Keimig, 1983), even though these programs have not been wholeheartedly advocated (Grant and Hoeber, 1978; Roueche and Snow, 1977; Cross, 1976).

With the recent expansion of such programs, knowing which ones have been relatively more effective has been complicated by research practices since much of the research has been piecemeal and has often taken place in the context of laboratory experiments. While the laboratory experiment has the advantage of relative control, it usually isolates the research situation from its context (Kerlinger, 1973). This has been a primary weakness of descriptions in the literature.

## Programs Described in the Literature

A comprehensive study by Roueche and Kirk (1973) attempted to go beyond previous measurements of program success by looking at: 1) The academic performance of high-risk students as measured by mean grade point average (GPA) at selected intervals in the student's collegiate career; 2) Persistence as measured by completion of semesters subsequent to the initial enrollment period; and 3) Students' attitudes toward or degree of satisfaction with counseling, instruction, and the total developmental program. In addition, their study measured the degree of satisfaction with remedial education programs among students currently enrolled in developmental studies programs. They also studied students who had completed the program and gone into regular college-credit programs. A third group utilized in their study was a group of high-risk students not enrolled in a remedial program. Student attitude was determined by gathering data through an attitude-assessment instrument administered to representative students. In summary, the findings were:

1. Students in a remedial program earned significantly higher grades than high-risk students in non-remedial programs.

2. Students in a remedial program persisted in college to a greater extent than high-risk students in nonremedial programs.

3. At each of the five colleges in the study, students in remedial programs expressed greater satisfaction with the instructor/instructional elements of the program than they did with the counseling component.

4. Based on findings for the 1969-70 and 1970-1971 academic years, 50-54% of the high-risk students in remedial programs completed a third semester of college and 35% of the 1969-1970 group completed 2 years of college.

An investigation of the individual characteristics of programs to remediate students' academic deficiencies will clarify the types of approaches institutions have developed. These are rarely found as separate, individually focused programs but most often institutions will select two or three components for development and these have been characterized in the literature according to their most distinguishable characteristic. Other programs are more comprehensive in nature and these have been grouped as models with their various characteristics to be used as a measure against the program described.

Smith (1986) stated that higher education is responsible for proving that those who complete collegiate programs know something and that there is a need to continue to serve students after enrollment. This is defined as access after enrollment and results both in retention and in the enhancement of student learning. McMillan (1988) reported this approach to service as a part of the value-

added concept of education. Value-added education is defined as the impact of the college experience in a student's life from the point of entrance to college through exit.

There is support (McMillan, 1988) for value-added education through the assessment of entering levels of competence and advisement of students to take courses that are of an appropriate degree of difficulty. Following assessment, then, as skill deficiencies are identified, remedial courses can be required.

One of the recent studies linking achievement and student retention (Van Allen, 1988) stated that there must be the component of an effective network to enhance interaction between students and faculty. Others (Carbone, 1987, Landward and Hepworth, 1984) asserted the importance of academic support services in ensuring the effectiveness of developmental programs. Carbone (1987) described the Learning Assistance Support System developed in the community college system of Washington and Luzerne County Community College's Institute for Developmental Educational Activities. A corollary to this study of community college efforts is the academic enrichment program reported by Landward and Hepworth (1984) which was designed for a large state university. They reported an experiment conducted to test the effectiveness of an academic enrichment program and stated that students in the enrichment program significantly

outperformed control group students within the program's scope. They proposed further study and discussed the need for continuing support of efforts for high risk students.

There is support for a student-centered emphasis. This is reported as "responding to human needs" and provides help to those looking for ways to move their institutional philosophies "from access for all to education for each" (Gardiner and Nazari-Robati, 1983).

Intervention techniques are supported in the literature as impacting student success. Astin (1976) mentioned possible intervention techniques such as tutoring, programmed instruction, courses for developing study skills and self-paced learning.

Noel, Levitz, and Saluri (1985) summarized research on thirteen successful programs. That study focused on retention efforts but included intervention and academic support services as important elements in institutional efforts. A key element of the campuswide programs of Notre Dame, Harvard, and Jefferson Community College, for example, was the "front-loading" in the freshman year. "Front-loading" is defined as promotion of adjustment by focusing early in the first semester of enrollment on programs of personal, social, and academic support (Noel, Levitz, and Saluri, 1985).

An article by Astin, Korn, and Green (1987) reported that surveys of college students conducted by the



Cooperative Institutional Research Program (CIRP) indicated that there was something colleges could do to make learning opportunities more readily available and that was to provide more and better assistance in non-classroom (but not necessarily non-academic) services.

Tinto (1989) stated that one of the difficulties with retention efforts was the misconception that their primary purpose is to keep students in colleges to keep their tuition coming to the institutions. He stated that the focus of retention efforts is one way to insure that all students have a chance to learn as much as possible while in college regardless of whether they stay or not. Retention efforts are not, he insisted, "aimed at enabling students who do not belong in college to stay there" (B2). Effective retention programs must concern themselves with remediation.

Characteristics of programs of remediation address the need for academic support, developmental courses, socialization, and intervention techniques. Academic advising in conjunction with a sustained academic orientation program through the freshman year was reported by Patrick, et al. (1988). This study measured success of the program by the 13.27 percent increase in the retention rate of high-risk students.

Programs also used grade point average and the correlation of grade point average with the hours spent using support services and the number of tutor contacts to

evaluate program success. Abrams and Jernegan (1984) reported a study of over two hundred high-risk students who attended small classes, visited tutors, and participated in a reading and study skills program. College grade point averages correlated positively with number of hours spent using the support services and the number of tutor contacts.

Patrick, et al. (1988) reported on research findings that academically underprepared students have inadequate study skills. They were also found to have deficiencies in basic academic skills (English, mathematics, reading) and were often vague or unsure of long-term career goals, and had often chosen majors that were inappropriate for their interests and abilities.

Beck (1980) also supported the need for study skills instruction. However, she reported a project which used human potential seminars on study skills and library use as alternatives to traditional freshman orientation courses. These were reported as an effective means of improving the self-concept, and thus the retention, of high-risk students.

The improvement of self-concept as an element of programs of remediation was also found in a report by Higbee and GoldbergBelle (1987). This report proposed the application of student development theory as a means of shedding the negative connotations of remedial education. The article asserted that research in student development provides educators with a sound theoretical foundation for

meeting the needs of high-risk students. It concluded that knowledge and application of developmental theory would help educators to define their mission and philosophy, then justify and perfect programs which could be viewed in the near future as models for teaching and advising all students.

Other programs reported in the literature attempt to incorporate many elements into a single comprehensive approach to remediation. Bray (1987) examined the developing relationship between assessment and instruction and provided a model comprehensive assessment and placement program. The report describes student flow from assessment through instruction.

In another study of a comprehensive program, Schmedinghoff (1979) described a program for high-risk students. Identification, prescription, follow-up and evaluation are discussed. While the results of the program were not dramatic, this was attributed to the need for intensification of institutional efforts.

A Title III project at Florence-Darlington Technical College in Florence, Carolina, developed a model plan for high-risk students. The model (Cellucci and Price, 1986) focused on: 1) admissions criteria; 2) academic standards; 3) advising; 4) freshman orientation; 5) counseling; 6) the individually guided studies program (IMPACT-standing for Individualizing, Mentoring, Prescribing, Assessing,

Counseling, and Tutoring); 7) student assistance in curricula; 8) peer tutoring; and 9) auxiliary services.

Billson and Terry (1987) advocated the improvement of skills before allowing the student to enroll in credit and grade-bearing courses. They stressed the likelihood of this improving student chances of success. Five central problems they reported students face were:

1. The difficulty of coping with the transition to adulthood for the traditional age students.
2. The lack of study skills and discipline.
3. The inadequacy of family supports.
4. The underdevelopment of problem-solving skills.
5. The difficulty relating academic work to career plans (or lack of career goals).

Eight phases of the career path of college students are provided:

1. Outreach (to high schools). This must, according to the authors, clearly identify the institution's mission and strategies.
2. Recruitment/Selection.
3. Assessment.
4. Preparation.
5. Orientation.
6. Integration (faculty/student, student/student interaction).
7. Maintenance.

## 8. Separation.

The sixth phase, integration, stressed the need for a strong support group system and peer counseling program attached to various points of contact on campus. Faculty mentoring was also reported as an important factor. The element of faculty advisement increasing students' levels of success was reported both by Billson and Terry (1987) as well as elsewhere in the literature (Beal and Noel 1980).

There is no one best way to evaluate, there are appropriate ways (Clowes, 1981). Contemporary evaluation studies focus on process evaluation, which analyzes the process occurring within a particular setting. The Stufflebeam context, input, process, and product model (CIPP) is an example of this type of evaluation. More and more, the literature reports that emerging assumptions are for alternative evaluation models which allow the context and activities of the program being evaluated to influence the characteristics and effects of these programs.

Evaluation, then, may take various forms while remaining consistently focused on examination for the purpose of program improvement. Guidelines, while these, too, may not be universally followed, are a first step in validating evaluation studies for they provide a framework for logical, step-wise analysis and they recognize the inherent pitfalls to objective evaluation (Joint Committee on Standards for Educational Evaluation, 1981).

