

An Evaluation of the Changes Implemented in
the Virginia Student Transition Program (VSTP)
at George Mason University, 1986-1987

by

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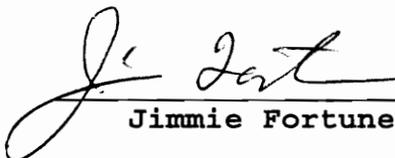
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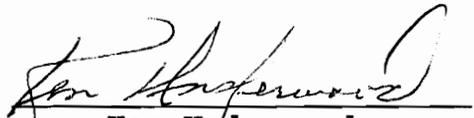
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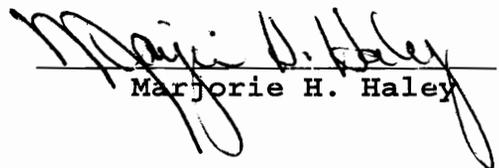
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(ABSTRACT)

George Mason University, with the support of the Virginia State Council of Higher Education, implemented a program in 1983 designed to assist African-American students with their transition from high school to college. The students enrolled in the Virginia Student Transition Program (VSTP) had either low high school GPAs, low Scholastic Aptitude Test (SAT) scores, or insufficient academic units completed in high school. These students would not have been admitted to the university without participating in the VSTP.

Retention rates for students enrolled in the program failed to reach the level anticipated by the university.

The program was redesigned in 1987 to reflect both a developmental and academic focus by adding academic courses for credit to the developmental program.

The purpose of this study was to evaluate the changes in VSTP that were implemented in the VSTP in 1987, and

continued to the present. Data collected from the 1986 program participants provided a baseline for understanding the experience of students participating in 1990.

Data for the study were collected from four separate sources: (1) student transcripts, (2) student retention data from George Mason University Institutional Research Office, (3) structured interviews with 1990 VSTP participants, and (4) structured interviews with five peer counselors.

The data were analyzed using a t-test to determine the differences in the mean for first year academic performance and grades earned in mathematic and freshman English for both the 1986 and 1990 program participants. The Pearson Chi Square was used to determine the difference in the means for the persistence rate between the 1986 and 1990 participants. The interview data were analyzed and summarized by coding responses.

The findings indicated no significant differences for academic performance, grades earned in mathematics, and the first year persistence rate. There was a significant difference found in the grades earned in English 101. The interview data suggested that the 1990 VSTP program met its objectives and made a significant contribution to the students' transition to college, their educational development, and ability to persist to graduation.

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DEDICATION

To my mother for providing me with a solid foundation and telling me to never leave a job half finished.

To my wife, who gave me the time during our first year of marriage to finish my course work, and provided me with so much support.

To my three children Joshua, Justin and Jazmyn.

TABLE OF CONTENTS

	<u>PAGE</u>
ABSTRACT	ii
ACKNOWLEDGMENTS	iv
DEDICATION	v
CHAPTER	
I. INTRODUCTION	1
Background	2
The Virginia Student Transition Program	6
Overview of Current VSTP Design	12
Purpose of the Study	15
Research Questions	16
Definition of Key Terms	16
Significance of the Study	18
Overview of the Dissertation	18
II. REVIEW OF RELEVANT LITERATURE	20
Evaluations of Transitional and Bridge Programs.....	22
Programs Designed to Improve Student's Academic Performance in Freshman English and Mathematics	30
Programs to Improve the Retention Rates of Minority Students Admitted to Universities with Lower Entry Scores.....	34
Chapter Summary.....	39
III. METHODOLOGY	40
Research Design	40
Research Questions	41
Population	42
Baseline Study.....	42
Evaluation Survey.....	42
Instrumentation	43
Structured Interview	43
Institutional Data.....	44
Procedures.....	44
Interrater Reliability.....	45
Limitations.....	48
Analysis of the Data.....	48
Chapter Summary.....	49

TABLE OF CONTENTS (continued)

CHAPTER	<u>PAGE</u>
IV. THE RESULTS OF THE FINDINGS.....	50
Research Questions.....	50
Characteristics of the Sample.....	51
Research Questions and Statistical Data.....	53
Research Question No. 1.....	53
Research Question No. 2.....	55
Research Question No. 3.....	55
Research Question No. 4.....	56
Research Question No. 5.....	57
Project Effects.....	57
Strengths of the Program.....	65
Weaknesses of the Program.....	71
Participants' Reactions.....	73
Chapter Summary.....	80
V. DISCUSSION OF THE FINDINGS.....	81
Summary.....	81
Findings.....	83
Conclusion.....	91
Limitations.....	93
Recommendations.....	94
Recommendations for Future Study.....	97
REFERENCES.....	98
APPENDIX A.....	102
APPENDIX B.....	106
APPENDIX C.....	110
APPENDIX D.....	136
APPENDIX E.....	138
APPENDIX F.....	141
VITA.....	145

LIST OF TABLES

TABLE	<u>PAGE</u>
1 Percent of Agreement for Each Interview Question.....	46
2 High School GPAs and SAT Scores of 1986 and 1990 VSTP.....	51
3 Math Grades, Means and Standards.....	52
4 Mean and Standard Deviation on Math.....	54
5 Enrollment and Retention Rates on the 1986 and 1990 VSTP.....	56

CHAPTER I

INTRODUCTION

The 1991 status report from the Office of Minority Concerns of the American Council on Education entitled Minorities in Higher Education stated that minority enrollment in higher education increased through the 1980's culminating with a 10% gain from 1988 to 1990. The enrollment gains for African Americans were significant, but they still lagged behind whites (39.4%) and other minority groups (29%). Between 1985 and 1989, the enrollment rate for African-American males remained constant while white high school graduates increased slightly. In 1989, the rate for white men was 39.7% compared to African-American men at 29%. White women achieved an increase of 6% compared to African-American women at 5% (Carter & Wilson, 1991).

African Americans lagged behind Asian-American students who had the largest four year growth with 15.5% from 1988-1990. Asian Americans recorded only 6.5% gains at two-year institutions and nearly 20% at independent schools. Asian-American women posted an 11% increase and men 13% respectively during 1986-1990. Their gains for professional schools were high at 28.5%, the largest of all the minority groups. African-Americans made some gains in receiving bachelor and master's degrees, but their numbers were still much lower than other groups. Hispanics made significant gains from 1987-1989, registering a 26% increase in social

sciences, while African-Americans showed gains of 7.4% for men and 11% for women. Proportionately fewer African-Americans received bachelor and master's degrees in the 1980's than other groups during the same period (Carter & Wilson, 1991). These data seem to suggest that even though African-Americans made some small gains in obtaining higher education degrees, their numbers still were much lower than other minority groups and significantly lower than white Americans. This suggests that other methods for retaining and graduating African-American students are still needed.

Background

The retention of African-American students continues to be one of the most problematic areas facing most institutions of higher education in the United States (Giles-Gee, 1989). Enrollment data showed that predominantly white institutions enrolled about 82% of all the African-American students enrolled in four-year colleges while graduating only 60% of all the African-American students receiving degrees. On the other hand, historically black institutions, while enrolling only about 18% of all the African-American students, award 40% of the degrees earned by African-American students (Farrell, 1992).

Many predominantly white institutions have had problems with recruiting, retaining, and graduating black students. Some have been successful in recruitment, but less

successful in retaining students after their enrollment. This has often been described as the "Revolving Door Syndrome," one in which African-American students enrolled but quickly dropped-out, stopped-out, were suspended or dismissed, and never graduated. The retention rate for African-American students tends to be lower than that of white students, and at predominantly white institutions the rates are even lower (Selacek & Webster, 1980; Astin, 1982).

Because of the disparities in retention, graduation, and academic performance between white and African-American students at predominantly white institutions, there continues to be a need for research that can assist with understanding how best to combat these problems. What works at one institution often may not work at another, but many retention and academic models can be adjusted to fit a particular institution's needs (Clewell & Ficklen, 1987).

Within the last ten years, Virginia has taken a serious look at recruitment, retention, and graduation of African-American students in the state. Following a series of federal actions that began with Brown v. Topeka Board of Education and including The Civil Rights Act of 1964, Green v. County School Board of New Kent County, and the Adams litigation, the states that had maintained legal segregation were to develop and implement desegregation plans or face loss of federal funding.

The Adams litigation began in 1970 as Adams v. Richardson. The case was named for the first plaintiffs, John Quincy Adams, who later became the secretary of Health, Education, and Welfare (HEW) and Elliott Richardson (Egerton, 1982). The litigation continued with various department secretaries (Adams v. Califano) until it became Adams v. Bell in the 1980s. It has been the leading case in the application of Title VI to post-secondary education (Kaplan, 1985). Virginia was one of the ten original Adams states and responded to the order in a number of ways. As early as 1983, the State Council for Higher Education in Virginia (SCHEV) had already developed amendments to its 1978 state desegregation plan in response to an Office of Civil Rights (OCR) evaluation which stated:

The Commonwealth has a statewide problem in retaining black students. Since retention efforts are critical to the success of the Plan, we recommend that Council staff continue to work with individual institutions to develop effective retention models, which have mechanisms for tracking the academic progress of students and include programs and activities designed to achieve the commitment to the amended plan. (Simmonds, 1985, p.83)

The State Council for Higher Education in accordance with the 1983 Amendments of the Virginia Plan developed statewide initiatives that included:

- State-wide workshops on retention
- A conference on white faculty and African-American students

- The Virginia Student Transition Program
- Funds for excellence subprogram
- Transfer grants for the Virginia College System

Several other programs were also a part of the desegregation efforts. These included categorical funds to institutions to assist them in the recruitment of "other race" students, (other race refers to African-American students at traditionally white institutions and white students at historically black institutions), scholarship funds targeted at minority students, bridge programs, a series of publications which assisted students in working their way through the education pipeline and a number of mentoring programs for faculty and students as well as support programs to assist students in persistence to graduation (Kaplan, 1985).

The Virginia Student Transition Program (VSTP) was the first program of its kind established under the state plan. The program was originally developed to provide "tutoring, instruction in study methods, counseling, developmental skills in English, mathematics, and reading for African-American students who were either full-time freshmen or transfer students and who had anticipated or had actual academic deficiencies" (Casteen, 1983, p.14). This program was developed initially at five major state institutions:

The College of William and Mary in Williamsburg, James Madison University in Harrisonburg, the University of Virginia in Charlottesville, Virginia Polytechnic Institute and State University in Blacksburg, and George Mason University (GMU) in Fairfax.

The Virginia Student Transition Program

In 1983, George Mason University offered its first Virginia Student Transition Program. The goals for this program were to enroll African-American students whose SAT scores or high school grades were slightly lower than other freshmen enrolled in the university and whose educational growth would be enhanced by participating in a program of this nature. Specifically, the program objectives were:

1. To enhance the students' understanding of language arts and reasoning, especially reading comprehension, writing and mathematics.
2. To orient the students to the services and programs offered at the university.
3. To provide a setting in which students may investigate in-depth personal and academic concerns and to assist the students in removing social and personal obstacles toward achieving academic goals.

4. To prescribe individually tailored, supportive learning programs.
5. To facilitate the adjustment of the students to the university community, academic requirements and processes and policies.
6. To provide opportunities for social and cultural development.
7. To provide role models and improve motivation (Pelham, 1983, p.2).

The students participated in a six-week residential program during the summer prior to their freshman year. Some of the supporting activities provided during the summer were also provided during the following academic year. Throughout the six-week summer program, various cultural activities were provided. These activities included, but were not limited to, concerts, plays, seminars, and workshops (Pelham, 1986). Also included were developmental classes, personal growth sessions, and career development sessions. The purposes of these activities were to facilitate the students' adjustment to and understanding of college, provide an orientation to academic requirements and procedures, introduce role models, and provide opportunities for personal and career development. There were several activities offered during the academic year. Academic support was provided for students who were enrolled in

mathematics, English, and other high-risk courses. All African-American and other minority students who needed additional help in their courses were provided free tutorial assistance, academic awareness workshops, and social and cultural trips. The academic awareness workshops were provided for students to assist them with their transition to George Mason University (Pelham, 1986).

During the years 1983-1986, the program struggled with the retention rates and the grade-point averages (GPAs) of the students. The number of students on warning and academic suspension was much higher than for other university students. The first class of students that entered the university in 1983 as VSTP students presented the weakest profile in terms of Scholastic Aptitude Test scores and high school grade-point averages as compared to students entering the university in 1984 and beyond and participating in the VSTP. In their first academic year, twenty-four of the original thirty-five students were not eligible to continue their studies because of academic suspension. Their college grade-point averages for the first year were among the lowest at the university; however, they were allowed to return. The GPA and SAT scores of students entering the program from 1983 to 1985 remained constant but the scores did improve during the 1986-1987 academic year. Because the university has become more selective with the students

accepted for admission, GPAs have continued to increase (Riordan, 1987).

Astin (1982) suggested that successful African-American students:

Enter college with good high school grades, well-developed study habits, and relatively high self-esteem in terms of academic ability. The potential persisters are also likely to have taken a college prep course in high school, to come from relatively affluent and well-educated families, and to be relatively young at the time of entry. (p. 10)

The VSTP program was developed to demonstrate that African-American students who did not fit the profile proposed by Astin in 1982 could be successful with proper academic and social support to help them make the transition from high school to college. However, the university realized that in order to accomplish its goal of increasing the retention and graduation rate of students admitted to the university through the VSTP program, some changes to the program had to be made.

During the summer of 1987, the program was redesigned to include a focus on academic success and transitional support. Placement exams were implemented to determine which classes students should be enrolled based on their ability. Students took courses in mathematics, English, and reading. They were placed in either developmental mathematics or pre-calculus, freshman English or developmental writing, advanced reading or developmental

reading and communication. Students scoring 16 or better out of a possible 25 points on the mathematics placement exam were placed in pre-calculus, and students scoring below 16 were placed in developmental mathematics. Students scoring 35 or better out of a possible 50 points on the English exam were placed in freshman English, and all others were placed in developmental writing. Students scoring 10.5 or better out of a possible 15 points on the Nelson Denny Reading Exam were placed in advance reading and given an opportunity to enroll in Communication 120, a credit course that focuses on teaching students to write and recite speeches in class. All other students were enrolled in developmental reading. Additionally, all students took the mini courses in African-American history and critical thinking.