Guidelines developed by the Joint Committee on Standards for Educational Evaluation (1981) include the need to be clear in describing the evaluation plan to various audiences and demonstrate that the plan is realistic and technically sound. The committee emphasized the necessity of ensuring that the evaluation remain consistently responsive to the key audiences, as well. The plurality of audiences is an important consideration and complicates any program evaluation. There are multiple truths to be determined through evaluation and a "thick description" provides the greatest opportunity for appropriate evaluation.

One problem of evaluation of the effectiveness of programs to remediate student deficiencies is the establishment of appropriate cut-off scores for placement purposes. Hector (1984) reported a program to determine the effectiveness of placement test scores in predicting final course grades. Students in selected college-level courses were tested. At the end of the quarter, course grades were collected and correlations between test scores and course grades were calculated. Cut-off scores were determined. Concerns about the distribution of headcount in college-level and developmental (or remedial) courses were also considered in setting cut-off scores. In order to increase student and faculty acceptance of the use of test scores for placement purposes, according to Hector, a revised screening

procedure was implemented. The screening procedure utilized a three-level system of cut-off scores. Students below the STOP level were advised that they had little chance of success in courses related to skills measured by the test. The second level, the CAUTION level, indicated students should look at their high school performance and other factors before deciding on course selection. Students above the third level, the GO level, seemed to have the skills needed to succeed. The revised screening procedure significantly increased developmental enrollments, and an analysis of the performance of students at various levels validated the cut-off scores.

Kulik, et al. (1983) synthesized findings from sixty studies of college programs for high-risk and disadvantaged students. This research showed that special college programs for high-risk students have had basically positive effects on students. According to this study, high-risk students who enrolled in such programs stayed in college somewhat longer than control students did, and they received somewhat better grades in regular college work.

As Astin (1984) and McMillan (1988) reported, there are many potential benefits of programs attempting to provide for individual growth and development. According to McMillan, this is best referred to as value-added education. He proposed the assessment of entering levels of competence so "students can be advised to take courses that are at an

appropriate level of difficulty, and as skill deficiencies are identified, remedial courses can be required" (564). Also, this approach is designed to fit student characteristics. Not only may value-added education be made to fit individual student characteristics, but also, according to McMillan, it can be designed to fit the "unique mission of each institution" (564).

Smith (1986) also referred to the need to tailor programs for student success. He stated the important question was: Will this activity measurably enhance student learning? This is often confused with whether or not the activity will increase student persistence. Smith asserted "yes" to the former would likely produce "yes" to the latter.

#### Summary

Of the programs reported in the literature, some common characteristics were found. Tinto's model of institutional departure provided a basis for assumptions about institutional experiences which affect students' persistence in college. These assumptions included the relationship between the formal and informal aspects of both the academic and the social systems (Tinto, 1987). In addition, several of Alexander Astin's works (1972, 1976, 1984, 1985, 1987), helped establish a conceptual framework.

Some common components found in the studies reported in



this review of literature were: 1) there must be institutional commitment for a program (developmental or otherwise) to have the greatest chance to survive to institutionalization. This support must be evident from the leadership of the institution. The president, as the chief administrator of the college, must demonstrate a high level of commitment to the faculty, staff, and students that the college will accept the challenge of providing appropriate educational opportunities to high-risk students; 2) instructors who teach in remedial programs should volunteer for such duties. Instructor expectation of students is dependent upon faculty viewing their job assignments, and their students, in a positive light. Teachers in remedial programs must be sensitive, but able to maintain objectivity in dealing with the myriad problems of their students; 3) most successful programs are separately organized as a department or division with their own staff and administrative leader. Most authors advocate a holistic approach to the students' attitudes, academic skills, and personal and career needs. Separateness, however, is not an ideal situation and the question of organization is one of the points of disagreement among researchers; 4) developmental/remedial programs must exercise great care to assure the relevance of their curricular offerings. The need for more acknowledgement of various learning styles and curricular adaptation to accommodate student learning

differences is critical and nothing specific was reported of studies of learning styles in remedial programs. There must be a basic skills curriculum linked to a program of general education. There must be a focus on the learner and there must also be flexibility in individual learner objectives. Also recommended is the inclusion of a course to address student attitudes, self-confidence, and integration into the campus environment. Such a course might be called orientation, human relations, or study skills, depending upon the institution.

The grading and credit used for remedial courses are different according to context. Some recommend credit for graduation or program certification (Roueché and Kirk, 1973). Also recommended is that grading be non-punitive. This implies the elimination of the failure grade. All programs do not subscribe to this elimination. However, non-punitive grading would require mastery of course content at a certain level before going to the first level college course.

A strong case is presented in all studies for individualized instruction as the most appropriate for remedial programs. To assist in the individualization, some programs utilized paraprofessionals or peer tutors. These were reported as positive additions to remedial programs.

An area identified as one essential to the remedial program but perceived as a weaker, less utilized area, is

that of counseling. Counselors are perceived to have an important role in developing a positive student self-concept and in working with student attitude development and modification. However, in many programs, counseling is ancillary to remedial efforts or is perceived by students as not effective.

The transition to traditional college courses is described as difficult and student grade point averages generally decrease in the regular college curricula after the student has completed remedial work. Suggestions for program improvement included inservice for faculty teaching first-level college courses to make them aware of the needs and characteristics of students formerly in the remedial program and also the continuation of open labs and tutoring might help students move more successfully into the broader college environment.

Remedial programs can and do differ greatly. They may be very different and still be successful. Success is measured in the literature by collecting data on student performance (defined as grade point average), persistence in college, and student attitudes. The program described in this study used these success measures.

## CHAPTER III

### METHODOLOGY

#### Introduction

The rationale for selecting a descriptive method was consistent with the findings in the literature (Yin, 1989). In describing the program, information was obtained from records of the institution involved in the study, from surveys of students identified as at-risk, and from interviews with at-risk students and faculty who taught them.

#### Goals of the Remediation Program

Goals of the program were developed by an in-house committee, called the Pre-Collegiate Course Committee, and were stated as assumptions regarding remediation in college:

1. A significant improvement in retention of at-risk students can occur.
2. Retention of at-risk students is the result of the emphasis by the institution on individual treatment, evaluation, advisement, placement and early intervention.
3. A program of evaluation, advisement and placement in pre-collegiate coursework will result in a higher level

of student success, as evidenced by grade reports, and will result in a better retention rate of the at-risk student.

### Statement of the Problem

The problem addressed through this research was:  
To what extent did students participating in a remedial program experience success as determined by 1) their earned grade point average, 2) their persistence in college, and 3) their graduation rate.

### Research Questions and Solutions

#### Question

1. To what extent did students participating in the program succeed in remediating certain academic deficiencies, as measured by grade point average (satisfactory academic progress)?

Students were regarded as academically successful if they achieved the standards specified by the college.

#### Question

2. To what extent did students participating in the program succeed in remediating certain academic deficiencies, as measured by consecutive semesters of enrollment in college?

The number of semesters the at-risk students remained in college helped determine the extent of success of students in the remedial program. Since 70% of the group was predicted to fail by the end of one semester, continued

enrollment of any number above 30% beyond the first semester was regarded as success.

### Question

3. To what extent did students participating in the program graduate after two years?

The data used to answer research question number three was the number of students who continued to graduation. Any graduates from this group would indicate success, as 70% were predicted to fail within one semester.

### Selection of Participants

The academic records of all 986 students who applied for fall 1988 admission to the college in this study were reviewed by the college admissions office. That office decided students were one of two types: 1) Ready to proceed to an adviser for scheduling of classes, or 2) Deficient in one or more of the four core areas and referred to the testing center for further evaluation. The four core areas were mathematics, English, history, and science. ACT subscores of 10 or below in math, 12 or below in English, 9 or below in history, and 14 or below in science were defined as deficient.

The 411 students who were identified as deficient due to the low scores were considered to be potentially "at-risk" of academic failure in their first semester of enrollment. These students were referred for testing and

were administered the ASSET test, which was developed by American College Testing. The college wanted to allow the students an additional chance to prove their ability in addition to the ACT Assessment. (The students who achieved a passing score of 47 in English or 29 in Reading were sent to advisers for scheduling in regular college courses). The English score was used for English while the reading score was used for science and history because the purpose was to test ability to gain the knowledge through reading ability rather than to test content knowledge. There was no additional test in mathematics. The ACT mathematics subtest was used for math placement.

Of the students who were referred for the exam, eighty-six (21%) earned passing scores. The remaining 325 students were identified as "at-risk" of academic failure and were regarded as having a 70% or greater chance of failure within the first semester of their enrollment in college according to historical data of the college reported on the student profile sheets supplied by American College Testing.

All "at-risk" students in the initial group were mailed a questionnaire regarding their understanding of the program, their attitude toward it and their use of elements within the program. Some of the students were selected for an interview, as well.

Faculty participants were interviewed regarding their

observations of the students and their perceptions of the remediation achieved by some students. Eight faculty were interviewed.

### Selection of Instruments

Data were collected from the Registrar's Office and were reported as raw numbers and percentages. The data were grade point averages, continuing enrollment and graduation rates of "at-risk" students.