Follow-up activities were provided during the fall and spring semester of the 1987-1988 academic year. These activities included: monitoring of students' courses, students attending biweekly advising groups, monthly group meetings, course selection based on prior performance, and a limit to the number of courses that could be taken each semester during the first two years. Beginning with the 1987 VSTP class, the program design became more rigorous. It demanded more from the students in terms of a commitment to their studies and careful selection of semester courses. In addition, professors teaching courses during the summer

program met and developed an interdisciplinary approach to teaching these students (Pelham & Smith, 1987).

The objectives of the program were changed and modified to reflect a more academic approach to the students' development and transition. They were placed in courses based on their abilities, and provided with an opportunity to enroll in academic courses for credit. The objectives for the new design were:

1. To improve the levels of academic performance through developmental and academic courses in English, reading and mathematics.
2. To familiarize students with institutional support services.
3. To acclimate students to the overall college environment and to facilitate a positive transition to George Mason University.
4. To assist students in persisting to graduation.
5. To design individually tailored supportive learning activities.
6. To provide exposure to role models at the university who might inspire students to achieve.

7. To provide a counseling component to address academic and career goals and personal needs (Pelham & Smith, 1987, p.3).

Overview of Current VSTP Program Design

The 1987 program began one week prior to the beginning of the third summer school session. Upon arrival, students registered for their rooms in the residence halls and attended a campus orientation session. At ten o'clock, students took placement exams in English and reading. While the students were taking their placement exams, their parents were receiving information pertaining to the program's goals and objectives and information about the university. After the students completed their exams, they attended the VSTP opening luncheon and reception.

During the reception, the university provost, the director of minority student services, and other officials of the university provided welcoming speeches and pledged support to them. Later that evening the students met with their peer counselors and received additional instructions concerning rules and regulations for the residence halls and campus. They also received their class assignments for the summer.

During the first week, all students attended academic advising sessions where they received their course assignments for the fall semester. Some students were told

that their course assignments for the fall might change depending on how well they performed during the summer.

The first three days of the program were spent conducting academic advising, career counseling, critical thinking workshops and seminars. On Thursday of the first week all students who placed in developmental mathematics, reading and English began their classes. These classes lasted for an hour and twenty minutes each day. Other students who were not enrolled in developmental courses spent these days in small group discussion sessions. The students who were enrolled in regular academic courses began their classes the second week of the program. VSTP students were sometimes enrolled in academic and developmental courses at the same time. Some students took all academic courses or all developmental courses depending on their scores on the placement exams.

All students attended classes every day in addition to attending personal growth groups and other workshops and seminars provided by the university counseling center. Further, all students were required to attend eight sessions of African-American history and a tutorial session every Tuesday, Wednesday, and Thursday night from six to eight o'clock. Academic tutors were available to assist students with academic difficulties. Students also were required to attend the Writing Lab for assistance with English papers.

To provide additional exposure, each Friday at two o'clock students attended a session where faculty, staff and administrators were provided with an opportunity to talk with the students and for students to ask and receive answers to some of their questions about the university and the college experience.

In an effort to enhance the students' cultural understanding, the students attended a play at the Kennedy Center in Washington, DC, took several field trips to museums, and attended a concert.

At the end of the six-week program students were given their grades for the summer, and course instructors provided the program administrators with an evaluation of each student's academic performance and a recommendation concerning the student's future academic needs. Students then met with the program administrators, received their grades, and were told whether they would be returning in the fall. All students who were to return were given their fall schedules. Changes that were needed because the student successfully completed the course during the summer, were made. Any student who was not recommended to attend in the fall was provided with an explanation and a recommendation that perhaps the student should attend a community college for further developmental work. All recommendations were sent to the admissions office with a list indicating those students who had successfully completed the program. On the

last day of the program all students checked out of their rooms and left for the summer.

All students who returned in the fall semester were required to report to the Office of Minority Student Services when they arrived on campus. Because of their participation in VSTP, the program was charged with providing the necessary academic, personal, and social support for these students for at least two years. In addition, these students were provided with free tutoring, support groups, academic advising, counseling, career planning, and writing support. Their classes were monitored each semester and corrective action taken to further their academic success.

Purpose of the Study

George Mason University implemented the Virginia Student Transition Program in 1983 to improve the academic performance, retention rates, GPAs, and grades earned in freshman English and mathematics of a select group of African-American students who were admitted to the university with less than the required admission criteria. The original program was strictly a developmental program. However, in 1987, because of the concern with the students' less-than-average academic performance and the poor retention rate, the program was redesigned as a developmental and academic program.

The purpose of this study was to evaluate the changes that occurred in the program after 1986, and to determine if the 1987 objectives for the program were being met. The 1990 Virginia Student Transition Program participants were used to evaluate the program.

Research Questions

The research questions addressed were:

1. How well did the program meet its stated objectives during the 1990-1991 academic year?
2. How did the 1990 VSTP participants perceive the impact the program had on their academic performance during their first year of college?
3. What impact did the program have on the first year retention rate of the 1990 VSTP?
4. What were the most and least beneficial aspects of the 1990 VSTP program as perceived by the participants?
5. What parts of the 1990 VSTP program would the participants retain or change?

Definitions of Key Terms

1. Virginia Student Transition Program (VSTP): A state-supported program at George Mason University designed to increase the number of minority students entering the state's ten senior

institutions. This program provides assistance for increasing the academic performance, retention, and graduation of the students participating in the program.

2. Retention rate: The percentage of students enrolled in a specific semester that returned the following semester.
3. First year retention rate: The percentage of students enrolled in the university during the fall semester of one year that re-enrolled during the fall semester of the next year.
4. First year academic performance: The students' academic performance in all of the course work attempted during the first year of their enrollment at the university as measured by their semester grade point average (GPA).
5. 1990 VSTP Students: All students who participated in the VSTP program during the summer of 1990 who enrolled at the university for the 1990-1991 academic year.
6. 1986 VSTP Students: All students who participated in the VSTP program during the summer of 1986 who enrolled at the university for the 1986-1987 academic year.

Significance of the Study

Findings from this study will assist George Mason University in determining if goals of the VSTP program are being met. It will also assist the institution in determining if including academic courses for credit as part of the transition program has increased the likelihood of the VSTP students' academic performance and their chances of returning to school after one year. In addition, these findings will provide additional research for other colleges and universities who may decide to offer a bridge or transition program for students entering the university with a lower academic profile.

Overview of the Dissertation

Chapter I contains an introduction, background information, statement of the problem, purpose of the study, research questions, definitions of key terms, and significance of the study.

Chapter 2 contains a review of the current literature related to retention programs, bridge programs, and other transition programs designed to enroll students into colleges or universities and provide them with the opportunity to experience college life before actually beginning their freshman year.

Chapter 3 contains a description of the research methodology used to evaluate the 1990 VSTP program, the

study population, and an explanation of the interview process. In addition, the process for collecting the data and method of analysis are presented.

Chapter 4 contains the results from the data collected from the transcripts and interviews.

Chapter 5 contains the summary of the results, findings, conclusions and recommendations.

Chapter II

REVIEW OF RELEVANT LITERATURE

This chapter provides an overview of the literature relevant to (1) programs designed to assist students with their transition to college and enhance their academic ability, (2) programs designed to improve students' academic performance in freshman English and mathematics courses, and (3) programs designed to increase retention rates for minority students admitted to institutions with lower entering scores.

As early as the 1950s, intervention programs were created to provide equality of educational opportunity for diverse social groups and especially for students from disadvantaged backgrounds. These intervention programs at the secondary and post-secondary levels usually focused on raising the academic achievements and motivation of those students selected to participate. The participants were usually from lower socioeconomic backgrounds and entered college with some type of educational deficiency.

During the 1960s there was an unprecedented growth in college enrollment. Because educational opportunities for a diverse group of students, a large number of four-year colleges and community colleges adopted admission policies to attract and enroll a diverse group of enrollees. Many private schools increased the number of students they

admitted through their special admission programs. Many of the students who enter through these access programs were not sufficiently prepared for college level work and came from environments that were much different from the educational environment that they were exposed to once they entered college. The special admission and access programs that once focused on how-to-study and remediation courses for students were expanded to include developmental courses and programs to assist students with academic difficulties (Basonic, 1982).

The inability of students to complete an educational program has been shown to be caused by many factors. Among these are characteristics of family and community environment, the students' exposure to educational opportunities, quality of education and ability to adjust to the college environment. Students who enter college with impoverished backgrounds and with poorer educational preparation than their peers are often at greater risk of academic failure and withdrawal from college. Many of the access, intervention and special compensatory programs not only provided educational interventions to a targeted group of students, but also began to develop a component of the program that focused on assisting students with their transition and adjustment to college (Tinto & Sherman, 1983).

Evaluations of Transitional and Bridge Programs

In 1983 as set forth in the Amendments to the Virginia Plan for Equal Opportunity in the State Supported Institutions of Higher Education, the Virginia Student Transition Program was established. George Mason University established its first program in 1983. Riordan (1987) conducted a study of the George Mason University Virginia Student Transition Program to determine if there were any significant differences in performance of the students admitted to the program and other students at the university who were admitted to the university with similar scores. This was the first study to evaluate the Transition Program since it was established in 1983. Riordan (1987) used two groups of students, a control group and experimental group. The control group was other university students with similar high school GPA's and SAT scores. There was a total of 144 students in the experimental group and a total of 121 students in the control group. The experimental group was composed of students who participated in VSTP during 1983, 1984, 1985, and 1986.

Riordan (1987) used five hypotheses to determine if the participation in the Summer Transition and Retention Program had any effect on the student participants. She found that there were no significant differences in the performance between VSTP students and other students admitted with similar scores. She also found that the grades earned in

freshman English and mathematics for the two groups of students were similar, and that the retention rates for both groups were similar. However, a significant difference in mean GPA between the 1986 VSTP group and the control group was found. The mean GPA for the VSTP group was lower than that of the control group. Riordan also found that although the academic performances and the retention rates for these students as a group were lower than the control group, a number of these students remained in school and were successful. She suggested that there may be other factors associated with the VSTP students' ability to remain in school and improve their academic standing.

At the University of California at San Diego, "Summer Bridge: A Residential Learning Experience for High Risk Freshmen," was implemented to combat the problem associated with the retention of incoming freshmen in transition from high school to college. The program was designed to improve the retention and college experience of low income, educationally or culturally disadvantaged students. These students traditionally had poorer academic performance, communication skills and retention rates (Buck, 1985). This program enrolled students who were American Indian, African-American, Chicano/Mexican American, Latino, and Filipino. Some of the students entered the program with low SAT scores and low high school grades or a combination of these factors in relation to other students admitted to the institution

during the same time. Summer Bridge was a four-week summer residential program designed to improve academic performance and to integrate participants into university life.

Students enrolled in the program took courses in writing, mathematics and science. In addition, they attended time management and communication skills sessions (Buck, 1985).

A peer advisor group was established to provide the program participants with some additional support and a sense of belonging. Students enrolled in the Summer Bridge Program received four units of baccalaureate credit for successful completion of a writing class entitled "Response Class." The "Response Class" served as the central activity of the Summer Bridge Program. This class was a pass/no pass course which was offered through summer school session. The students attended the class for four hours a day for five weeks. In addition, they took math and science classes for two hours a day. They were placed in the courses according to their scores on the placement exams given at the beginning of the program. During the last week of the program, the participants were divided into different groups in which each focused on a different academic strand and completed the work within that particular area of concentration (Buck, 1985).

To assist with the students transition, they attended an orientation session and were encouraged to meet with faculty and staff members in small groups. They also

attended small group sessions with the counseling center staff and, on weekends, were provided with cultural enrichment activities.

The Summer Bridge program served a dual role. It provided an opportunity for the student participants to be immersed in an academic environment with strong traditional academic course work and an opportunity for the students to be innovative and express their freedom. This program helped build and enhance the skills the students brought to the university and improved their opportunity for continued success. The Summer Bridge Program helped the students assess their expectations and goals, and to understand what it took to be successful at the university (Buck, 1985).

This program was well organized to provide the kind of support the students needed to be successful. The staff included 8 coordinators, 1 program assistant, 4 counseling psychologists, 1 head resident counselor, 3 readers, 19 writing tutors, 20 math/science tutors, and 16 peer counselors. These staff members met two weeks before the start of the program to begin orientation and training.

The retention and graduation rates for the Summer Bridge Program dramatically improved and were equal to the university-wide rates. The retention rate for the Bridge participants improved 25-30%. The retention rate for the program for the first year was 61%, compared to 42% for non-Summer Bridge students who were asked to participate in the

program and declined. In addition, to the increase in the retention rate, many of the Bridge students became campus leaders. Buck (1985) attributed the success of the program to the intensive academic focus, the ability of the program staff to provide a sense of belonging for the students, and the academic follow-up during the academic year by peer counselors and other support staff.

Baruch College offered a six-week college preparatory program for incoming freshmen during the summer of 1984. The SEEK (Search for Education, Elevation, and Knowledge) program was a special opportunity program for economically and educationally disadvantaged students. It was designed to give SEEK students an opportunity to receive early and intensive skills remediation and counseling before they enrolled during the regular semester. The program was designed to ease the transition from high school to college and increase their chances for academic success. Further, the program was designed to increase students' social integration to college. Ninety-three students participated in the program. The average age of the students was 18-19 years and the majority of the students were women. The program has demonstrated a high rate of completion and allowed students to enter their freshmen year at a more advanced skill level than they would have if they had not attended the program.

A study of the program was conducted to compare students who participated in the program and students who did not to determine the effect the program had on students' retention rate and academic performance during the first year. The sample group of nonparticipants was drawn from the freshmen class using information collected from students during the first week of orientation. The data collected included high school preparation, test scores on the CUNY Freshmen Skills Assessment Tests in mathematics, reading, and writing to determine the basic skill's preparation of the students when they entered the university as freshmen. The students who attended the SEEK Program had performed poorly on the initial mathematic test. However, the SEEK participants performed better in the fall and appeared to benefit from the opportunity to begin college at a more advanced skill level. It was found that nonparticipants who took non-credit courses passed a higher percentage of their non-credit courses than the SEEK participants, but SEEK participants had a slightly higher term grade point average.

The research showed that re-enrollment rates were higher for spring semester for SEEK participants than for nonparticipants. The retention rate for program participants was 91.5% and 84% for non-program participants. In addition, 48% of program participants had earned average or better GPAs while only 45% for non-program participants. SEEK students who were able to advance to a higher level of

academic progress as a result of a successful summer experience were able to maintain their progress throughout the fall semester (Tan, 1985).

In 1989, Ackerman and Byock evaluated the 1988 Summer Program and Transfer Summer Program at the University of California at Los Angeles. This program was designed to increase the academic achievement, retention and graduation of underprepared and underrepresented or low-income students. The general program components were mathematics, English and general education. The goals of the program were: to facilitate entering students' transition from high school and community college to UCLA, to increase the potential for the persistence, retention, and graduation by providing academic support, and to facilitate the development of critical thinking, academic skills and personal and social responsibility. In addition, the program promoted appreciation of racial, cultural, and socioeconomic diversity at UCLA and fostered the ability of Summer Program students to functioning in the university environment, and to build and reinforce their positive self image, inner confidence and self direction. To accomplish the goals of the program, a curriculum including tutoring, counseling services, social opportunities and political science events was developed. The total number of students participating in the program was 645. Ninety percent of the students were freshmen and 10% were transfer students. With

the support provided during the summer by the program, students in the program earned an average GPA of 2.64, and in the fall it was slightly lower at 2.30, increasing to a 2.37 in the winter quarter.

At the University of California at Davis, Suhr (1980) evaluated the Summer Bridge Program. This program was designed as an orientation and academic program to assist low income and minority students to make the transition to the university curriculum. This program assisted students with their study skills and strengthened their learning skills: it helped increase the students' readiness to do university work by providing them with three weeks of academic instructions prior to the fall quarter and provided them with a week of orientation activities.

The students who participated in the program were divided into two groups: Group A and Group B. The students in Group A attended the summer program and took all required parts of the program including the summer advising, orientation, mathematics, writing, reading and study skills classes. Those in Group B were not required to attend the summer advising, received their advising in the fall, and enrolled in English and mathematics classes in the fall. All the students attended the tutoring and workshops during the academic year.

The students in Group A entered the university with slightly poorer academic preparation than Group B. In spite

of their poorer pre-college academic credentials, Group A did as well as Group B in college performance. The finding of the study indicated that Group A had lower high school GPAs and lower SAT math scores on the average than students who were in Group B. Further, participation in the Summer Bridge program had a statistically significant effect on the first year college GPA, and retention rate of the Summer Bridge Program participants.

The Summer Bridge Program afforded the participants an opportunity to utilize and become familiar with campus support services before regular academic year pressure became a factor for them. They met with their counselors, faculty advisors, learning services staff, and other students, building social and academic support systems that were essential to these students' success (Suhr, 1980).

**Programs Designed to Improve Students'
Academic Performance in Freshman English and Mathematics**

Clewell and Ficklen (1987) reviewed a program at a private Catholic institution in the northeast that enrolled about 14,000 students. The institution catered to middle-class students. The institution's African-American enrollment was 3%; the Hispanic enrollment was 4%; and, other minorities were 4%. The program was designed to improve retention rates and scores in mathematics and English of the minority students served by the institution.

The Special Service Program (SSP) that served African-American, Hispanics, Asians, and Native Americans was implemented by the institution to combat the retention problems. A major goal of this office was to focus on high-risk students. To accomplish this, the Option Through Education program (OTE), a six-week residential program during the summer, was implemented. The OTE program was designed for 40 to 50 high-risk freshmen students who demonstrated the potential to succeed. These students enrolled in the summer program before entering the university in the fall. The OTE program was designed to improve the students' basic academic skills in mathematics and English and to provide an orientation to college life. Students were placed in English and mathematics courses according to their ability. These students received support in academic skill development and their courses were monitored throughout their four years at the institution. According to a study conducted in 1984, the retention rate for the students participating in the OTE program after one year was 94% and 84% after two years.

A program was developed at the University of California at Berkeley by mathematics Professor Philip Uri Treisman to assist African-American and Hispanic students with mathematics. Treisman's approach deviated from the traditional method of teaching calculus. His program stressed academic excellence as opposed to remediation.

Freshmen participated in an honor's workshop that met several times a week to tackle mathematics problems that were more difficult than the problems the students normally encountered in their regular calculus class. The mathematics workshops included about 25 students and were usually taught by an African-American or Hispanic teaching assistant. The program has enabled many African-American and Hispanic students to pass the first year calculus course. Prior to Treisman's program, minority students at Berkeley had a 60% failure rate in calculus. Since the program began, the failure rate has decreased from 60% to 4% (Cociatore, 1991).

Orbach (1988) reported on a study conducted at Metro University, a large multifaceted urban institution with a diverse population of students, both educationally and racially diverse. Students attending this institution were from college preparatory high school programs and those admitted through an access program, Community Action Program (CAP). At this institution, the graduation rate for black students was 20-22% in four years and about 42% for white students in four years. According to Orbach (1988), in a study conducted by Cortina in 1980 there was a 73% dropout rate among black students and a 48% dropout rate overall.

In this study students' performance in Basic Writing was examined. All freshmen in the school of Arts and Science including the students who participated in CAP, the

special access program for black students, were placed in the appropriate writing course based on their grade on the placement essay. CAP students were placed in mainstream writing courses along with all other College of Arts and Science (CAS) students. The CAS students were traditional-age students admitted to the university immediately after completing high school and had earned a "B" average or better in their college preparatory track, scoring 1000 or better on the SAT. CAP students were first-generation college students and considered to be underprepared for college. These students took some college preparatory courses in high school and passed but with lower scores, entering the institution with lower SAT's than CAS regularly-admitted students (Orbach, 1988).

The results of the study indicated that the CAS regularly-admitted students' performance was better on the End Of The Term Review (EOTR). In the fall of 1984, CAP students had scored 79% while CAS students scored 93%. In the fall of 1985, CAP students scored 85% and CAS students scored 96%. However, in the winter of 1985 the results indicated that there was no significant difference in the performance of CAP and CAS students on the EOTR. Further, when the two groups were reviewed in the Basic Reading and Writing course, CAP students performed better than CAS students. CAP students earned 85% and CAS students earned 53%. Orbach (1988) reported that in this course because of

the small sample size, a meaningful Chi Square analysis was not possible. This study demonstrated that when students who enter through special access programs are provided with support and treated as other regularly-admitted students, over time they performed equally or better than other students, and persist to graduation. Orbach (1988) explains the CAP students' success as being related to non-academic factors, but attributing their success to their acclimation to the university or the social integration to the university.

Programs to Improve the Retention Rates of Minority Students Admitted to Universities with Lower Entry Scores

An American Council of Education (ACE) study reported by Wilson and Melendez in 1986 indicated that African-American students were far more likely to drop out of college than their non-minority peers. In 1981, 50.1% of the white freshmen continued to be enrolled and graduated by the fall of 1985 whereas only 32.1% of the African-American students did so during the same period (Giles-Gee, 1989). Further, the ACE study showed that African-American students at predominately black institutions had a closer personal relationship with faculty members; however, at predominately white institutions, black students experienced more alienation (Giles-Gee, 1989). Therefore, the ACE study supported Fleming's (1984), conclusion that the low rate of

affiliation with the colleges was linked to a decreased desire to remain in school and the possible decline in their academic performance (Giles-Gee, 1989).

According to Trippi and Cheatham (1991), retention studies have produced contradictory results. They reported that several studies conducted in the past had produced some useful results. Their report included a study by Mow and Nettles (1990) in which they reviewed several retention studies, and reported that when academic ability and socio-economic status (SES) were controlled, researchers found that African-American college students' retention rates were similar to or greater than those of white students. Thus, they suggested that given these findings, African-American students' overall retention rate could be improved if they were accepted to college immediately after completing high school and if some methods could be used to compensate for the differences in their preparation for college and SES (Trippi & Cheatham, 1991).

In another study, Nettles, Thoeny and Gosman (1986) stated that African-American students' poorer academic integration to college campuses, lower satisfaction with the collegiate experience, poorer study habits, and generally more incidence of adjustment problems might result from some personal and behavioral factors. They also argued that many African-American students' academic success in college seemed to be more dependent on aspirations and goals than on

their high school grades or admission test scores (Trippi & Cheatham, 1991).

A study was conducted at Towson State University to evaluate the effect of an individualized advising program, study skill's development training, and the use of tutorial services on the performance of African-American students. Participants in the study accounted for 135 of the 258 first-time African-American freshmen entering the university between 1986 and 1987. There were 95 females and 40 males. The findings in this study indicated that after one year African-American students who had participated in a retention program that emphasized academic advising, study skills development training, and tutorial services were able to improve their grades significantly and consequently increase their retention rate (Giles-Gee, 1989).

The faculty members who participated in this program were nominated by The Directors of the Counseling, Orientation, Tutorial, and Advising Offices to serve as student advisors. Faculty members who served as students' advisors were paid a stipend of \$1,300 to their regular salary and assigned eight students. Their responsibilities included: assisting students who had been advised in early academic self-assessment, helping students use services, serving as role models, assisting students with faculty interactions and completing a monthly form to aid the tracking of individual student participation.

The advising program used for these students was different from the advising offered to black students in previous years. These students had advisors contact them by mail and by telephone, and these students were provided with the names, department, location and office telephone number of their advisor. This had not been done before and in the past advisors waited for students to contact them.

The study skill's development training took on a different approach because the advisor was given the materials to assist the student with academic self-assessment. In addition, these students were asked to answer a series of questions that had been developed by the Director of Orientation and Advising to help them determine their area of weakness. Further, students and advisors attended fall and spring workshops where they had an opportunity to discuss black students' level of satisfaction with the program (Giles-Gee, 1989). The data in this study suggested that issues affecting African-American student retention were multivariate in nature and not single focused (Giles-Gee, 1989).

Clewell and Ficklen (1987) reported on a Special Services Program at a major predominantly white institution that had the highest retention rate of the 16 institutions in this state system. This particular institution enrolled over 10,000 students with 10% were African-Americans and 3% other minorities. Eighty percent of the students lived on

campus. The Special Services Program was a federally funded project designed to enroll students who did not meet regular admission criteria, but could be enrolled through this program. These students were first-generation college, and economically, educationally or physically disadvantaged.

Out of 96 students admitted to the program, 76 were African-American. The program provided academic advising, mathematics, reading and study skills development, writing instructions, and tutoring and counseling. Students were required to take assessment exams in writing and mathematics, and a program of study was developed before they were allowed to register for classes. These students were also required to meet regularly with a counselor and attend tutorial sessions.

The Special Services Staff included: a full-time director, counselor, reading and study skill's specialist, secretary, mathematics specialist and a tutorial coordinator. Upper division students and graduate students provided tutorial assistance.

The Special Services Program students had a higher retention rate than other students who were admitted with similar profiles but did not participate in the program. The one-year retention rate for Special Services Program participants was 87% versus 39% for those who did not participate in the program. Further, students rated the

program with a high degree of satisfaction (Clewell & Ficklen, 1987).

Chapter Summary

In summary, students are continuing to enter college often needing some support in making the transition from high school to college and needing some additional preparation before they begin their college career. The programs cited in this chapter were designed to assist students who were often underprepared and needed assistance in bridging the gap between their high school experience and college life. These programs often used different approaches, but they were designed to improve the students' academic abilities and increase their retention, because often these students entered underprepared and often fell victim to what is often cited as the "revolving door syndrome," in one semester and out the next. The literature focused on transitional approaches, retention, and academic development.

Chapter III

METHODOLOGY

The purpose of this study was two-fold. First, the study was designed to determine differences in the impact of the VSTP program prior to 1987 which primarily provided developmental educational experiences, as compared to the program offered in 1987 and subsequent years which provided academic class experiences based on the participants' capabilities. This aspect of the study measured impact on first-year retention rates, grade point average, mathematics and English grades. Second, the study was designed to evaluate the perceived impact of the program on those students who participated in the program during the summer of 1990.

Research Design

The research design was a summative evaluation study employing two methodologies. The first evaluation consisted of a pretest/post-test design which utilized first-year retention rates, first-year grade point average and mathematics and English grades from participants in the 1986 VSTP program to establish a baseline (Barlow & Herson, 1984 and Isaac & Michael, 1990) from which differences in these variables in the 1990 participants could be analyzed. The second evaluation consisted of a survey of participants

perceptions of change utilizing the content analysis of structured interviews to describe reported common patterns of program impact.

Research Questions

In this study five research questions were investigated. They were as follows:

Question 1: How well did the VSTP program meet its stated objectives during the 1990-1991 academic year?

Question 2: How did the 1990 VSTP participants perceive the impact the program had on their academic performance during their first year of college?

Question 3: What impact did the program have on the first year retention rate of the 1990 VSTP?

Question 4: What were the most beneficial and least beneficial aspects of the program as reported by the participants?

Question 5: What part of the program would the participants retain or change?

Appendix F provides a description of instrumentation, research questions, program objectives, interview questions for student and staff, and objectives of the program.