A questionnaire was developed in order to describe the attitudes of students in the program toward the remedial efforts. The questionnaire was validated with a group of students continuing in enrollment in the college and not in the remedial program. The questionnaire and cover letter are found in Appendix B. The questions used in student and faculty interviews are in Appendixes C and D. No other instruments were used.

### Statistical Procedures

Descriptive statistics were used to trace the progress of students through the remedial program and throughout their enrollment in the college. The entire population, 325 students identified as at-risk, was used in this study.

### Research Procedures

Data were collected regarding grade point averages,



continuing enrollment and graduation rates and were reported as raw numbers and percentages.

The 325 at-risk students were mailed the survey. The responses of students making satisfactory academic progress by earning a 2.0 grade point average or above and persisting in college beyond the first semester were viewed together. The responses of those who did not experience success in the program or within the institution were tabulated. The responses of both subgroups were looked at together.

The survey was followed by interviews with 13 randomly selected students in the at-risk group. The data collection of this study took place during the spring semester of 1990. Students were not identified by name.

Some faculty who taught one or more pre-collegiate courses during the fall, 1989, semester were also interviewed. The inclusion of these faculty added the dimension of professional judgment to the description of the program and provided information regarding student attitudes and observed classroom climate. Faculty were not identified by name. Eight faculty were randomly selected for interviews from the thirteen who taught courses in the remedial program and were interviewed during the spring and summer semesters of 1990.

The cover letter, survey instrument, and the script used for student and faculty interviews are all provided in the Appendixes B, C, and D of this document.

## CHAPTER IV

### RESULTS OF THE STUDY

#### Introduction

The stated goal of the program involved in this study was to improve the scholarly performance and retention of at-risk students by emphasizing individual treatment and placement in remedial or pre-collegiate courses. Student demographics are provided to show the group characteristics and characteristics of subgroups within the population. This information is provided to demonstrate the different responses of these student subgroups to the remedial work.

The range of ages is shown in Table 1. The mean age is 19 years. The ages of the group clustered around 19-21 years. The age range for the group of at-risk students in the study is from 18 to 45 years of age. Of the 325 at-risk students in the study, 314 were 18-21 years of age.

TABLE 1

#### AGE OF AT-RISK STUDENTS

---

Number in Group =	325
Range	18-45
Mean	19.397
Standard Deviation	3.452

---

The tables depicting within-group differences arranged by gender show additional differences in academic background of the at-risk students in the study. These characteristics are grouped by age and by gender.

TABLE 2

## AT-RISK FEMALE STUDENTS BY AGE

	<u>18-21</u>	<u>22-31</u>	<u>32-41</u>	<u>42 and above</u>
N =	130	11	1	4
Admission Basis				
Maturity	1			
GED	2			1
Col. Trans.	4			
H.S.Grad.	123	11	1	3
ACT Average	10	10	11	10

Table 3 depicts the ages, admission basis (prior academic preparation) and ACT average of the male at-risk students. Age, composite ACT and gender are characteristics used to describe the "at-risk" students. The semesters enrolled, the cumulative hours earned and the cumulative grade point averages of female and male students are provided separately in Tables 4 and 5.

TABLE 3  
AT-RISK MALE STUDENTS BY AGE

	<u>18-21</u>	<u>22-31</u>
N =	184	12
Admission Basis		
Maturity/GED	1	1
Coll. Transfer	6	
H.S. Graduate	177	11
ACT Average	11	8

The average semesters enrolled, the cumulative hours earned and the cumulative college grade point average are presented in Tables 4 and 5. Table 4 provides information regarding the female at-risk students and Table 5 provides the same information for male at-risk students.

TABLE 4  
SEMESTERS ENROLLED, HOURS EARNED AND CUMULATIVE GPA OF  
FEMALE AT-RISK STUDENTS

	<u>18-21</u>	<u>22-31</u>	<u>32-41</u>	<u>42 and above</u>
N =	130	11	1	4
Avg. Sems. Enr.	2	3	5	4
Cum. Hrs. Earned	24	36	38	60
Cum. GPA	1.84	2.85	3.34	2.93

TABLE 5  
SEMESTERS ENROLLED, HOURS EARNED AND CUMULATIVE GPA OF  
MALE AT-RISK STUDENTS

	<u>18-21</u>	<u>22-31</u>
N =	184	12
Avg. Sems. Enr.	2	3
Cum. Hrs. Earned	26	38
Cum. Col. GPA	1.78	2.25

The ACT composite score was obtained and is shown in Table 6. The ACT composite shows a wide range of academic preparation of the at-risk students.

TABLE 6  
COMPOSITE ACT SCORES OF AT-RISK STUDENTS

Number in Group =	315 *
Range	3-20
Mean	10.702
Standard Deviation	3.005

\* The difference in the group N is that some students were admitted without ACT scores.

The wide range of ACT scores indicates widely differing ability levels within the group. However, the mean composite ACT of 10.7 for the group is well below the average composite score (14.6) of freshmen entering the college and not identified as at-risk.

The purpose of this chapter is to present the results of this study. The research questions are presented below.

### Research Questions

1. To what extent did students participating in the program succeed in remediating certain academic deficiencies, as measured by grade point average (satisfactory academic progress)?
2. To what extent did students participating in the program succeed in remediating certain academic deficiencies, as measured by consecutive semesters of enrollment in college?
3. To what extent did students participating in the program graduate after two years?

#### Research Question #1

Research question number 1 asked, to what extent did the students participating in the remedial program succeed in remediating certain academic deficiencies, as measured by grade point average (satisfactory academic progress)?

The "at-risk students" were identified by the college in this study as being deficient in either high school credits, course grades, or test scores. They were tested and placed in remedial courses when necessary. These students were the first students participating in a remedial program in the college. Information regarding the academic progress of students was obtained from the institution and

characteristics of the at-risk students were described.

Research question number 1 regarding extent of student success, may be answered by comparing the criteria for satisfactory academic progress as defined by the college with the grade point average earned by the at-risk students. Table 7 shows the mean cumulative grade point average for the at-risk students in the study was 2.092.

TABLE 7

MEAN CUMULATIVE GRADE POINT AVERAGE FOR AT-RISK STUDENTS

Number in Group =	325
Grade Point Average Over Four Semesters=	2.092

It should be recalled that, prior to undertaking remedial work, the at-risk students were predicted to be unsuccessful in college courses. Another way of looking at grade point average is to consider gains from semester to semester. Table 8 illustrates the changes in grade point average by semester.

TABLE 8

## FOUR SEMESTER G.P.A. PATTERN OF AT-RISK STUDENTS

---

	Semester	Grade Point Average
N = 311	1	2.305
N = 236	2	2.044
N = 150	3	2.180
N = 119	4	2.388
	Gain in GPA Sems. 1-4	0.083

---

Examination of the data shows that the longer the at-risk population remained in school, the better able they were to achieve on a level adequate for remaining in college. By semester four, they recovered the place held in semester one. (The N of the at-risk students and the percent of the group on academic probation declined. The rate of 2% on academic probation or suspension of the at-risk students is notable).

The students identified as at-risk were determined by the college to be academically deficient and placed in remedial courses, yet their earned cumulative grade point average indicated they made satisfactory academic progress. The students appear to have overcome perceived deficiencies.

### Research Question #2

Research question number 2, asked to what extent did students participating in the program succeed in remediating



certain academic deficiencies, as measured by number of semesters in college?

Of the 325 students in the at-risk population, 36.6% completed four or more semesters. The data indicated a mean of 2.685 semesters enrolled in the institution by these students. Table 9 shows the enrollment pattern of the at-risk students.

TABLE 9  
NUMBER OF SEMESTERS COMPLETED BY AT-RISK STUDENTS

	N=	325	Percent of the Group
Semester 1		311	95.7%
Semester 2		236	72.6%
Semester 3		150	46.15%
Semester 4		119	36.6%
Mean Semesters Enrolled		2.685	
Standard Deviation		1.281	

The extent to which the students continued in enrollment in college is one indicator of remediation which, when coupled with satisfactory academic progress shown in grade point average, provides a look at what happened to this first group of at-risk students to participate in remedial courses.

Research Question #3

Research question #3 asked: To what extent did students participating in the program graduate after two years? This information follows.

The extent of student success as measured by their academic outcomes after two years may be determined by looking at their graduation rates. The rate for the at-risk students was 12% after four semesters.

TABLE 10  
GRADUATION RATES FOR AT-RISK STUDENTS

Total N =	325	Percent of Group
Degree N =	39	12%

Students fated to fail turned out to achieve a degree. Persistence to graduation in four semesters provides information for viewing the degree of success of the remedial program. If the program of "assessment, advisement and placement" were the major educational change for the at-risk students, it has had an impact on the success rate of these at-risk students. This study looked at student progress for four semesters. The at-risk students who did not graduate after four semesters and who continue in

enrollment will cause changes in the graduation rate of this population as they complete degree requirements after five, six, and even seven semesters. This continuing enrollment will also cause changes in the cumulative grade point average of the at-risk population.

### A Subjective Aspect

A questionnaire was mailed to all at-risk students to learn about their attitudes toward the program and the services provided to them (Appendix D).

Although the return rate was only 20%, it allowed some observations to be drawn regarding student attitude toward the program. A summary of student responses is provided on the following pages.