Population

Baseline Study

Prior to 1990 a VSTP program was operating. This program differed in many aspects to the one under study, but it was able to provide baseline subjects for the study of the VSTP program in question. The 1986 VSTP participants' data served as the baseline for this study. Their academic profile reflected a high school GPA of 2.30, a combined SAT of 751, an average first year GMU GPA of 1.70, average freshman English GPA of 2.16, freshman mathematics GPA of 1.25 and a first year retention rate of 67%.

The 57 VSTP participants in 1990 were freshmen who had been admitted to the university with the condition that they successfully complete VSTP. These students were required to attend the program before entering their freshman year because of their academic profile. Their academic profiles indicated that assistance with their transition to college was needed, or that some remediation in mathematics, English, reading or study skill development was necessary.

Evaluation Survey

Participants: The participants in this study were 46 of the 57 students enrolled in the 1990 VSTP summer program. Five percent of the 1990 VSTP students were in the military and stationed out of the country. Another 5% had transferred to other universities and could not be located, and another 3% declined to participate in the study. The 1990 VSTP

students' academic profiles reflected an average high school GPA of 2.46 and combined SAT of 757.

Peer Counselors: The five peer counselors employed during the summer to assist the students were upper class students selected on the basis of academic performance at George Mason University who had either participated in VSTP in previous years or had a commitment to assisting other students with their transition to the university. In addition, students selected to be peer counselors were required to tutor either mathematics, English or reading.

Program Coordinator: The program coordinator was hired by George Mason University as the Assistant Director of Minority Student Services. This person was responsible for the total management of the program.

Instrumentation

Structured Interview

The 1990 VSTP participants were asked a series of questions about their participation in the 1990 program and their perception of the program (see Appendix II). The 1990 VSTP peer counselors and program coordinator were also asked a series of questions concerning their role with the program and their perception of the students' participation in the program (see Appendix III). The interviews provided the researcher with an opportunity to probe for clarification of answers provided by those questioned while also allowing for

elaboration. All the interview questions were designed to obtain answers to the research questions as they were related to the objectives of the program (see Appendix F).

Institutional Data

Students' transcripts were used to collect data on their first-year academic performance. Data from the University Office of Information and Research on the university retention rates were used to determine the retention rates for the 1986 and 1990 VSTP participants.

Procedures

The method of data collection for this study consisted of a structured interview schedule, data from 1986 and 1990 VSTP student's first-year transcripts, and first-year retention data collected by the University Office of Information and Research.

The 1990 VSTP participants, peer counselors, and the program coordinator participated in sixty minute interviews, answering a series of open-ended questions. These interviews were conducted at a time that was convenient for the interviewees. These interviews were conducted in the researcher's office and at the homes of the interviewees who were not enrolled in school at the time of the interview. The questions used for the structured interviews were open-ended (Yin, 1984). With the permission of the interviewee,

all interviews were taped and transcribed to ensure accuracy and clarity when analyzing the response data, and to control researcher bias.

Interrater Reliability

The researcher used two raters to rate the responses to the interview questions in this study. In order to determine interrater reliability, both raters rated the same 10 interviews. A percent of agreement on the responses to each question was computed. For questions that had poor interrater agreement, similar categories were collapsed to improve interrater agreement. After interrater agreement was established with the first 10 interviews, the remaining 33 interviews were randomly divided between the two raters. Table 1 below gives the percent of agreement for each question.

Table 1
 Percent of Agreement
 for Each Interview Question

<u>Question</u>	<u>Percent of Agreement</u>
1. What did you understand the objective to have been?	74.4
2. Describe your experience in STP.	43.4
3. What courses did you take?	27.4
4. What were your academic needs in Freshman English and Dev English?	58.9
5. What were your academic needs in math or pre-calculus?	90.9
6. What were your academic needs in reading?	99.9
7. Describe your academic experience in freshman English or Dev writing.	84.7
8. Describe your academic experience in reading.	66.6
9. Describe your academic experience in Dev math or pre-calculus.	72.8
10. How was your academic program tailored or not tailored to fit needs.	87.6
11. Describe how your academic and career needs were or were not met by the program.	56.6
12. Describe how your personal needs were or were not met by the program.	66.7
13. Describe how the orientation to the university and the program assisted you with your transition from high school to GMU.	58.8
14. Describe your interaction with the program coordinator.	81.9

<u>Question</u>	<u>Percent of Agreement</u>
15. Describe your interaction with the peer counselors.	80.1
16. Describe your interaction with other faculty, administrators and staff.	90
17. What kind of study skills development assistance did you receive from the program.	63.7
18. Describe your class experience in any of the other subjects you took during the summer.	75.1
19. Describe your experience in the various activities that you participated during the summer.	83.3
20. What things did you learn in the program that assisted with your academic performance during the first year in college?	83.3
21. What things did you learn during the program that has or will help you continue your education?	87.9
22. Do you plan to stay in school to completion based on your experience in this program?	69.3
23. Do you believe that school will be beneficial in your lifetime based on your experience in this program?	91
24. What were the most beneficial aspects of the program?	50
25. What were the least beneficial aspects of the program?	72.8
26. What components of the program would you retain?	64.2
27. What components of the program would you change?	84.7

The average percent of agreement across the interview questions was 74.87%. Question three had a very low percentage of agreement (27.4%), indicating some confusion by the raters on the subjects. Rather than rely on the memory of the interviewee for this question, information concerning the courses the students took was obtained from the students' files.

Limitations

The results of this study were limited since other variables that could not be controlled by the researcher may have influenced the findings. One of the chief threats to internal validity in this study was the student's prior academic history, influences by other persons not involved with the program or university and some other non-academic factors. In addition, generalizing the findings from the analysis of the interviews was limited to similar programs. Further, this study was limited to how accurately the respondents answered the interview questions.

Analysis of the Data

In the evaluation survey, the data obtained from the interviews were analyzed using content analysis to categorize the data and summarized using percentages. The content analysis provided an examination of the data to

discover similarities, differences, and other patterns in the responses (Strauss & Corbin, 1989).

In the baseline study, the data from the 1986 VSTP class served as the baseline. The data of the 1990 class were analyzed in an effort to determine whether the 1990 program met its objectives, and the impact changes in the program from 1986 to the 1987 model had on students' academic performance. Since the program was changed after 1986 because of the low retention rate, low grades earned in freshman English and mathematics, and overall low academic performance during the freshmen year, a t-test was used to analyze the differences in the mean for retention rates of the 1986 and 1990 program. A t-test was also used to analyze the differences in the grades earned during the freshman year for 1986 and 1990 class, and a t-test was used to analyze differences in the means for grades earned in freshman English and mathematics for both the 1986 and 1990 VSTP classes.

Chapter Summary

The purpose of this chapter was to describe the research design, instrumentation, study population and data collection procedure. The results and findings of this study are in Chapter IV and the conclusions, implications and recommendations are in Chapter V.

CHAPTER IV

THE RESULTS OF THE FINDINGS

The purpose of the study was to evaluate the changes that occurred in the program after 1986, and to determine if the objectives of the program were being met. The data used in the study included the academic records of the 1986 and 1990 program participants and data collected from actual interviews with the 1990 program participants and staff.

In this chapter the results of the study and analysis of the data are presented. The chapter is divided into the following subsections: Research Questions, Characteristics of the Sample, Program Effects, Strengths, Weaknesses, and Participant Reactions.

Research Questions

Five research questions were entertained. These were:

Research Question 1 - How well did the VSTP program meet its stated objectives during the 1990-1991 academic year?

Research Question 2 - How did the 1990 VSTP participants perceive the impact the program had on their academic performance during their first year of college?

Research Question 3 - What impact did the program have on the first year retention rate of the 1990 VSTP?

Research Question 4 - What were the most and least beneficial aspects of the program as reported by the participants?

Research Question 5 - What part of the program would the participants retain or change?

The data obtained from the academic records of the two groups were analyzed using a t-test to determine if there were any significant differences in the groups as stated by research questions 2 and 3. The data collected from the interviews were used to provide additional answers to questions 2 and 3. The interview data were also used to answer research questions 2,3 and research questions 1, 4 and 5.

Characteristics of the Sample

There was a total of 93 VSTP participants in the combined VSTP groups for 1986 and 1990. The entering high school GPA and SAT scores for participants are listed in Table 2. The high school GPA and combined SAT scores are provided only as background information on the VSTP participants.

TABLE 2

High School GPAs and SAT Scores of 1986 and 1990 VSTP

	<u>1986</u>	<u>1990</u>
H.S. GPA	2.30	2.46
SAT	751	757

The 1986 VSTP group represented 38.7% of the sample and the 1990 VSTP group represented 61.3% of the sample. The combined mean GPA for these groups was 1.83 (SD =.66). The mean for the combined group was very low, however, the range was from 1.57 to 3.12, indicating a very wide range. The persistence rate for the combined 1986 and 1990 VSTP group was 76.3%. The frequency rates for the combined group of students who took mathematics are listed in Table 3 along with the combined mean GPA for 1986 and 1990 VSTP participants. The mean GPA for all 1986 and 1990 VSTP participants who took mathematics without regard to the type was 1.38, (SD = 1.11).

Ninety-one students from the combined group of 1986 and 1990 took English 101. The mean GPA for this combine group was 2.58 (SD = 1.06).

TABLE 3

Math Grades, Means and Standards
Deviation For Combined 1986 and 1990 VSTP

<u>Math</u>	<u>N</u>	<u>Grade</u>	<u>SD</u>
106	13	1.69	1.18
108	17	1.12	.93
110	9	1.33	1.22
113	6	1.50	1.38

Research Questions and Statistical Data

Five research questions were used in this study. Three are addressed in this section and the other two in a later section of this chapter.

Research Question 1 - How well did the program meet its objectives during the 1990 academic year?

The first objective of the program was to improve the levels of academic performance through developmental and academic courses in English, reading, and mathematics. Reading was not offered during the first academic year, only English 101 and mathematics 106, 108, 110, and 113.

A t-test was used to determine if there were any significant differences in the grades earned in mathematics by the 1986 and 1990 VSTP participants. There were no significant differences between 1986 and 1990 in any of the mathematics courses taken by the participants (see Table 4). For math 106 and math 113, the number of students who took the course was too low to compute a meaningful t value.

TABLE 4

Mean and Standard Deviation On Math
Grades Earned By Students in VSTP in 1986 and 1990

	<u>Year</u>	<u>Freq</u>	<u>Mean</u>	<u>SD</u>
Math 106	1986	2	2.50	.71
	1990	11	1.54	1.21
Math 108	1986	7	.86	.90
	1990	10	1.30	.95
Math 110	1986	4	.75	.95
	1990	5	1.80	.58
Math 113	1986	2	2.00	1.14
	1990	4	1.25	1.50

In addition, there were no significant differences found for math when the math grades for all math courses were combined for each year. The 15 students who took math in 1986 had a mean of 1.20 (SD = 1.02), and the 30 who took math during the first academic semester in 1990 had a mean of 1.44 (SD = 1.13).

A t-test was used to determine if there were any significant differences in the grades earned in English during the first academic year by the 1986 and 1990 students. There was a significant difference found between the 1986 and 1990 VSTP groups in English 101 ($t = -2.35$; $df = 1, 89$; $p < .05$). The 1990 VSTP students earned a

significantly higher grade in English 101 (mean = 2.77, SD = .97) than the VSTP students who took English 101 in 1986 (mean = 2.24, SD = 1.14).

Research Question 2 - How did the 1990 VSTP students perceive the impact the program had on their academic performance during their first year of college.

A t-test was used to determine if there were any significant differences in the first year academic performance between the 1986 and 1990 VSTP groups. The 1986 VSTP group had a mean GPA of 1.72 (SD = .67) and the 1990 VSTP group had a mean GPA of 1.90 (SD = .642). No significant difference was found in academic performance ($t = -1.29$; $df = 1,91$; $p > .05$).

Research Question 3 - What impact did the program have on the first year retention rate of the 1990 VSTP students. The persistence rate for the 1986 VSTP group was 66.7% and 82.5% for the 1990 group. No significant difference was found in the persistence rate for these two groups of students ($\chi^2 = 3.04$, $df = 1$, $p > .05$) Table 5 shows the number of students who entered and returned the following fall semester for 1986 and 1990 VSTP groups.

TABLE 5

Enrollment and Retention Rates on the 1986 and 1990 VSTP

	<u>1986</u>	<u>1990</u>
Enrollment	36	57
No. return	24	47
Retention	66.7%	82.5%

Even though there were no significant differences found between 1986 VSTP and the 1990 VSTP classes, the 1990 VSTP persistence rate was as good or better than the overall university rate for all students with the exception of those students who enrolled with extremely high GPAs (see Appendix D).

Research Question 4 - What were the most and least beneficial aspects of the program?

This question was answered by utilizing the data collected from the interviews with the students and staff.

Specifically, student interview questions: (24) "What were the most beneficial aspects of the program?" and (25) "What were the least beneficial aspects of the program?" and staff interview questions: (18) "What were the most beneficial aspects of the program?" and (19) "What were the least beneficial aspects of the program?" answered this research question. This data will be reported in the next section.

Research Question 5 - What components of the program would you retain or change?

This question was answered by utilizing the data collected from the interviews with the students and staff.

Specifically, student interview questions: (26) "What components of the program would you retain?" and (27) "What components of the program would you change?" and staff interview questions: (20) "What components of the program would you change?" and (21) "What components of the program would you retain?". This data will be reported in the next section.

Project Effects

The data collected from both the students' academic records and the interviews provided information concerning the effects the program had on the students. These program effects are discussed in this section. Appendix C provides a statistical summary of the interview data.

When the 46 students who participated in the 1990 VSTP were asked whether the program had met its objectives, all of the student answered affirmatively. They felt that the program had a significant positive effect on them making the transition from high school to college, and that the program had provided a solid foundation for them to begin their college careers. One student stated "without the head start that the program provided for me I would not have stayed in

college". Another said "the program provided me with a solid foundation for learning and helped me overcome my shyness."