Three items on the form asked students to respond by selecting responses corresponding to their feelings about being tested during enrollment, as well as their feelings about possibly being required to take non-credit (pre-collegiate) courses. The majority of the students responding (68%) indicated that they felt terrible about having to take a test for possible placement in remedial courses, and the same percentage (68%) also indicated they were unhappy about having to enroll in non-credit, remedial work.

However, when responding to statements about effort in zero-level, non-credit courses after placement, 83% indicated they did their best in the remedial courses. The

majority of the students surveyed (64%) viewed both the process of evaluation and subsequent placement as the opportunity to prove they could perform better than their high school academic records indicated.

Student responses were split regarding frequency of visits to advisers. Fifty percent reported visiting a faculty adviser no more than once or twice during their first semester of enrollment. The remaining fifty percent indicated they visited their faculty adviser on a regular basis.

Student responses to the question about the counseling program were also split. Forty-one percent reported using the counseling services of the college on a regular basis. Approximately the same response (43.6%) was obtained on the statement regarding positive student perceptions of the counseling service.

Peer tutoring was an element of the remedial program and was intended to support academic efforts to remediate. Forty percent of the students who responded went to the tutoring service. Although thirty-three percent of these students thought better grades resulted from the peer tutoring element of the program, this amounts to a response from only about six percent of the whole group of at-risk students and is a small number.

Students were also asked if they were more confident of their abilities when they re-enrolled for the second

semester. Eighty-five and one half percent said they had more confidence in their academic ability after one semester in college. Fifty-six percent of the students surveyed believed the program of evaluation, advisement, and placement helped them be more successful in college. The percent responding who would recommend the program to a friend was 56% as well.

When responding students were organized by grade point average, it was found that 72% of the students with a 2.00 grade point average or higher responded positively regarding their judgment that the program was beneficial to them. The same percentage of students also agreed they would recommend the program to a friend.

Student Interviews. In addition to the questionnaire sent to all identified at-risk students, some students from this group were randomly selected for a personal interview. The questions used during the interview are provided in Appendix C.

Using the script in Appendix C, the students responded to questions about housing, student services, and activities. Although responses to these questions proved interesting, the pertinent questions for determining satisfaction with the program being studied were questions 7, 8, 10, 11, and 12.

Summary responses to those questions indicated the following student judgments. The students did not feel

adequately informed of special services (defined as financial aid, career counseling, tutoring, personal counseling). Attitude toward tutoring was mixed--with some students feeling the service was very helpful, while others did not believe it helped them. The student tutors had no formal training and were peer tutors, approximately 18 to 20 years of age.

In order to determine whether or not student perceptions of the program could be related to their academic progress, the attitude of students interviewed was looked at in relation to their grade point average. The results agreed with survey data. The higher the grade point average, the more positive the response to the remedial program. The lower the grade point average, the more likely the students perceived the program negatively.

Faculty Interviews. The pre-collegiate courses in the remedial program were taught by regular faculty in the departments of English, mathematics, social science, and natural science. The reading and study skills courses were taught by faculty in the reading department. Faculty teaching in the fall, 1988, semester (the first semester of the program) and in the fall, 1989, semester, were interviewed to determine their perceptions of the program. Interviews followed the script contained in Appendix D. The following responses represent sample comments from the faculty interviewed.

Faculty indicated they believed the program was needed and met student needs, but at the same time they expressed regret that remedial work was necessary in college. These expressions were almost universal among faculty interviewed. However, faculty were for the most part satisfied that the general format of the program was meeting student needs and that it was working effectively within policy parameters. No difference was determined in faculty attitude toward pre-collegiate and regular college level courses.

#### Summary of Findings

The performance of students participating in a remedial program provided information regarding the remediation of certain academic deficiencies. The program of "assessment, advisement and placement" was the result of a response to impetus from an external source and a response to an expressed need within the institution. The institution screened students upon admission and provided placement testing to verify preliminary screening of high school transcripts and ACT scores, or to refute those measures and give incoming students with high school credits but marginal scores the opportunity to "test out" of pre-collegiate courses.

Program goals were depicted along with the student outcomes of semesters enrolled, retention patterns of the

at-risk students, and the earned grade point average of the at-risk students. The at-risk students were described by age, semesters enrolled, hours completed, semester by semester grade point average, cumulative grade point average, and gender. Students in the program were surveyed and selected students in the program were interviewed to obtain their perceptions of the program in greater depth. Faculty were interviewed and their responses were discussed. The goals of the program of "assessment, advisement and placement" were presented. Such elements provide insight into the program, and although no finite answers are possible, given dynamic occurrence in its specific context, some conclusions can be drawn for the purpose of making decisions for program improvement. The recommendations and conclusions discussed in Chapter V will present interpretation of the data.



## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This study described the rate of success of students in a remedial program. The method is consistent with the findings in the literature and included examination of records of the college in the study, including: 1) grade point average; 2) student persistence in college; and 3) graduation rates. The goals of the program were viewed alongside the academic progress of the at-risk students in the study. Student surveys and interviews added information regarding student attitudes. Faculty who were teaching in the remedial program were interviewed to add their observations of the program.

The information derived from this study, while generalizable only to its specific context, nevertheless provides insight into student performance in a college program of remediation by describing the observed pattern of performance of the first group of at-risk student participants.

#### Discussion of Program Goals

The program studied can best be discussed in

conjunction with the data generated by the study and in relation to program goals. The three program goals and corresponding conclusions follow:

Goal:

1. To improve the retention of at-risk students.

Students identified as at-risk were placed in remedial courses. On the average, these students were retained in school for 2.685 semesters even though it was predicted they would not complete a single semester successfully. The study was only able to describe the retention pattern of these students. The program must be studied with subsequent groups beyond this first cohort in order to show a trend. However, the at-risk students who stayed beyond the first semester were, in fact, retained in college longer than predicted.

Goal:

2. To achieve retention of at-risk students by placing emphasis on individual treatment, evaluation of prior academic records, proper advisement, placement in remedial or pre-collegiate courses when necessary, and early intervention when problems arise.

Individual treatment is an area needing more thorough examination by the institution, but the examination and placement procedures were perceived positively by both students and faculty interviewed. Students perceived faculty adviser contact positively and reported more frequent contact with faculty advisers than with counseling

staff for purposes of personal, as well as academic, counseling.

Recommendation is made for more emphasis on counseling students prior to their withdrawal from the institution. This is based on student perceptions that, in some cases, no one asked why they were leaving the college. It is possible that some of the problems causing them to leave the institution could have been resolved without their leaving school.

Goal:

3. To achieve a higher level of success of the at-risk students, as evidenced by grade reports.

The success level of the at-risk students in the study is apparently different from that of the general student body when their grade point averages are viewed. The grade point averages and rate of satisfactory progress were examined, and it is determined that the at-risk students, while having widely varying ACT composite scores and somewhat lower cumulative college grade point averages than institution records report for the general student population, nevertheless achieved success to a greater degree than was predicted by their previous academic achievement. The students in the at-risk group in the study were predicted by the institution to have less than a 70% chance of success in core college courses. Therefore, it must be concluded that, if the remedial program is the only difference in the treatment of the at-risk students, then

without the program, they would not have achieved at the same level or have persisted in college. Or, it must also be considered that perhaps the individual treatment, rather than the program itself, made the difference for these students. It is also important to note that the number of at-risk students on academic probation and suspension declined over time. This provides information for concluding that, while the at-risk students achieved at a low level, a high number of them achieved at a rate defined as satisfactory for remaining in college. In spite of the anticipation that survival in college was not probable for the at-risk students, many of them did continue in college and made satisfactory progress.

### Conclusion

This study focused on the performance of students in a program of remediation in an open-access two-year public institution of higher education. The study describes the students who were inadequately prepared for college and depicts their grade point averages, the number of semesters they remained enrolled in the college and their academic outcomes after two years. However, the level of achievement of students in the study was not found to be above that of the regular, "not-at-risk" students, as was found in studies by Roueche and Kirk. The most noticeable finding of this study, in contrast to previous studies, is that students in the remedial program, while achieving minimally, remained

off academic probation at a good rate. The conclusion is drawn that the at-risk students in the study used whatever abilities they were able to develop in order to achieve the level of satisfactory academic progress. For many students in this group, achieving at a 2.00 level in college was the highest grade point average they had ever earned. The students having the least success were the 18-21 year old male students who were undecided on a major. This substantiates the studies by Alexander Astin which establish the importance of student "ties" to the college.

#### Recommendations

Substantiated by the findings of this study, the following areas are recommended for future research:

1. The program needs to be continually monitored and evaluated by the institution.
2. The at-risk students knew that they were in a special population and that they were not predicted to succeed, based on their prior academic records. What effect might this knowledge have had upon their performance?
3. As was shown in the demographic picture of the population, within the at-risk population, on the average female students were more successful than male students, and there were differences in achievement among the female students by age category. What part does gender and/or age play in the achievement of success in remedial programs?

4. An indirect finding of the study indicated that the suspension record of the at-risk students was in contrast to the grade point average of the group. The longer the students stayed in school, the better able they were to stay off academic probation. What compensations were made by these at-risk students in order to overcome the threat of academic failure?

5. Student performance patterns provide information for effective future strategic planning.

6. The contrast between the students' attitude toward the program and the extent of their success is an area needing further study. The students who perceived the program more positively did succeed to a greater extent than those who perceived the program more negatively. All at-risk students, however, indicated they felt terrible when told they had to participate in remedial work. It would be interesting to investigate the population itself to determine what made the difference--student attitudes, the college's treatment, a Hawthorne effect or some unknown factor.

## SELECTED BIBLIOGRAPHY

- Abrams, Helene G. and Louise P. Jernigan. "Academic Support Services and the Success of High-Risk College Students." American Educational Research Journal, 21 (Summer 1984), 261-274.
- Abraham, Ansley A., Jr. A Report on College-Level Remedial/Developmental Programs in SREB States. Atlanta, Georgia: Southern Regional Education Board, 1987.
- American Association of Community and Junior Colleges. Building Communities: A Vision for a New Century. AACJC National Teleconference. Teleconference Workbook. November 22, 1988. Washington, D.C.: National Center for Higher Education, 1988.
- American College Testing Program. College Assessment Planning. ACT: College Level Assessment and Survey Services, 1990.
- Anderson, William W. Evaluation of College Reading and Study Skills Programs: Problems and Approaches. Paper presented at the Annual Meeting of the College Reading Association. (17th, Silver Spring, Maryland, November 1-3, 1973).
- Astin, Alexander W. College Dropouts: A National Profile. American Council on Education. ACE Research Reports, February, 1972.
- \_\_\_\_\_. "Excellence and Equity: Achievable Goals for American Education." Phi Kappa Phi Journal, 64 (Spring 1984), 24-29.
- \_\_\_\_\_. "Involvement: The Cornerstone of Excellence." Change, July-August, 1985, 35-39.
- \_\_\_\_\_. Preventing Students from Dropping Out. San Francisco: Jossey-Bass Publishers, 1976.
- Astin, Alexander, William Korn, and Kenneth Green. "Retaining and Satisfying Students." Educational Record, 68 (Winter 1987), 36-42.

- Astin, Helen S., et al. Higher Education and the Disadvantaged Student. Washington, D.C.: Human Service Press, 1972.
- Barrow, John C. "Follow-up of Dropouts From Developmental Programs: A Supplemental Program Evaluation Approach." Personnel and Guidance Journal, 59 (November 1, 1980), 186-189.
- Beal, P. and L. Noel. What Works in Student Retention. Iowa City, Iowa: The American College Testing Program, 1980.
- Bean, John P. "Assessing and Reducing Attrition." New Directions for Higher Education, 14 (March 1986), 47-61.
- \_\_\_\_\_. "Student Attrition, Intentions, and Confidence: Interaction Effects in a Path Model." Research in Higher Education, 17, Number 4 (1982), 291-320.
- Bean, John P. and George D. Kuh. "The Reciprocity Between Student-Faculty Informal Contact and Academic Performance of University Undergraduate Students." Research in Higher Education, 21, No. 4 (1984), 461-477.
- Beck, Marilyn C. "Decreasing the Risk of High Risk Students." Community and Junior College Journal, 51 (September 1980), 4-6.
- Berenson, Mark L., David M. Levine, and David Rindskopf. Applied Statistics: A First Course. Englewood Cliffs, N.J.: Prentice-Hall, 1988.
- Billson, Janet and Margaret Terry. "A Student Retention Model for Higher Education." College and University, 62 (1987), 290-305.
- Blanchfield, W. C. "College Dropout Identification: A Case Study." Journal of Experimental Education, 40, No. 2 (Winter 1971), 1-4.
- Blum, Mark E. and Stephen D. Spangehl. "Developing Educational Programs for the High-Risk Secondary School and College Student.: ERIC/CUE Urban Diversity Series, Number 80. Columbia University, New York. Institute for Urban and Minority Education (July 1982). ED 223 762.



- Bohr, Dorothy H., et al. "Project HELP: Instruction for High-Risk, Non-Traditional Students." Sacramento City College, Sacramento, California (1983). ED 259 615. RIE November 1985.
- Boylan, Hunter R. "Program Evaluation: Issues, Needs, and Realities." In New Directions for College Learning Assistance: Assessment of Learning Assistance Services. C.C. Walvekar, Editor. No. 5. San Francisco: Jossey-Bass, 1981, 3-15.
- Braxton, John M., Ellen M. Brier, and Donald Hossler. "The Influence of Student Problems on Student Withdrawal Decisions: An Autopsy on 'Autopsy' Studies." Research in Higher Education, 28, No. 3 (1988), 241-253.
- Bray, Dorothy. "Assessment and Placement of Developmental and High-Risk Students." New Directions for Community Colleges, 15 (Spring 1987), 33-48.
- Burke, Joseph David. An Examination of the Preceptor Concept with New Students In a Junior College (Orientation Programs, Freshmen). The University of Alabama (0004), 1985, No. AAC8600749.
- Burroughs, G.E.R. The Design and Analysis of Longitudinal Studies: Their Role in the Measurement of Change. London: Academic Press, 1979.
- Carbone, Gilbert J. "Academic Support Services for Developmental and High-Risk Students in Community Colleges." New Directions for Community Colleges, 15 (Spring 1987), 23-31.
- Carter, Larry G. Developmental Studies Project: Post-Secondary Disadvantaged. Final Report. VEA Grant No. 76-2-384. University of the State of New York State Education Department, Division of Educational Finance. 1975-1976.
- Cates, Ward M. A Practical Guide to Educational Research. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1985.
- Cellucci, Philomena, and Teresa P. Price. "IMPACT: A Map for Student Retention." Report presented at the Annual National Convention of the American Association of Community and Junior Colleges (67th, Dallas, Texas, April 22-25, 1987).

- Churchill, William D. and Stanley I. Iwai. "College Attrition, Student Use of Campus Facilities, and a Consideration of Self-Reported Personal Problems." Research in Higher Education, 14, No. 4, (1981), 353-365.
- Clark, John H. The Effectiveness of Remediation Among High Risk College Freshmen of Different Ages. ED 227 727. RIE August 1983.
- Clowes, Darrel A. "Evaluation Methodologies for Learning Assistance Programs." In New Directions for College Learning Assistance Services: Assessment of Learning Assistance Services. Carol C. Walvekar, editor. No. 5. San Francisco: Jossey-Bass, 1981.
- Commission on the Future of Community Colleges. Building Communities: A Vision for a New Century. Washington, D.C.: National Center for Education, 1988.
- Cope, Robert G., and William Hanna. Revolving College Doors: The Causes of Dropping Out, Stopping Out, and Transferring. New York: John Wiley & Sons, 1975.
- Cronbach, Lee J. Designing Evaluations of Educational and Social Programs. San Francisco: Jossey-Bass, 1982.
- Cross, K. Patricia. Accent on Learning. San Francisco: Jossey-Bass, 1976.
- Dick, Walter. Evaluating Programmatic Impact In Education. Washington, D.C.: Teacher Corps Research Adaptation Framework, 1976.
- Duck, Gary A. Planned Variations Study. Volume V: Student Performance Measures for Evaluating Secondary and Postsecondary Intervention Programs. Santa Monica, California: System Development Corporation. Studies and Evaluation Department. January 31, 1978.
- Dutka, Solomon, Lester R. Franker, and Irving Roshwalb. How to Conduct Surveys. New York: Audits and Surveys, Inc., 1982.
- Education Commission of the States. "Transforming the State Role in Undergraduate Education." Chronicle of Higher Education, July 30, 1986, 13.
- Entwisle, Doris R. "Evaluations of Study-Skills Courses: A Review." Journal of Educational Research, 53, No. 7, (March 1960), 243-251.

- Forristall-Brown, Dorothy, and William F. Brown. Reducing Attrition Through Student-to-Student Study Skills Instruction and Guidance. ERIC/CAPS Document  
Reproduction Service No. 243 198, RIE April, 1985.
- Friedlander, Jack. "Are College Support Programs and Services Reaching High-Risk Students?" Journal of College Student Personnel, 21 (January 1980), 23-28.
- Gardiner, John J. and Ali Nazari-Robati. "Student Attrition Research: Implications for Retention Strategies." NASPA Journal, 20 (1983), 25-32.
- Goldstein, Harvey. The Design and Analysis of Longitudinal Studies: Their Role in the Measurement of Change.  
London: Academic Press, 1979.
- Gordon, Judy Anderson. A Comparison of the Academic Achievement and Persistence of High-Risk Community College Students Who Completed a Remedial Reading Course and Comparable Students Who Elected Not To Enroll in a Remedial Reading Course. Mississippi State University (0132), 1983, No. AAC8410667.
- Grant, Mary Kathryn and Daniel R. Hoeber. Basic Skills Programs: Are They Working? AAHE-ERIC Higher Education Research Report No. 1. 1978. ED 150 918.
- Gronlund, Norman E., and Robert L. Linn. Measurement and Evaluation in Teaching, 6th Edition. New York: Macmillan, 1990.
- Hector, Judith, H. "Establishing Cut-Off Scores for Placement in Community College Developmental Courses." Ed 246 934/RIE December, 1984.
- Herzen, M. and Barlow, D.H. Single Case Experimental Designs: Strategies for Studying Behavior Change in the Individual. New York: Pergamon Press, 1976.
- Higbee, Jeanne L., and Elissa GoldbergBelle. "Meeting the Needs of High Risk Students through Application of Theory and Research." Paper presented at the Joint Annual Meeting of the American College Personnel Association and the National Association of Student Personnel Administrators (Chicago, Illinois, March 15-18, 1987).
- Hossler, Donald. Enrollment Management: An Integrated Approach. New York: College Entrance Board, 1984.