The program had an important effect on the students academic performance in courses such as English and mathematics and other courses indirectly. The program objectives stated that the program would improve the students' levels of academic performance in English, mathematics, and reading. During the summer program, students took classes in reading, English, and mathematics. Some of the students took developmental writing or freshman English and pre-calculus or developmental math. While no significant differences in grades were found for mathematics, there were significance differences in English grades with the 1990 VSTP group earning higher grades in freshman English, the 1990 mean = 2.77, and 1986 mean = 2.24, ($t = -2.35$; $df = 89$; $p < .05$). Even though the statistics indicated that there were only significance differences for English, the program had some important effects on the students' performance that was not identified by the statistics. Seventy-five percent of the students indicated that they were able to improve their writing skills by learning to organize their papers, stay with the main idea, and proof their papers several times before turning them in for class. The students who were required to take the developmental course felt that their overall

ability in English improved and assisted them in earning a successful grade in English.

The majority of the students admitted that math was a difficult subject for them. While there were no statistically significant differences in math grades between 1986 and 1990 students and the grades for each of these groups were low (1986 mean = 1.20, SD = 1.44; 1990 mean = 1.44, SD = 1.13), program effects were perceived by students to be more important than the statistical data demonstrates. Almost three-fourths of the students reported that they had improved their math skills. Even students who stated that they did not like math and those who were not required to take math were pleased that they had taken the course since it help them to improve their skills and assisted them in preparing for the next level of math courses. One student stated "I did not like math but I knew I needed to overcome my fear of math and the instructor took extra time with me, he helped me a lot." Another student stated "I did not need to take math because I placed out of it, but taking the class helped me even more and I helped the students in the program."

The reading course was designed to help students with problems that they might experience in any of their college courses. The program had an important effect on the students reading abilities. Through the assistance of the program, the students were able to improve their reading

comprehension, vocabulary and word usage, and their ability to retain information over a longer period of time. Students reported experiences where they were able to feel comfortable with their reading abilities for the first time in their education. One student stated "I had a problem with reading, I could not remember what I read from one page to the next, the class helped me learn to focus on what I was reading." Another student stated "the books we had to read, I read things that I had never read before, it introduced me to Black History. In my high school Black History was not deeply covered; learning to be a better reader and taking the Black History class enlightened me on the subject of my history."

The program was designed to assist students to improve their academic abilities, to learn new methods of studying, and introduce them to the university climate. By tailoring the students' academic program to fit their particular needs, they were placed in courses that matched their abilities. This provided an opportunity for the students to learn and not feel pressured to move at a pace they were not equipped to handle. When asked whether they felt their academic program fit their academic need, 86% of the students stated that the program did meet their needs. The utilization of placement exams enabled the program to place students in the appropriate classes. Several students stated that they were able to learn how to use the computer

to write their papers which improved their English writing skills on papers and, that the math courses prepared them to pass math 108 and math 113, the two most difficult math courses.

In addition to the effect the program had on the students' academic performance, there was some personal value gained from the program. Several students reported that the program assisted them in learning how to deal with people who had different backgrounds and helped them learn how to work with other students in groups on projects. Other students talked about how the program helped them learn to be responsible and accountable for their behaviors and actions.

The program had an important effect on the students' ability to improve in a variety of areas, including relationships with their peers, peer counselors, staff and faculty members, and with the university. Fleming (1984), in her book "Black In College" and Orbach (1988) in her study at Metro University both mentioned the importance of African-American students developing a relationship not only with the faculty and staff, but also with the institution in order to feel a sense of belonging, remain in school, and succeed academically. Seventy-two percent of the students interviewed reported that they developed a great relationship with the program staff and that the peer counselors were invaluable to them. They reported that the

relationships they were able to develop with other students who were determined to succeed helped them obtain that same determination, and the friends that they made were so important to their success. The program staff clearly saw the relationships the students developed with each other and the program faculty and staff as having a meaningful effect on the students' ability to continue their education and perform better in their classes.

The students also reported that the orientation to the university provided by the program gave them an opportunity to learn how the university operated and to meet other faculty and staff who talked with them and encouraged them to be successful at the university. The orientation was successful in helping the students eliminate a lot of the nervousness that students experience on the first day of classes, attempting to weave their way through the maze of finding their classes, the business offices, the cafeteria, and other places of importance. Program participants indicated that this was not a problem for them because they knew where to go for help and the people to see when they had a problem.

Almost all of the students admitted that the program was rigorous, requiring almost all of their time during the summer and often leaving them drained and tired. But they also admitted that the program prepared them for the academic year because the course load in the fall was easier

to handle since they did not have to take as many classes each day as they were required to take during the summer.

They also reported that the study skill's development sessions taught them new methods of studying. They learned that they could not wait until the night before to study for an exam, and that they needed to complete several drafts of a paper before it was ready to be turned in for grading. Many of the students stated that they had not learned how to study in high school and that they were able to get by. During the program however, they learned that studying in college was different, requiring different study methods and more time. Time management was often mentioned as one of the most important things that they had learned during the program. It was also mentioned as one of the most important skills contributing to their academic performance during their first academic year. All of the staff reported that time management was one thing that would help students continue their education.

When asked what they learned during the program which assisted them in their first year of college, 72% of the students reported that learning how to study, how to prepare for classes, and where to get help when necessary were most important. They also reported that feeling they had staff and faculty at the university who cared about them and were willing to help when they encountered a problem made them approach their college experience with a lot more

confidence. In addition, several students reported that the communication course was instrumental in assisting them to develop confidence in their ability to speak in front of a group, ask questions of professors, and not feel as if they were dumb or stupid.

Riordan (1987) in her study indicated there were other values which the program had provided to the students that went far beyond academic ability. A large percentage of the VSTP students were able to persist against odds, when they had not been prepared sufficiently in high school to handle college level work. This value was evident in the statements by the students interviewed as they attested to the fact that the program was instrumental in helping them realize the importance of education and develop the determination necessary to remain in school. Eighty-nine percent reported the program had helped them realize that education, the need to persist, and the need to improve their academic abilities were important to them as young black Americans.

Additionally, the students credited the program with providing them with awareness of themselves and assisted them with understanding how important education is to their life. One student stated, "education is the only way people could obtain a certain level in life." Another stated, "if I had never come to college and had an opportunity to understand what goes on at the university, I would be a

totally different person. People who never come to college have no idea what goes on here, at a university you experience everything, if not for yourself but through other people."

The program provided these students with the foundation and guidance necessary for them to begin to improve their academic skills and develop a solid foundation for success. The staff reported that the students began to improve academically and they observed the majority of the students developing a success oriented attitude.

Strengths of the Program

To present the strengths of the program, the researcher used the responses from both the student and staff interviews. (See code book for response percentages in Appendix C.)

The majority of the students and the staff reported that one of the strengths of the program was the transition to the university provided by the program. The bridge that this program provided between high school and college has become so important to freshmen students all over the country. At present almost every four-year and two-year institution in the country operates some type of pre-college or transitional program during the summer. Both students and staff reported that this transition period provided an opportunity for students to get use to the idea of being

away from home for the first time, learn how to make decisions on their own concerning their life and careers, and realize they had to be more responsible for themselves. In addition, the students cited learning to share a living space with someone unfamiliar as a new experience, and one that presented its share of problems, but something they learn to adjust to. One student stated, "Growing up helped me figure out what I wanted out of life. It showed me that I could be successful."

The program provided the students with an opportunity to take developmental courses and improve their academic ability, and the opportunity for them to take courses for credit based on their ability. If they were not prepared the program provided the faculty and support staff to assist them in improving their ability. The placement exams, which were administered at the beginning of the program, provided an opportunity for students to be placed in courses based on their ability. These placement exams served an important function for both the student and the faculty. The students were provided with data which indicated they had some deficiencies and needed to work on them. This data provided the faculty with an idea of the ability of the students enrolled in their class to handle certain levels of work. This placement information also eliminated some of the frustration students in previous programs had experienced who complained of not wanting to take the developmental

courses because they felt they did not need improvement. With the changes implemented after 1986, the program gave students the opportunity to demonstrate their qualification to take credit courses. Further, any student who did not do well on the placement exam could request another opportunity to retake the exam.

Another strength of the program cited by the students and staff was the study skill's development training which the students received during the program. Several students stated they had not been successful at studying in high school and others mentioned they did not really see a need to study. However, during the program, with the rigorous schedule to which the students were exposed, they began to realize the importance of studying. The student participants were exposed to a number of studying techniques. These techniques were designed to help students learn how to study for the different kinds of courses they were taking. The study skill's development training was cited by close to 60% of the students as the one thing that assisted them academically during the first year of college, and made a difference in their college career.

When the students were asked what were the most beneficial aspects of the program, one student stated, "The trips that we took gave us an opportunity for everyone to be together. Getting a real feel for college life, meeting new people and the study skill's development training." More than 50%

of the students cited "getting to know people" as one of the most beneficial aspects of the program. Students reported that the course for academic credit was an important strength of the program, along with the knowledge they learned from these courses and the assistance they were able to receive from the instructors. Some students reported that the instructors were very caring and genuinely concerned with their development. One student commented, "the instructors were great, I could not have made it through without their constance support."

The program was designed with a very tight structure to provide the best possible system for the students' development, academically and emotionally. The structure of the program was cited by both the majority of students and staff as being one of the most beneficial aspects of the program. The structure provided an opportunity for students to improve and enhance their academic ability. It also provided an opportunity for students to explore new things within the university structure and learn something about themselves in the process. About the structure, one student stated, "The tight structure. I wouldn't slow down at all." Another stated, "I did not want to be here at first, things were too difficult and we were required to do too much work, I could not keep up, the instructors and the students helped me, and I would keep the structure just the way it is." And another stated, "It's tough but I would not change the

structure at all because in the fall you appreciate the tight schedule."

Some students attended classes or seminars from 7:30 a.m. to 5:00 p.m. with additional time required for study hall at night. The tight structure assisted the students in learning the real value of time management and planning ahead to complete their class work. Another important strength of the program was the design to assist students in being successful. Many of these students were underprepared for college but some of the small successes they had obtained were important. One student mentioned learning to overcome his/her shyness. Another mentioned that she was able to feel comfortable with her writing ability for the first time, and yet another mentioned learning to overcome a fear of taking math. Still others mentioned other things such as earning an A in English for the first time, learning things about Black History that they never knew, and reading books they had never imagined existed. The program met students at their academic level and tried to move them beyond that particular point to improve their academic performance.

Research studies have shown that early exposure to college and pre-college programs have had a important effect on students' ability to improve their academics and persist from one year to the next. Riordan (1987) found that even though the students were not as prepared as the other

students who entered during the same period and their first year grades were not as good, the students who participated in the program did persist with their education. In another study conducted at Baruch College, Tan (1985) found that these high-risk students were able to persist from year to year and their improvement took place gradually.

Fleming (1984) and Tinto (1983) talked often about the importance of first-time college students developing a sense of belonging and making a connection with one or more persons on the campus with whom they could develop a relationship. These relationships have been found to be an important factor to these students, persisting to graduation and improving their academic performance. One of the strengths of the program, as identified by the majority of the students and staff, was that the students developed a connection with the program and a sense of belonging with the other students and especially with the staff. Many students saw this as one of the many values of the program. They talked about the many friendships they had developed and the relationships they were able to develop with the program staff. Many students credited these relationships with being one of the critical elements which assisted them in remaining in school and working to be successful.

Weaknesses of the Program

There were several weaknesses identified by both the students and staff during the interview process. These weaknesses were presented as answers to the questions concerning the least beneficial aspects of the program. A few of the weaknesses were identified also with answers to other questions and have been teased out and presented here.

The majority of the students and staff found very few weaknesses in the program. Almost 50% of the students and 60% of the staff reported no "least beneficial" aspects of the program.

One weakness which was identified by the students was the fact that the program had too many rules and regulations and tended to "mother" the students too much. Many of these students felt they did not receive the same kind of "mothering" during the academic year and they were often not ready to handle structuring their own lives. Another weakness identified was that the summer structure was not really similar to the fall. During the summer program the students had classes or activities scheduled from 7:30 a.m. to 5:00 p.m., with some additional study time at night. Several students felt this was a problem for them during the fall. They had difficulty getting use to having so much free time, and it often affected their study habits.

A few students mentioned that during the summer everyone acted like family, but during the fall there were

so many other people that often the same family atmosphere did not exist. Further, the fact that during the summer the program was 99% African-American often gave students the impression there were a large number of minority faculty members and students at the university, and in the fall, this was not the case. Several students mentioned that classes during the summer were all African-American and in the fall they often found themselves in classes with only one or two African-American students and on many occasions none. This for many students created problems for them adjusting to classes in the fall. During the summer, the classroom had been a friendly environment, but during the fall, students often saw it as hostile and impersonal.

A few students reported that while the contact they had with the peer group during the summer and academic year was great, their contact with the administrative staff during the summer was limited, and during the fall it was only when they were being called in because they had earned less than satisfactory grades. These students reported that they needed more contact with the administrative staff throughout the year.

Another weakness identified by both the students and staff was that the program did not provide an opportunity for all students to take a least one class for credit. Students and staff felt this was important and would have helped those students who did not take any courses for

credit feel better about their ability to do college level work if they had.

Lastly, a weakness which caused problems for some students was the information they received from the admission office concerning their reasons for being in the program or how they perceived this information when they received it. A small number of the students felt as if they did not need the program since they believed they had come from a reputable high school with strong academic credentials. It often took these students much longer to adjust to the program and become receptive to the assistance the program provided.

Participants' Reactions

There was a wide range of reactions to the program. Most of them were good, but there were a few that were not. The majority of the participants viewed the program as serving a very important function in their life. They reported that the program had assisted in ways which statistics could not report. This assistance ranged from helping them to improve their academics and helping them overcome their shyness and grow into a young adult, thereby bridging the gap between high school and college.