- Huck, Schuyler, Cormier, William H., and William G. Bounds. Reading Statistics and Research. New York: Harper and Row, 1974.
- Iwai, Stanley, and William D. Churchill. "College Attrition and the Financial Support Systems of Students." Research in Higher Education, 17, No. 2, (1982), 105-113.
- Jelfo, Donald T. An Evaluation of the Developmental Education Program at Cuyahoga Community College Eastern Campus. Practicum submitted to Nova University in partial fulfillment of requirements for Doctor of Education degree. August 26, 1974.
- Johnson, Jerome A., et al. One State's Efforts to Get Serious About the High Risk Student: Assessment, Faculty Advising, Career Planning, and Developmental Education in Oregon's Community Colleges. Oregon State Dept. of Education. Salem, Oregon (June 1980). ED 188 732. RIE November 1980.
- Joint Committee on Standards for Educational Evaluation. Standards for Evaluations of Educational Programs, Projects, and Materials. New York: McGraw-Hill, 1981.
- Kean, Thomas H. "Creative Policies Foster Creative Change." Opinion. Higher Education & National Affairs, December 23, 1985, 7-8.
- Keimig, Ruth T. The Change Facilitator Model For Managing And Evaluating Developmental Studies Programs Applied To The Study Of Freshmen Achievement At The Marymount College Of Virginia. Dissertation submitted to the faculty of the Graduate School of Education. September 30, 1982. George Washington University, Washington, D.C.
- \_\_\_\_\_. Raising Academic Standards: A Guide to Learning Improvement: ASHE-ERIC Higher Education Research Report No. 4. Washington, D.C.: Association for the Study of Higher Education, 1983.
- Kerlinger, Fred N. Foundations of Behavioral Research. Second Edition. New York: Holt, Rinehart and Winston, Inc., 1973.
- Kratochwill, Thomas R., ed. Single Subject Research: Strategies For Evaluating Change. New York: Academic Press, 1978.

- Kulik, Chen-Lin C., et al. "College Programs for High-risk and Disadvantaged Students: A Meta-Analysis of Findings." Review of Educational Research, 53 (Fall 1983), 397-414.
- Kurtz, Albert and Samuel T. Mayo. Statistical Methods in Education and Psychology. New York: Springer-Verlag, 1979.
- Lamar Community College. Accountability Program Plan to Assess Institutional Effectiveness for Undergraduate Education. Dr. Marvin E. Lane, President. April 17, 1989.
- Landward, Stayner, and Dean Hepworth. "Support Systems for High Risk College Students: Findings and Issues." College and University, 59 (Winter 1984), 119-128.
- Levitz, Randi and Lee Noel. Retention Management - Catalyst for Change and Growth. Noel/Levitz Centers Occasional Paper. July, 1988.
- Mager, Robert F. Measuring Instructional Intent. Belmont, California: Lear Siegler, Inc./Fearon Publ., 1973.
- McCurdy, Jack. "Sending The Message: New Admissions Standards for a New Decade." Phi Delta Kappan, April 1982, 547-550.
- McFadden, Ronald. Program Evaluation and Educational Research in Developmental Studies. "A Systems Model." March, 1979. ED 184 393.
- McMillan, James H. "Beyond Value-Added Education: Improvement Alone Is Not Enough." Journal of Higher Education, 59 (September/October 1988), 564-577.
- Merriam, Sharan. Case Study Research in Education: A Qualitative Approach. San Francisco: Jossey-Bass, 1988.
- Miller, Carson K. Success Comparison of High-Risk Students in Two-Year College Transfer Curricula. Stark Technical College, Canton, Ohio (October 1982). ED 225 624. RIE June 1983.
- Miller, Richard I. The Assessment of College Performance. San Francisco: Jossey-Bass, 1979.

- Millett, John D. "Open Admissions and Higher Education Quality." Opinion. Higher Education & National Affairs, April 6, 1987, 7.
- Newman, Frank, et al. Report on Higher Education, U.S. Dept. of Health, Education, and Welfare. Washington, D.C.: Office of Education, March, 1971.
- Newton, Eunice Shaed. The Case for Improved College Teaching: Instructing High-Risk College Students. New York: Vantage Press, 1982.
- Noel, Lee, Randi Levitz, Diana Saluri, et al. Increasing Student Retention. San Francisco: Jossey-Bass, 1985.
- Orlans, Harold. "On Higher Standards, Minority Enrollment, and Money." Point of View. Chronicle of Higher Education, July 23, 1986, 72.
- Pace, C. Robert. Measuring Outcomes of College. San Francisco: Jossey-Bass, 1979.
- Patton, Michael Quinn. Qualitative Evaluation Methods. Beverly Hills, California: Sage Publications, 1980.
- Patrick, John, et al. "Using a Comprehensive Academic Intervention Program in the Retention of High-Risk Students." NACADA Journal, 8 (Spring 1988), 29-34.
- Pascarella, Ernest T. and David W. Chapman. "Validation of a Theoretical Model of College Withdrawal: Interaction Effects in a Multi-Institutional Sample." Research in Higher Education, 19, No. 1, (1983), 25-48.
- Popham, W. James, ed. Evaluation in Education: Current Applications. Oakland, CA: McCutchan Publishing Co., 1974.
- Roueche, John E. and George A. Baker III. Access and Excellence: The Open-Door College. Washington, D.C.: Community College Press, 1987.
- Roueche, John E. and R. Wade Kirk. Catching Up: Remedial Education. San Francisco: Jossey-Bass, 1973.
- Roueche, John E. and Jerry J. Snow. Overcoming Learning Problems. San Francisco: Jossey-Bass, 1978.

- Schmedinghoff, Gerard J. "A College Program for High-Risk Students." College and University, 55 (Fall 1979), 69-78.
- Schulman, Sandra. "A Description of a Developmental Program for High Risk Students in a Community College.: Pierce College, Woodland Hills, California (October 1981). ED 208 928. RIE March 1982.
- Schulsinger, Fini, Sarnoff A. Mednick, and Joachim Knop, eds. Longitudinal Research: Methods and Uses in Behavioral Science. Boston: Martinus Nijhoff Publishing, 1981.
- Smith, Terry, B. "The Coming Revolution in College Retention Strategies." NASPA Journal, 24 (1986) 10-13.
- Sparks, June R. and Cynthia L. Davis. A Systems Analysis and Evaluation of a Junior College Developmental Studies Program. Paper presented at the Annual Meeting of the American Educational Research Association (New York, New York, April 7, 1977).
- Stufflebeam, D., et al. The CIPP Evaluation Model. Phi Delta Kappa Study Committee on Evaluation. American Educational Research Association Annual Meeting, New York, February, 1971. ERIC/ED 050 138.
- Tinto, Vincent. Leaving College: Rethinking the Causes and Cures of Student Attrition. Chicago: University of Chicago Press, 1987.
- \_\_\_\_\_. "Misconceptions Mar Campus Discussions of Student Retention." Chronicle of Higher Education, September 6, 1989, B2.
- Van Allen, Georgio H. "Retention: A Commitment to Student Achievement." Journal of College Student Development, 29 (1988), 163-165.
- Yin, P. Case Study Research. San Francisco: Sage, 1989.
- Zwerling, L. Steven. Second Best: The Crisis of the Community College. New York: McGraw-Hill, 1976.

## APPENDIX A

### CHRONOLOGY OF PROGRAM DEVELOPMENT

The evolution of the remedial evaluated in this study, is described from three vantage points: (1) Program Planning; (2) Program Implementation; and (3) Program Evaluation by the Institution. The planning stage includes a description of the structure of administrative oversight, faculty-staff involvement, curriculum development, and the program elements comprising the remedial effort. Program implementation and program evaluation are discussed chronologically and related to the program elements described in the planning phase. While chronology of events is accurate, it must be remembered that there is an ebb and flow to change and program implementation in institutions of higher education. Rarely is a stage completed before another is begun.

#### Program Planning

##### Administrative Oversight

A committee, appointed by the Vice President for Academic Affairs, was formed for the purpose of planning the institution's approach to the task of developing a remedial



program to improve the academic preparedness of entering students prior to their enrollment in college level courses in the core collegiate academic areas of English, mathematics, history and science. Members of this committee were the Dean of Admissions, the Associate Dean for Special Programs, and the Academic Vice President. The committee deemed it imperative that both administration and faculty support the program and that both groups should have the opportunity to discuss the program with committee members during the planning process to provide additional insight into the problems anticipated as well as the logistics of the program.

The President of the institution met with the committee and agreed to provide support for the project as well as leadership in discussions with division chairpersons regarding the proposed program. He also agreed to a series of meetings with faculty during the spring semester of 1988.

#### Faculty-Staff Involvement

Faculty meetings were held to allow the faculty to contribute ideas which could be incorporated into the program during the planning stages. Eight small group meetings were held with faculty during the semester, and minutes of each group meeting were given to all faculty to enable them to see what had been contributed by others.

Outside consultants met on two different occasions with

the pre-collegiate course committee. Also, at a general faculty meeting one of the consultants presented historical institutional test data to facilitate faculty understanding of the framework for the process of planning the program.

#### Evaluation of Student Achievement

Records for the fall, 1987, semester, were examined and grades in core college courses were compared with ACT subtest scores in the same areas to determine the ACT score needed in order for the student to have a 70% or greater chance of earning at least a grade of "C" or better in the course. In addition, ACT Assessment records (student profiles) were reviewed and both sets of records compared.

Next, sections of core collegiate level courses being taught during the spring, 1988, semester, were randomly selected and the appropriate subtest of the ASSET Assessment was administered in the following courses: American History 1483 or 1493, American Federal Government 1113, Biology 1114, College Algebra 1513, and English 1113, the first course in English composition. The history, government, and biology classes were given the Reading Subtest, the English classes were given the Language Skills Subtest, and the algebra classes took the College Algebra Subtest. These were scored and the results compared with grades earned in the courses as well as ACT Assessment subtest scores and high school grades. Correlation coefficients were figured

and probability tables developed. In this way, the institution had two semesters of data to use in establishing a baseline and determining the least possible score a student could make and still have a reasonable chance (70% C or better) of passing the course.

### Placement Guidelines

Materials to be used were selected early in the process. The Dean of Admissions developed a flowchart for enrollment and presented it to the committee. This was accepted and went through two or more modifications as warranted.

Students were placed based on the following criteria:

1. Course deficiencies or not.
2. Sufficient data resulted in placement in either honors courses, regular courses, or remedial courses.
3. Insufficient information was the third criterion.

The placement element of the program being planned was to develop an answer to the problem of insufficient information from high school credits, grades, or achievement test data. Insufficient information was caused by three factors: (1) Myriad gaps were present in student high school records and grading practices in high schools are governed by no standard practices. (2) Even though the institution might have had the subtest and composite scores of the ACT, the ACT student profile, a most useful part of

the achievement test, was often missing because many students enrolling in the institution either did not take the ACT Assessment on national test dates or did not name the college as one of their prospective colleges when they took the ACT at another institution. Thus, the student profiles with the student survey information and the probability tables were not available. As a result, greatly-needed placement information was missing. To respond to this problem, the department head of the Computer Science Department wrote a software program which enabled the institution to enter the subtest scores and the probability of success in the core collegiate courses was calculated. (3) In regard to the student survey information, normally obtained by ACT on national test dates, the advisers were asked to obtain some of this data using informal means. Also, the students referred for ASSET evaluation would complete a needs survey as part of the educational background portion of this instrument. It was hoped that these measures would provide the needed information and that there would be enough communication with students during enrollment to direct them to the appropriate special services.

Students with below the ACT cut-off scores and who were therefore required to participate in the ASSET Assessment were tested with the Language Skills and Reading Skills tests. Those earning a Standard Score of 47 or less on the

Language Skills test were placed in pre-collegiate English. The placement in pre-collegiate history, pre-collegiate science and reading improvement was determined by the score earned on the Reading Skills Test. The cut-off for placement in pre-collegiate and remedial work was a Standard Score of 29. Students were placed in math classes using a flowchart indicating previous courses and ACT math scores. The mathematics faculty administered an examination during the first week of school to allow students to move up or down in the math curriculum.

The cut-scores used for screening and referral of students having the high school credits but not predicting a 70% chance of success in first level college courses were: ACT English 12 for English; ACT Math 15 for College Algebra; ACT Social Studies 09 for History and Reading; and ACT Natural Science 14 for Science and Reading. These students were referred to the Testing Center for the ASSET Assessment. Students referred for this service were given the Language Skills and the Reading Skills Tests of the ASSET battery. These students could "test out" of pre-collegiate courses and Reading Improvement with the scores: Language Skills - Standard Score of 47; and Reading Skills - Standard Score of 29.

Student performance in the pre-collegiate courses was to be evaluated by departmental guidelines and the students' performance was graded Satisfactory (S) or Unsatisfactory

(U). Students earning a grade of Unsatisfactory were required to repeat the course and could not enroll in the first college-level course in the discipline until a Satisfactory grade was earned.

### Curriculum Development

Basing predictions on the data gathered and on past student records, the committee began to plan an estimated number of sections of pre-collegiate courses needed. Division Chairpersons were consulted; they, in turn, talked with the faculty about teaching assignments and returned to meet with the committee. Some sections were built at once, but since the number of sections was only an estimate, other sections were held as "invalid" on the schedule, but could be activated at once if needed.

Faculty developed new course syllabi and set competency requirements for the Satisfactory grade to be awarded. Faculty who were to teach pre-collegiate courses met to establish guidelines universal for all pre-collegiate sections within the department.

### Program Elements

The Program of Evaluation, Advisement and Placement for students in need of remediation consisted of the following elements:

1. Evaluation of high school transcripts and test

- scores by the Office of Admissions.
2. Testing of referred students and placement.
  3. Faculty advising, enrollment follow-up.
  4. Pre-collegiate courses in English, Algebra, History, and Science. Placement recommendations based on test results.
  5. College credit course in Reading Improvement.
  6. Career counseling and orientation in a one credit hour, eight week course.
  7. Study skills evaluation and Study Skills courses.
  8. Peer tutoring in all academic areas.

Elements 1-5 have been discussed in the study. Career counseling, Study skills, and a system of intervention and tutoring were included, according to committee minutes, in order for students to be helped before they became frustrated and withdrew from college. It was decided that a need for study skills must first be determined. To accomplish this, a study skills survey instrument was selected and plans were made to give this during the eight week orientation class required of all entering freshmen during their first semester of enrollment. Also, a coordinated tutoring program was developed and one of the counselors was appointed supervisor of this program. Tutoring was to be conducted in one of the classroom buildings for four nights per week, free of charge to the students. Tutoring was conducted by student tutors, hired

for the work-study program.

Further meetings were held with division chairpersons and faculty to explain planning results. The program was documented to be well-received and many of the suggestions offered were incorporated into the final program.

During this time, the institution received word from that funds were available for Quality Initiative Grants to be used for innovative or strengthening programs. The recommendation was made to apply for one of the grants, and an application was submitted. This was to provide funds for research, a part time clerk/typist to help with recordkeeping, and for an additional counselor. The grant was awarded, but the budget had to be revised downward and the counselor was not hired for this program. The additional workload was handled by present counseling staff.

#### Program Implementation

The new enrollment process was tested with student volunteers. This included a "dry-run" of transcript evaluation, assessment, scoring, and advisement. This helped determine the time needed to enroll students who needed further evaluation. The result was that a decision was made to extend the hours of enrollment, at least for the first day of summer enrollment, in order that no student would be turned away. It was also decided that each day the faculty would judge whether extended hours were needed. The



institution has faculty advisers and their training and involvement was continual throughout the program planning.

At the time of a student's application for admission, the Office of Admissions and the Registrar reviewed the application, the student's high school transcript, and ACT scores. A folder was made for the student's adviser and preliminary course recommendations were indicated on the adviser record card, which was included in the folder. Also, the folder was labeled with either a blue or a red label. The blue label indicated the student had no deficiencies and could proceed to advisement. The red label indicated one of two cases: 1. The student had one or more course deficiencies and was required to enroll in the appropriate pre-collegiate course(s). 2. The student had no course deficiencies but could not proceed to advisement without evaluation with the ASSET Assessment.

Additional meetings were held with the counseling staff and they were requested to help with specific tasks anticipated during the evaluation, advisement, and enrollment process. The counselors agreed to help and were involved throughout the program. During the week of summer enrollment they administered the ACT residual examination, helped administer the ASSET placement test, presented orientation sessions, and conducted meetings with parents. Three or more of the counseling staff, including the Director of Counseling and Guidance and the Director of

Testing and Placement, were constantly involved in evaluation.

At the time students were directed either to advisement or to testing, their parents or others who accompanied them to enrollment were met by a counselor who guided them to the lounge set up for them. There they were shown a videotape of campus activities and were given the opportunity to ask questions about the college. A campus tour was conducted for those indicating an interest. The various activities were developed to help them cope with any anxiety felt about the enrollment process and the college in general.

The additional evaluation of students took approximately one and one-half hours. Of the one and one-half hour total, the assessment itself took one hour, and scoring, interpretation, and printing of results took an additional half hour. A counselor spoke with the students during the time the tests were being evaluated and provided a brief orientation to college for them. After the tests were scored, the results were explained to them and time was allowed for questions from the students. They were then directed to advisers for completion of their schedules.

Although most students traditionally enroll for the fall semester during one week in July, some enrollment continues until classes begin in August. Faculty advisers are not typically available during the summer and this has caused a heavy load on counseling staff who work on an

eleven month basis and rotate their schedules to provide advisement. The committee decided that the manpower needed on hand "in case" students showed up to enroll was not justified, and the policy was adopted of enrolling students only on Monday after the July enrollment week.

The information gained from the program was to be disseminated to other institutions of higher education, to the State Regents for Higher Education, and to the governing board of the institution. Planning documents and committee minutes were kept and made available to aid in institutional monitoring of the program and its development.