The majority of the participants described their experience in VSTP as being one which made the college experience more enjoyable, less stressful, and a reality for

them. One student stated that in high school she had always earned the average passing grade to just get by, but her experience in the summer program had taught her she needed to put forth more effort to succeed at the university. Some students credit the program with assisting them in learning to deal with faculty, understanding what the classes were like, and how to handle the class workload. Others saw meeting a lot of new people and making friends as an important component of the program.

Some students did not have a good experience when they first enrolled in the program. They reported feeling it was useless and a waste of their time. Several students reported they did not need the program and resented having to attend. Several of these same students eventually stated that participating in the program was one of the best things they had ever done. One student stated, "the program was fairly easy but I am glad I had an opportunity to meet all the students and learn about the school." Another stated, "I like to write poems and I never wanted people to read them because I thought they would make fun of me, but Mrs. William my English instructor encouraged me to keep writing and told me she thought they were good, that really I helped my confidence."

Several students in both the developmental and academic classes, realized they had been afforded an opportunity to improve their academic ability in a caring environment and

that they had a staff of people who cared with professors who were willing to assist them in learning the subjects. The majority of the students who took the developmental math and writing course came out of the course with improved ability. The students who took developmental writing reported they felt this class was instrumental in developing their skills so that they were able to pass English 101 successfully. The majority of the students in this course reported it was one of the best courses they had ever taken. One student stated, "It was the best course I ever had in English, I got a chance to express myself and it felt good." Another stated, "It did not make me feel inferior or intimidate me, we were all there for one purpose, to learn, if I had any questions or comments I could always raise them and seek help."

Some students in developmental math reported that this class had assisted them in overcoming some of their fear of mathematics and they praised the instructor for the time and care he had taken. Others who took pre-calculus, credit this course with preparing them for the task of passing math 108 and 113. These two courses have the highest freshmen failure rate at the university, about 26.5.1% for first time freshmen students (see Appendix E). Students, who took math during the academic year the first time and did not pass, reported that the math course they took during the program made a difference in how they performed in their math class

during the fall even though their grades did not reflect their success. Many of these students had a very positive reaction to the instructor of the math classes and commented that his ability to communicate and make math relative to life was a new experience but one they appreciated.

The participants had various reactions to the other courses taught in the program, social activities and staff personnel. In general, most of the students reported that the reading course was well taught; they had learned some very needed reading and study skill's techniques, and improved word usage. Several participants felt the class should have been connected more to the other courses. All of the students who took the directive reading felt it was a waste of their time and had no clear direction. One student stated, "it was a waste of my time because I have always been a good reader." Another stated, "I really did not like it but it was very beneficial to me because we had to do a lot of workbooks and study examples of different words that helped me improve my vocabulary."

The students were overjoyed with the communication and Black History courses. They felt the communication course assisted them in developing skills to overcome their shyness. Further, some students credited the course with preparing them to make presentations in front of groups of people, ask questions of professors, and feel confident in

doing both. In general they saw this class as one of the confidence builders.

The Black History class received even stronger reactions from students with 91% of the students reporting that this class provided information about their history to which they never had been exposed. According to the participants, this class shed light on things they had heard about, but had never read or discussed before. The majority of the students complained about the amount of reading required for this class, but they praised the instructor and the course information. Several students reported this course as being one of the key factors for them deciding how important education was to them. Others credited this course with assisting them in deciding they had the confidence to write better papers, handle the rigors of mathematics, earn better grades, and persist to graduation. One student stated, "I was overwhelmed by the books in Dr. Walkers' Black History class." Another stated, "the books we had to read, I read things that I had never read before. It introduced me to Black History. In high school Black History was not deeply covered. This class enlightened me on that subject."

The participants' reactions to the various activities sponsored by the program were mixed. Many of the students reported they enjoyed the activities because they gave them a break from classes and an opportunity to relax. Others

reported they appreciated the opportunity to meet and talk with those students who were not in their classes which they did not get to see or talk with during the week. At first, some participants reported they did not want to attend the cultural activities even though they knew they were required. Many students felt the activities would be boring and they would not be interested since often they had never been exposed to these kind of events. Many of these participants later reported they had the best time ever and this was a new experience which they thoroughly enjoyed. A small number of students did not find the cultural activities enjoyable because they were familiar with the area and had attended some of the functions before. Some of this small number of students also reported they were not interested in the activities because they wanted to use their weekends to go home.

The student participants had several reactions to the peer counselors and program coordinator. Most of the students' reactions were positive. More than 70% of the students had extremely positive reactions to the peer counselors. The students felt they were a great help and served as good role models. A very small percent (7%) of the students had less than a positive reaction to the peer counselors. This small percent felt they experienced difficulty with the peer counselors.

The reaction to the coordinator by the students was good. More than 70% of the students felt the coordinator was "great" and "very helpful," and they enjoyed the interaction they had with her. Less than 7% of the students reported they had a less than satisfactory reaction to the coordinator. These interactions were minimal and often only when they had a problem or they to be disciplined. These students felt they needed more one-on-one support. With regard to the faculty, other administrators, and staff, 56% of the students had a lot of interaction with them. Their reaction to both the administrator and staff was good, even though much of the interaction with the faculty and administrators took place for class and university business related issues.

Overall, the statistical and interview data indicated that the changes which took place after 1986 were instrumental in improving the program. The data also indicated the 1990 program clearly met its objectives.

The majority of the students and staff reported the program was needed and should continue because of the value to the students and institution. This program provided many African-American students an opportunity to enroll in the university and demonstrated they were able to perform on the university level. Many of these students were the students who eventually represented the university in many of the

student organizations and in the various university activities.

Chapter Summary

This chapter presented the project effects, strengths and weaknesses of the program and the participants' reactions. The statistical and interview data can be found in Appendix C. Chapter V presents conclusions based on a complete summation of the findings and results of the study along with implications, recommendations, and suggestions for further study.

CHAPTER V

DISCUSSION OF THE FINDINGS

Chapters 1 through 4 described the need for the study, the problem the researcher investigated, a review of pertinent literature, a presentation of the research methodology employed and an analysis of the data obtained from the research questions. The Program Effects, Strengths, Weaknesses, and Participants Reactions of the study were presented. This chapter summarizes the major points of the study and its findings and presents conclusions and implications, and makes recommendations for areas of improvement based on research findings.

Summary

The purpose of the study was to determine if the changes which occurred in the VSTP after 1986 had a significant impact on participants, and to determine if the 1990 VSTP program met its objectives.

The data of the study included interviews with 46 student participants, 5 peer counselors and the program coordinator of the 1990 VSTP program. Other data were used including the academic records of both the 1986 and 1990 student participants. This researcher examined five research questions to determine if there were any significant differences in the 1986 and 1990 students'

academic performance during their first academic year, the students' grades earned in freshman English and mathematics during the first year, the students' persistence rate, whether the 1990 program met its objectives, and to identify the most and least beneficial aspects of the program.

The interview schedules used for the students included 27 questions concerning their experience in the program and opinions about the program of actual effects on their academic and personal life. The interview schedule for staff included a series of 21 questions concerning their role with the program and opinion concerning their observations of students' experience and behaviors.

The primary statistical methodologies used were t-test to determine differences in the means for first year academic performance and grades earned in mathematics and freshman English for both the 1986 and 1990 participants. The Chi Square was used to determine the differences in the persistence rate between the 1986 and 1990 program participants. To analyze the interview data, a content analysis was conducted on both the student participants' interview responses and the staff's interview responses. A codebook showing the categories which summarize the interview data can be found in Appendix C. This codebook includes percentages of cases reported for each response to the interview questions.

Findings

The first research question addressed how well the 1990 program met its objectives. The literature supported the research findings which suggested the objectives of the program had been met. Research studies conducted by Tinto and Sherman (1983), Tan (1985), and Orbach (1988), supported the finding that transitional and pre-college programs have been successful in improving student's academic performance in the first year of college in mathematics, English, and reading. The statistical data did not provide evidence of significant academic improvement, but the interview data suggested there were major improvements in the students' academic performance.

Further, the findings indicated that the program provided a complete orientation to the university, an opportunity for students to meet and get to know various faculty, staff and administrators, an opportunity for them to make new friends, learn about the university, adjust to the way classes were taught at the university, and assisted them in learning where to get assistance when necessary.

This research question also focused on whether there were any significant differences in the grades earned for students enrolled in mathematics and freshman English. There was no significance difference found between the 1986 and 1990 VSTP groups in their mathematics grades. It was anticipated that there would be a significant difference

found in mathematics. However, the students enrolled in mathematics entry level scores were significantly lower than required at the university. The algebra and pre-calculus courses taught during the summer were not sufficient to assist the majority of the students in successfully completing the mathematics course during their first academic year. In addition, the majority of the students enrolled in mathematics were enrolled in math 108 and 113. Both of these courses have a first time failure rate at the university of 26.5% (see Appendix E).

Research studies by Clewell and Ficklen (1987), and Orbach (1988), support the use of placement exams to place students in courses according to their ability. Further, their research supports the finding that students have been able to increase their writing skills because of the support they received by attending pre-college and transition programs support. Uri Treisman, a professor at the University of California at Berkeley, demonstrated that students were able to increase their ability and master mathematics when more intense forms of mathematics workshops and tutoring were used.

There was a significance difference found in the grades earned for freshman English. The 1990 VSTP participants earned significantly higher grades in freshman English than the 1986 participants. These students earned a mean GPA of 2.77 (SD = .97) to the 1986 mean GPA of 2.24 (SD = 1.14).

Much of the 1990 students success could be attributed to placement testing which placed students in courses appropriate to ability. Thus, the students who needed more assistance received it and students who were ready to take a course for credit received the opportunity. In addition, tutorial assistance and support from the professors was provided as needed. Clewell and Ficklen (1987) found that students often performed better when they were placed according to their ability and given an opportunity to improve. Another study, conducted by Orbach (1988), also supported this finding. She found that the students who entered the university underprepared in English were able to perform as well or better than students who were prepared by the end of the term. She attributed this to the tutorial assistance and academic support the students received, and general support which assisted them in improving their self esteem.

The research findings indicated that the students attributed much of their success in freshman English to the support and teaching of the instructors in the program who took great care to address their weaknesses and strengthen them in the areas that needed it.

Research Question No. 2 focused on the impact the 1990 program had on students' overall academic performance during the first year. No significant differences were found in the overall academic performance between the 1986 and 1990

VSTP students. One way to understand this finding is suggested by the research of Ackerman and Byock (1989) and by Buck (1985). Their research indicates it is not unusual for students who enter the university with slightly lower academic scores than other students to start off slowly academically. Even though they may persist, some of these students tend to improve their academic performance at a slower rate. These students are often referred to as late bloomers. The research has shown that these students, who enter universities with slightly lower scores and need a transitional period to adjust to college, have a gradual increase in grades the longer they are in the system. This study may have failed to find a significant improvement in overall GPA because it was measured too soon in the students' academic program. Ackerman and Byock (1989) and a study by Buck (1985) found that the students GPAs increase as the students progressed through their college career.

Research Question No. 3 focused on the persistence rate of the students and the impact the students perceived that the program had their persistence rate. No significant difference was found in the persistence rate between the 1986 and 1990 VSTP groups. However, even though there was no significant difference, the 1990 VSTP group persistence rate was (82.5%) the highest rate at the university for all groups of students who entered the university during the fall of 1990. The 1990 VSTP group had a better persistence

rate when compared to other African-Americans students who entered the university with slightly higher admission scores than the VSTP group, but less than other regularly admitted students (peer group, 76%), other African-Americans who were regularly admitted students (non peers, 70.7%), other students at the university who were non-African-American, but were admitted with slightly less than the regular admission scores (peers, 69.7%), and all other regularly admitted students at the university (74.1%), (see Appendix D). There are some reasons why the persistence rate of the 1990 students was not significantly higher. During the 1990 year, according to research conducted by the Office of Institutional Research at George Mason University (1990), the persistence rate during this year was low, university and state wide. This was due to the decline of the economy, the increase cost of tuition that forced many students to return to areas closer to home to attend school, and the decline of the financial aid available for students to continue their education.

According to the 1990 VSTP participants, the program was a major reason they were able to remain in school and continue their education. They attributed their academic success and their persistence to the program efforts in teaching them about being successful and how important education was to their future success.

Research Question No. 4 addresses the components of the program that both the students and staff found to be most and least beneficial. The research findings revealed that the positive aspects of the program clearly outweighed the least beneficial aspects. The findings concluded that the most beneficial aspects and strengths of the program were, the transition to the university the program provided, the use of placement exams to place students into courses according to their ability, the additional advising that the program provided for the students during the academic year, and the assistance the students received in improving their academic ability. Other most beneficial aspects included: the program providing students with an opportunity to get a head start with their academics, to meet and make new friends, familiarize themselves with college classes, become acclimated to the university, and develop a sense of belonging while obtaining some needed nurturing from the program staff and faculty.

Studies by Fleming (1984), Orbach (1988), and Clewell and Ficklen (1987), support the findings concerning college students' persistence and their increased academic performance based on their ability to develop a sense of belonging and become acclimated to the institution. This research also supported the finding that pre-college and transitional programs have received good ratings from student participants who have had a good experience with

these programs assisting them with their first year of college.

The findings revealed only a few least beneficial aspects of the program. The least beneficial aspects mentioned were: the program had too many rules and regulations, the program participants did not feel the program operated as a family during the academic year as it had during the summer, all students were not able to take at least one class for credit during the summer program, some students felt they did not need the program, and others needed more contact with the program staff during the year. In each of these cases, the percentage of students supporting these concerns were less than 7%.

The student participants' concerns with the rules and regulations of the program were not unusual since most students entering college right after high school want as much freedom as possible. Because of the academic nature of the program, rules and regulations were deemed necessary to provide some structure in the students' lives. All students were not eligible to take courses for credit because of their scores on the placement exams. These exams were used to place students based on their academic ability and not simply to give students an opportunity to earn credit.