The approximate number of students needing pre-collegiate coursework was estimated correctly and there were enough sections of most courses available in the schedule to handle the student load. The greatest problem was in the number of sections of Reading Improvement on the schedule. The need for a Reading Improvement course was underestimated and faculty teaching in the Reading Department absorbed the additional sections as overload to their regular teaching duties. The assumption was made that students below an ASSET score of 29, needed a course in reading improvement, and this was made a requirement. The assumption proved to be a valid one, but the faculty and courses available for this need were not enough for the number of students who needed the course. As a result, some students who desperately needed to improve their reading skills had to

wait a semester before taking the course.

Of the first time entering students for fall, 1988, 326 students were tested and placed in pre-collegiate, reading improvement, study skills, or college level courses, with placement determined by evaluation of their records and further testing as needed.

#### Program Evaluation by the Institution

The evaluation of placement was made on the basis of whether or not a student was identified as deficient in performance, and was appropriately placed according to the recommendations on the Adviser Record Card used for placement recommendations and included with the student enrollment packet. Based on a review of enrollment records compared with student academic credentials, it was concluded the adviser in-service had been relatively successful but that more adviser training was needed. Some students with low ACT scores and low high school grades were enrolled in a maximum load of 18 credit hours and some of those weak in reading ability were enrolled in courses requiring a great deal of difficult reading. These problems were addressed by re-instituting the requirement that faculty advisers be at least beginning their second year of employment. First year faculty were to participate in enrollment by observing advisement by more experienced faculty and by facilitating the enrollment process through serving as guides or in other

capacities.

A Study Skills Survey was administered to all students in the program and results were disseminated to advisers. Planning was begun in order to better address student needs in study skills. Courses were added to the schedule and study skills needs to be more adequately addressed, according to academic administration of the institution. Mini-courses in specific skills areas were used to respond to students who needed help after the first eight weeks of school and these were used by more than thirty students. However, in some cases, beginning a course after eight weeks was believed to be too late to be of enough help to students who had become too frustrated to continue in college.

Reports of the tutoring program indicate an average of twenty students per evening using the tutoring program throughout the semester. Most students went to the tutors for math and accounting tutoring, with the fewest number requesting English help. This was investigated and it was determined that the English faculty were helping the students in their offices and that most of the students' English problems were resolved without their seeking additional help from a tutor.

Attrition for the institution, using September 1, through December 15, 1988, figures, showed a 35.7% decrease in overall attrition from the institution and this needs more study. The institution believes much more research is

needed and a more formal study of variables impacting retention must be conducted before specific conclusions regarding the program and its effect upon attrition can be reached. Further study needs to be conducted of student progress to determine what effect this might have upon their retention and/or success in college.

APPENDIX B

STUDENT LETTER AND SURVEY

May 22, 1990

Dear Student,

You are being asked in to participate in a graduate student research project regarding the Evaluation, Advisement and Placement Program at \_\_\_\_\_ College. The researcher making this request has the permission of the institution and promises to keep your responses confidential.

Enclosed with the survey itself is a stamped, addressed envelope to use for its return. The specifications of the research project require the return of the survey on or before May 25, 1990. Please comply if possible.

Thank you for your help in this project. We believe it will result in information useful to the institution in planning positive educational experiences for future students.

Sincerely,

Doris Snyder  
Graduate Student in Higher Education  
Oklahoma State University

## APPENDIX B, continued

STUDENT SURVEY OF THE EVALUATION,  
ADVISEMENT AND PLACEMENT PROGRAM

Please circle either (1) or (2) regarding your participation in the ASSET assessment program and pre-collegiate courses and your opinion of the statements following.

1. (1) -- Yes, I took the ASSET placement test and one or more pre-collegiate courses.

(2) -- Yes, I took the ASSET placement test but did not take pre-collegiate courses.

Please check the course(s) listed below which you enrolled in during your first semester in college. Check all that apply.

\_\_\_\_\_ Reading 1113, Comprehension Skills, or Voc. Improvement

\_\_\_\_\_ Fundamentals of English 0123

\_\_\_\_\_ Math 0013, Math 0113, or Math 0123

\_\_\_\_\_ Orientation 1011

\_\_\_\_\_ Skills for Success, Study Skills, or Test Taking

Please circle your opinion regarding the following statements.

Strongly Agree = SA

Disagree = DA

Agree = A

Strongly Disagree = SDA

Undecided = U

- |   |    |   |   |    |     |
|---|----|---|---|----|-----|
| 2. The courses I checked above were just like what I took in high school.               | SA | A | U | DA | SDA |
| 3. I was not happy about taking any courses which did not give me college credit.       | SA | A | U | DA | SDA |
| 4. In my estimation, however, I did the best I could in the courses I took.             | SA | A | U | DA | SDA |
| 5. When I first found out I had to take a test and maybe one or more non-credit courses | SA | A | U | DA | SDA |



## APPENDIX B, continued

I felt absolutely terrible.

- |     |  |    |   |   |    |     |
|-----|--|----|---|---|----|-----|
| 6.  | I viewed the ASSET assessment as an opportunity to prove I could do better than my high school grades and ACT scores showed. | SA | A | U | DA | SDA |
| 7.  | The placement recommendation for pre-collegiate (zero-level) courses made me feel awful.                                     | SA | A | U | DA | SDA |
| 8.  | I visited my advisor no more than twice during my first semester of enrollment in college.                                   | SA | A | U | DA | SDA |
| 9.  | I visited my advisor on a fairly regular basis during the first semester of my enrollment in college.                        | SA | A | U | DA | SDA |
| 10. | I visited a counselor more than once during the first semester.  | SA | A | U | DA | SDA |
| 11. | My experience with the counseling service was a positive one.  | SA | A | U | DA | SDA |
| 12. | I went to a tutor several times during my first semester.  | SA | A | U | DA | SDA |
| 13. | The tutoring service helped me get better grades than I would have earned on my own.   | SA | A | U | DA | SDA |
| 14. | When I re-enrolled for the second semester I had more confidence in my skills.   | SA | A | U | DA | SDA |
| 15. | I now believe the program of evaluation, advisement and placement helped me to be more successful in college.                | SA | A | U | DA | SDA |
| 16. | I would recommend to a friend a performance-based placement program like the one in which I participated.                    | SA | A | U | DA | SDA |

## APPENDIX C

### STUDENT INTERVIEW QUESTIONS

1. Do you live in a college residence hall?
2. Do you like living there?  
What do you like about campus housing?  
What do you dislike about campus housing?
3. Do you feel you are a part of campus life at \_\_\_\_\_?
4. Do you participate in campus organizations and activities?  
With what activity or organization do you spend the most time?
5. Are your classes interesting?
6. How do you feel about college after having attended \_\_\_\_\_ College for \_\_\_\_\_ # \_\_\_\_\_ of semesters?
7. During your first semester at this college, were you aware of special services available to help you? How were you informed?
8. Have you used any of these services?  
Which ones have you used?  
Were they helpful?  
Will you use them again if you need help?
9. What services are not available which you believe should be offered?
10. How do you feel about your experience during enrollment (the evaluation, advisement and placement process)?
11. What has been your experience in pre-collegiate courses?  
Have you taken pre-collegiate courses? Have you repeated

one or more pre-collegiate courses? Have you succeeded in completing one or more pre-collegiate courses? Did you "test out" of these courses? If so, which one(s)?

12. What is your overall evaluation of your experience with the following elements of the college to date?

Coursework \_\_\_\_\_

Faculty \_\_\_\_\_

Tutoring \_\_\_\_\_

Learning Resources Center \_\_\_\_\_

Counseling \_\_\_\_\_

Pre-collegiate Courses \_\_\_\_\_

Reading Courses \_\_\_\_\_

Study Skills Courses \_\_\_\_\_

## APPENDIX D

### FACULTY INTERVIEW QUESTIONS

1. Were you assigned or did you volunteer to teach a pre-collegiate course during the fall, 1988 semester?
2. Have you taught other pre-collegiate courses subsequent to that first semester?
3. What was your impression of the pre-collegiate course element of the program of evaluation, advisement and placement at the end of the first semester?
4. How did you feel about the level of remediation achieved during the fall, 1988 semester?
5. How did you view the Satisfactory/Unsatisfactory rates of the fall, 1988 students?
6. How do you feel about the pre-collegiate courses today?
7. Do you also teach college credit courses?
8. In your opinion, has the program of pre-collegiate coursework had an effect on the college credit courses you teach?  
What kind of effect have you observed?  
Has your opinion changed from fall, 1988 to fall, 1989?
9. Do you refer students to other elements of the program?  
If so, which services have you referred to the most? The least?
10. What do you see as the most successful element of the program?

## APPENDIX D, continued

11. In your opinion, which element(s) of the evaluation, advisement and placement program should be modified or discontinued? What should be added to strengthen the program?
12. In your opinion, is the program successful as it is operating in 1990?  
Is it highly successful?  
Is it moderately successful?  
Is it marginally successful?

VITA

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Doctorate in Education

Thesis: A STUDY OF AN EVALUATION, ADVISEMENT AND PLACEMENT PROGRAM IN A TWO-YEAR INSTITUTION

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