The findings of the interview data also revealed there was a small percentage of the students who had concerns about being required to participate in the program. These

students felt they were well prepared for the academic work at the university and they were eligible to be admitted under regular admission requirements. These students often misperceived the purpose of the program, and even after an appropriate explanation, still harbored some resistance to assistance. Often these were the students who did not perform well academically during the summer or the academic year.

Research Question No. 5 focused on the components of the program that the students and staff would change or retain. The findings were that 67% of the students and almost 86% of the staff felt that all of the program should be retained. A very small percentage of the students and staff felt some changes should take place in the structure with regard to the rules and regulations, such as the need for students to take classes for credit and the need for meals to be provided on the weekends as opposed to giving students money to purchase meals off campus. Both students and staff felt the educational and cultural components of the program should be retained.

The literature supports the findings that programs similar to the VSTP program are extremely valuable in assisting students in increasing their possibility for academic success and providing a period for students to adjust to college life. Further, the findings are supported by the literature showing that these programs have been

instrumental in assisting students to enhance their ability to earn higher grades in English and mathematics and improve their persistence rate. Almost all four-year and two-year institutions around the country offer pre-college or transitional programs. These programs are designed to have some effect on student success.

Conclusion

As a result of this study, it can be concluded that the changes in the program after 1986 assisted the program in providing more structure for students and a method of placing students into courses that more closely matched their academic ability, and provided additional academic support during the summer and the academic year. These changes did have a significant statistical effect on the grades the students earned in mathematics, or on the first-year academic performance of the students even though their GPAs increased slightly. However, the findings from the interview analysis suggested that the students and staff witnessed an increase in their academic performance. The students' academic performance in freshman English was higher than it had been in previous programs. The findings suggested the program had some significant effect on the 1990 VSTP students performance in freshman English. This conclusion is supported by the students' grades earned in freshman English and findings from the interview analysis

where the student attributed their success in freshman English to the assistance provided by the program.

In addition, the findings suggested the changes in the program had no statistical effect on the persistence rate of the 1990 program participants. However, this 1990 group had the highest persistence at the university for all groups of students. Further, the 1990 group had a 16% higher persistence rate than that of the 1986 group. Even though the persistence rate was not statistically higher, it can be concluded from the findings of the interview data that the students and staff attribute the students persistence rate to the assistance the students received from the program.

As a result of the findings in this study, it can also be concluded that the 1990 VSTP program met its intended objectives. The findings suggested that the program assisted students in improving their academic performance, grades in freshman English and mathematics, and their persistence rate during their first academic year. These conclusions are based on the analysis of interview data of both students and staff. The mathematics scores of the students did not reflect this improvement, but the actual student responses suggested the program was more successful than the hard data showed. This was also true of the persistence rate for the 1990 VSTP program.

The researcher concluded that the value of the 1990 VSTP program was greater than what the statistical data

indicated and that the interview analysis allowed the researcher to move beyond the statistical data to uncover data from actual program participants.

Limitations

There were certain limitations to the study. These limitations existed because of the very nature of the study. The results of the study can only be used in the most controlled situation. In drawing conclusions from the statistical data, the results are limited because of the number of variables which could not be controlled, such as prior academic experience of students and other experiences that could have influenced their academic performance and persistence rate.

The result of the interview data were also limited since they relied on students' and staff's perceptions of experiences and students' academic improvement. The study is limited by the collection of the interview data. Since the researcher was also senior supervisor of the program, students' responses could have been influenced by social desirability. If the interview data had been collected by other students or another person with no connection to the program, perhaps the responses would have been different. There were also limits in the coding because two of the questions had low reliability even though the overall reliability rating was good.

Recommendations

This study supported other research studies which have found that programs like VSTP have been successful in assisting underprepared students to enroll in college, improve their academic ability over time with proper support, and persist from one year to the next. This study also supports the notion that the value of the program and what it provides for students is not solely based on what grade they earn in a course but also whether they develop the motivation to learn, improve, and realize they can be successful in a college environment. It further supports Fleming (1984), Tinto (1983), Orbach (1988) and Trippi and Cheatham (1991) contention that when underprepared students, and especially African-American students, are able to develop a sense of belonging with the institution, find someone whom they feel cares about their success, and become socially integrated into the institution, they are more likely to do well and persist.

At George Mason University, there have been discussions over the last four months concerning retention at the university. Much of that discussion has centered around several of the components of the VSTP program. The Board of Visitors raised concerns at the last board meeting during which a report was presented concerning the persistence rate for the VSTP participants and asked why more of the components utilized in this program had not been considered

for the larger student body. The university administration is considering how to provide tutorial assistance for all high-risk freshmen and other students who become high-risk after enrolling at the university. In addition, the university has attempted to incorporate a process similar to the VSTP early alert warning system, where university professors will be asked to provide progress reports on other students who may be experiencing difficulty in their classes.

Riordan's (1987) study recommended changes to the structure of the program, students selection criteria, and possible curriculum adjustments. Two of her recommendations were implemented in the 1990 program. These were the structure of the program and curriculum adjustments. Even with these adjustments, additional changes could improve the program's results. In view of the findings and conclusion of this study, the following recommendations are made.

1. Even though the university has become more selective in accepting students, the academic records of the VSTP students overall have remained constant throughout the history of the program. An effort should be made to select students with better academic records.
2. The program staff should have more involvement in the selection of the students enrolled in the program.
3. An effort should be made by the admission office to ensure that the students admitted to the program have a

clear understanding of the importance for them to perform well during the summer.

4. The program should be recast in a more positive way, emphasizing transitional elements and educational enhancement attributes of the program.

5. An evaluation of the reading course should be conducted to determine how the reading course is to be used to improve the students' overall academic performance.

6. The university should develop a more effective mean of evaluating the students' improvement in reading and mathematics by using pre- and post-test measurements.

7. An evaluation process should be developed to determine effectiveness of the services provided to and used by the program participants after the first and second semester.

8. The university should establish a method for keeping these students together as a group, at least for the first two years of their college career.

9. The program managers should make an effort to enroll students in as many classes as possible together to provide an additional level of support.

10. The university should research additional methods of evaluating this program and find better ways of providing academic support for underprepared students entering the university.

11. A longitudinal study should be conducted to follow one VSTP class for four years examining their academic and social progress.

Recommendation for Future Study

Since this program has had some success in improving academic performance, improving grades in English, and increasing persistence rates, it would be beneficial for the university to attempt to incorporate more of the activities involved with this program for mainstream students to assist with academic performance and persistence rates of other students. Further, it also would be beneficial for the university to determine if more students could benefit from the transition program.

The university should research methods of designing an evaluation process that would provide more hard data which would be usable for evaluating the actual benefits of the program.

It would be useful to do a follow-up study of students participating in the 1990 program to determine whether academic performance does increase with more college level experience as has been suggested.

In addition, a more appropriate tracking system for both program participants and non-participants should be developed to allow for comparison of academic performance and program success.

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APPENDIX A
PROTOCOL FOR INTERVIEWS WITH VSTP PARTICIPANTS

Protocol for Interviews with VSTP Participants

I. Establish level of trust (15 minutes)

1. Introduction
2. Identify purpose of interview and study
3. Answer questions and discuss concerns regarding the study
4. Assure confidentiality of information

II. Discuss interview format (3 - 5 minutes)

III. Interview Questions

1. What did you understand the objectives to have been?
2. Describe your experience in VSTP?
3. What courses did you take?
4. What were your academic needs in freshman English or developmental writing?
5. What were your academic needs in mathematics or pre-calculus?
6. What were your academic needs in reading?
7. Describe your academic experience in freshman English or developmental writing?
8. Describe your academic experience in reading?

9. Describe your academic experience in developmental mathematics or pre-calculus.
10. How was your academic program tailored or not tailored to fit your academic needs?
11. Describe how your academic and career needs were or were not met by the program.
12. Describe how your personal needs were or were not met by the program.
13. Describe how the orientation to the university and the program assisted you with your transition from high school to GMU.
14. Describe your interaction with the program coordinator.
15. Describe your interaction with the peer counselors.
16. Describe your interaction with other faculty, administrators and staff members.
17. What kind of study skill development assistance did you receive from the program?
18. Describe your classroom experiences in any of the other subjects that you took during the summer.
19. Describe your experience in the various activities that you participated during the summer.

20. What things did you learn in the program that assisted you with your academic performance during your first year in college?
21. What things did you learn during the program that has or will help you continue your education?
22. Do you plan to stay in school to completion based on your experience in this program?
23. Do you believe that school will be beneficial in your lifetime based on your experience in this program?
24. What were the most beneficial aspects of the program?
25. What were the least beneficial aspects of the program?
26. What components of the program would you retain?
27. What components of the program would you change?

APPENDIX B
PROTOCOL FOR INTERVIEWS WITH STAFF

Protocol for Interviews of VSTP Staff (Peer
Counselors and Program Coordinator)

I. Establish level of trust (15 minutes)

1. Introduction
2. Identify purpose of interview and study
3. Answer question and discuss concerns regarding the study
4. Assure confidentiality of information

II. Discuss interview format (3 - 5 minutes)

II. Interviews Questions

1. Explain your role with the program?
2. What did you think the objectives of the program were?
3. Describe how these objectives were communicated to the program participants.
4. Describe how the program addressed the students academic needs in English or developmental writing.
5. Describe how the program addressed the students academic needs in reading.
6. Describe how the program addressed the students academic needs in mathematics or pre-calculus.

7. What kind of assistance did the students receive in study skills development?
8. Describe the orientation the students received to academic support services available on campus and their transition to the campus.
9. What do you think the students learned that will assist them in continuing their education?
10. Describe how the program tailored learning services to meet the students needs:
11. What kind of interaction did you observe between students and the peer counselors?
12. What kind of interaction did you observe between the students and the program coordinators?
13. What kind of interaction did you observe between the students and other faculty, staff and administrators?
14. Do you think that students were aware of the academic, career and personal counseling that was available, and if they were, how often do you think they used it, if they were not, why?.
15. What kind of improvement in the students academic performance did you observe?
16. What did you hear from students about their classroom experiences?

17. What did you hear from students about their experiences in program activities?
18. What were the most beneficial aspects of the program?
19. What were the least beneficial aspects of the program?
20. What components of the program would you change?
21. What components of the program would you retain?

APPENDIX C

CODE BOOK

INTERVIEW QUESTIONS

CODE BOOK

INTERVIEW QUESTIONS CODED

Special Note: In order to improve interrater agreement several items listed below were collapsed together (see asterisk).

Recode:

Questions (1) Response 3 and 4 were combined with 1.
(6) Response 1 and 2 were combined.
(10) Response 1 and 3 were combined.
(12) Response 1 and 4 were combined.
(13) Response 3 and 4 were combined.
(14) Response 1 and 3 were combined.
(15) Response 2 and 3 were combined.
(21) Response 3 and 4 were combined.
(22) Response 1 and 3 were combined.
(26) Response 4 and 5 were combined.

Questions Asked of Students	% Students	% Staff
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* 1.	What did you understand the objectives to have been?	
1	Transition H.S. to College	100.0
2	Adjust to a predominantly white school	16.3
3	Adjust to a college curriculum	-
4	Provide a head start to college	-
5	Other	2.3

2. Describe your experience in STP.

1	Learning to deal with faculty	75.0
2	Meet new friends	46.5
3	It was a great experience	32.6
4	Growing up, being on my own	23.3
5	Unnecessary, did not learn anything	2.3
6	Lot of work and intense program	6.9
7	I enjoyed the program and learned what the classes were like	13.9
8	Other	11.6

3. What courses did you take? (eliminated)

- 1 Math 004
- 2 Pre-calculus
- 3 Reading
- 4 English 101
- 5 Developmental English
- 6 Comm 120

4.	What were your academic needs in freshman English or developmental writing?	
1	Improve writing skills	75.0
2	Did not have any/refresher	9.3
3	Organizational skills	20.9
4	Sticking to the topic	9.3
5	Other	11.6

5.	What were your academic needs in mathematics or pre-calculus?	
1	Improve math skills	72.1
2	None/refresher course	18.6
3	Did not like math	9.3
4	Did not take math	7.0
5	Other	

* 6.	What were your academic needs in reading?	
1	Learning to read a lot of material	37.0
2	Reading comprehension	7.0
3	Improving my vocabulary	46.5
4	No particular needs/refresher	11.6

7.	Describe your academic experience in freshman English or developmental writing.	
1	Great experience, instructor was wonderful	46.8
2	Learning to improve my writing skills	39.5
3	Learning to improve my organizational skills	9.3
4	A lot about myself from learning to write in a journal	4.7
5	No real value	9.3
6	Other	11.6

8.	Describe your academic experience in reading.	
1	Improve reading comprehension	21.0
2	Worked on improving my vocabulary	9.3
3	Learn to take notes	4.6
4	It was okay	46.5
5	No real value	18.6
6	Did not take math	4.6
7	Other	9.3

9.	Describe your academic experience in developmental mathematics or pre-calculus.	
1	It was difficult	11.6
2	Reviewed my algebra & calculus	39.5
3	Teacher was good	34.8
4	Quite challenging/enjoyed it	18.6
5	No real value/did not like it	13.7
6	Other	7.2

* 10.	How was your academic program tailored or not tailored to fit your academic needs?	
1	It was, I was placed in the right class	86.0
2	It was not, because I needed more academic help and one on one support	9.3
3	It provided me with what I needed	4.6
4	Other	-

- * 11. Describe how your academic and career needs were or were not met by the program.
- | | | |
|---|--|------|
| 1 | They were not met, because I needed more academic help and an opportunity to review career choices | 20.9 |
| 2 | They were met, because I got an opportunity to take courses for credit and get a head start | 55.8 |
| 3 | Provided me with an opportunity to think about my academic & career | 20.9 |
| 4 | Other | 5.0 |

- * 12. Describe how your personal needs were or were not met by the program.
- | | | |
|---|--|------|
| 1 | They were met, because I got an opportunity to meet a lot of people and make friends | 80.0 |
|---|--|------|

2	They were not met, because I did not get a chance to focus on my career and improve my academics	2.3
3	Introduced to college life	27.9
4	Put me in contact with the university officers	2.3
5	Other	4.6
* 13.	Describe how the orientation to the university and the program assisted you with your transition from high school to GMU.	
1	It helped a lot	60.0
2	It did not help	0.0
3	When the school year started I knew where everything was I did not feel lost	57.1
4	Other	7.1

- * 14. Describe your interaction with the program coordinator.
- | | | |
|---|---|------|
| 1 | She was great, she was very helpful, had a lot of interaction | 72.0 |
| 2 | I did not have much interaction | 3.0 |
| 3 | Saw her only when there was a problem | 18.6 |
| 4 | Needed more one on one assistance | 6.9 |
| 5 | Other | 6.9 |
- * 15. Describe your interaction with the peer counselors.
- | | | |
|---|--|------|
| 1 | I had a lot of interaction | 19.0 |
| 2 | They were a great help to me and provided a lot of leadership & help | 76.9 |
| 3 | Difficult sometimes to relate to them | 7.0 |
| 4 | Did not have much contact with them | 7.0 |
| 5 | Other | 7.0 |

16. Describe your interaction with other faculty, administrators and staff members.
- | | | |
|---|--|------|
| 1 | I had a lot of interaction | 56.0 |
| 2 | Did not have much interaction | 16.3 |
| 3 | Only with classroom instructions | 34.9 |
| 4 | Met with administrators and faculty members to conduct university business | 9.3 |
| 5 | Other | 4.3 |
17. What kind of study skills development assistance did you receive from the program?
- | | | |
|---|---|------|
| 1 | Did a lot of study skills development | 56.0 |
| 2 | Learned I had to put more time into my studying | 25.6 |
| 3 | Learned I could not wait to the night before to study | 9.3 |
| 4 | Time management | 14.0 |
| 5 | Other | 20.9 |

- * 18. Describe your classroom experiences in any of the other subjects that you took during the summer.
- | | | |
|---|--|------|
| 1 | Comm. class was very helpful and good | 31.0 |
| 2 | Comm. class was not good | 2.3 |
| 3 | African Am. history was great and I learned a lot | 91.0 |
| 4 | African Am. history class was terrible learned nothing | 2.3 |
| 5 | Other | 4.6 |
19. Describe your experience in the various activities that you participated during the summer.
- | | | |
|---|--|-------|
| 1 | The activities were very enjoyable and great | 100.0 |
| 2 | The activities were a waste of time | 2.3 |
| 3 | Provide a good stress reliever | 11.6 |
| 4 | Other | 4.6 |

20.	What things did you learn in the program that assisted you with your academic performance during your first year in college?	
1	How to study effectively and how to prepare for college classes	72.0
2	How to approach professors and ask questions	16.7
3	I don't know	4.7
4	I knew where everything was on campus and who to see to get help	33.0
5	Time management critical	9.3
6	Other	6.9

* 21.	What things did you learn during the program that has or will help you continue your education?	
1	How to improve my writing skills	7.0
2	How to study more appropriately	35.7
3	That education must be taken seriously	57.0

4	Learning to deal with different kinds of people	13.9
5	Nothing	2.4
6	Other	9.3
* 22.	Do you plan to stay in school to completion based on your experience in this program?	
1	Yes, because education is important to me	89.0
2	It helped my confidence	10.3
3	Yes, because I want to get into teaching	5.1
5	No, it did not help	0.0
6	Other	0.0
23.	Do you believe that school will be beneficial in your lifetime based on your experience in this program?	
1	Yes, because education is important to me especially as a Black American	56.0

2	Yes, but not directly because of this program	23.3
3	Yes the program helped a lot with my understanding of how important it is to do well and get a good education.	44.2
4	Other	2.3

**Questions asked of
Staff**

		% Students	% Staff
1.	Explain your role with the program.		
1	Helping the students adjust to the university		100.0
2	Serving as liaison between the faculty staff and students		14.3
3	Providing support for the students		85.7
4	Being a buddy or friend to the students		71.4
5	Other		

2.	What did you think the objectives of the program were?	
1	To assist students with their transition from high school to college	85.0
2	To give the students a head start in college	71.4
3	To help the students adjust to the college curriculum	57.1
4	Other	0.0
3.	Describe how these objectives were communicated to the program participants.	
1	They were told at the beginning of the program.	100.0
2	They met with the peers and they explained the objectives.	71.4
3	They met with the program coordinator and she explained the objectives.	57.1

4.	Describe how the program addressed the students academic needs in English or developmental writing.	
1	The students were placed I their courses based on their placement exams scores	71.0
2	The students learned to improve their writing and organization skills	85.7
3	The students were provided with peer tutors to assist them with problem subjects	57.1
4	Other	0.0
5.	Describe how the program addressed the students academic needs in reading.	
1	The students were placed in class based on their placement exam scores	85.0
2	They had to read a lot of books and they read them in their class and as a group	57.1
3	Students had tutors to assist them with their reading	42.9

4	The professor provided a lot of assistance.	28.6
5	Other	0.0
6.	Describe how the program addressed the students' academic needs in mathematics or pre-calculus.	
1	The professor was very helpful and the students enjoyed the class	28.0
2	The class helped the students improve their understanding of mathematical concepts	57.1
3	They were placed in classes based on their mathematical abilities.	71.4
4	They received assistance from the peer counselors	42.9
5	They were not addressed	0.0
6	Other	0.0

7.	What kind of assistance did the students receive in study skills development?	
1	The peer counselors worked with the students on study skills development	100.0
2	Students attended the study skills workshops sponsored by the counseling center	71.4
3	Students learned about studying for subjects that they had weakness in reading class	14.3
4	Students had a mandatory study time	0.0
5	Other	0.0
8.	Describe the orientation the students received to academic support services available on campus and their transition to the campus.	
1	Students received a tour of the campus	100.0

2	Students were told about the support services on campus and their availability	85.7
3	Students attended workshops and seminars that delineated these services	57.1
4	Other	0.0
9.	What do you think the students learned that will assist them in continuing their education?	
1	Time management	100.0
2	Study skills development	71.4
3	Learning how to approach professors to ask questions and get assistance	42.9
4	Their area of strength and weakness	28.6
5	Other	0.0

10.	Describe how the program tailored learning services to meet the students needs.	
1	Students were placed in courses based on their test scores	71.0
2	Students were placed in courses based on high school academic performance	57.1
3	Students had an interview with the program staff to decide what courses they took	28.6
4	Other	0.0
11.	What kind of interaction did you observe between the students and the peer counselors?	
1	Good friendly supportive relationship	86.0
2	Big brother/big sister relationship	42.9
3	Served as a role model and leader for the students	57.1
4	A poor relationship/no relationship	0.0
5	Other	

12.	What kind of interaction did you observe between the students and the program coordinator?	
1	Very supportive relationship	71.0
2	Served as mother figure for some students	42.9
3	Just as administrator to student relationship	57.1
4	A poor relationship/no relationship	14.3
5	Other	0.0

13.	What kind of interaction did you observe between the students and other faculty, staff and administrators?	
1	Only with classroom professors who were helpful	71.0
2	Other administrators had little or no contact with the students	14.3
3	Had a lot of contact with other administrators	28.6
4	Other	0.0

14. Do you think that students were aware of the academic, career, and personal counseling that was available, and if they were, how often do you think they used it, if they were not, why?
- | | | |
|---|---|------|
| 1 | Students were aware because they were required attend workshops sponsored by the counseling center | 86.0 |
| 2 | They knew where the center was because they had been told and received a list of workshops they had to attend | 42.9 |
| 3 | They did not receive any information about the counseling center | 14.3 |
| 4 | They used it for the workshops but not for personal matters | 42.9 |
| 5 | Other | 0.0 |
15. What kind of improvement in the students academic performance did you observe?
- | | | |
|---|--|------|
| 1 | Some students were excited about their courses and made a lot of improvement | 57.0 |
|---|--|------|

2	Student improved in their writing and math course	28.6
3	Some students made a lot of progress and they let you know they were doing well	42.9
4	Some students did not make any progress, just drifted along	28.6
5	Other	14.3
16.	What did you hear from students about their classroom experiences?	
1	Some students enjoyed their classroom experience and thought their professor was a great teacher	86.0
2	Students learned a lot	42.9
3	Classes too large/professors were boring	
4	Students were not interested in the class	14.3
5	Other	0.0

17.	What did you hear from students about their experience in program activities?		
1	Students enjoyed the trips, concert, play and the opportunity to relax	100.0	
2	Students enjoyed the opportunity to socialize and have a cultural experience	100.0	
3	Students thought the activities were a waste of time	0.0	
4	Other	0.0	

Questions asked of Students and Staff

		% Students	% Staff
24.	What were the most beneficial aspects of the program?		
1	Getting to know other students	45.0	42.0
2	Learning where everything was on campus, getting a head start and transition	31.0	100.0
3	Learning about myself from Black History Class	26.2	57.1
4	Being in the program and getting a head start	38.1	0.0

5	Nothing		
6	Taking classes for credit and learning to study	4.8	38.1
25.	What were the least beneficial aspects of the program?		
1	Too many rules and regulations	14.0	14.0
2	Nothing	46.5	57.1
3	Too much work	4.6	0.0
4	More classes for credit	14.0	0.0
5	Make the program more like the regular year	9.3	0.0
6	Workshops not structured well	0.0	28.6
7	Other	11.6	0.0
* 26.	What components of the program would you retain?		
1	Everything	67.0	86.0
2	The structure and organization of the program	30.9	14.3
3	Academic classes	21.4	28.6
4	Nothing	0.0	0.0
5	Other	7.0	0.0

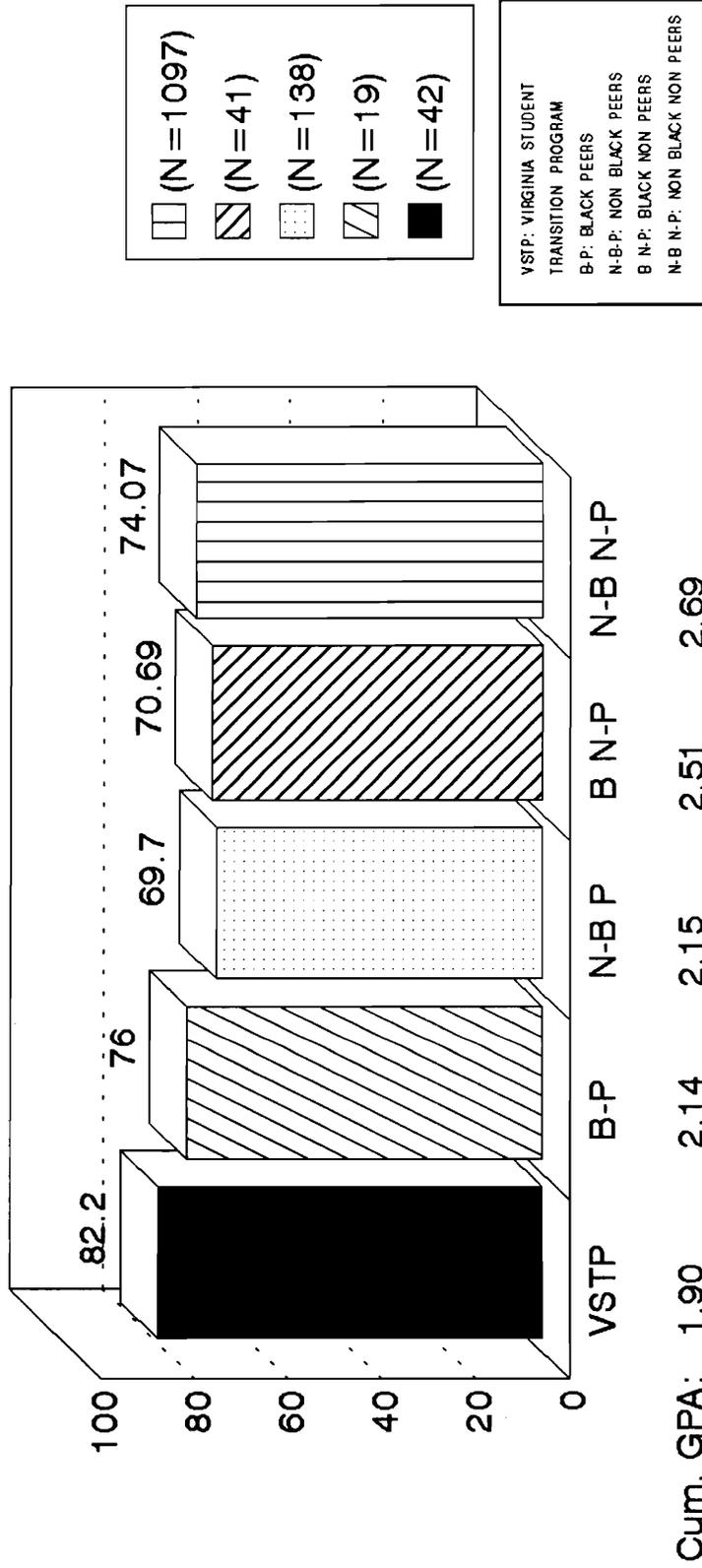
27.	What components of the program would you change?		
1	Relax the workload	12.0	0.0
2	Too strict	7.0	0.0
3	Nothing	25.0	28.6
4	Some of the workshops	4.7	0.0
5	Add more credit courses	32.5	14.0
6	Improve peer counselors training	0.0	57.1
7	Study hours in students rooms and add weekend meals	11.9	0.0

APPENDIX D
GEORGE MASON UNIVERSITY
FALL 1991
RETENTION RATES AND CUMULATIVE GPA

George Mason University

Fall 1991 Cohort

One Year Retention Rates And Cumulative GPA



APPENDIX E
1990-1991 UNIVERSITY
MATH COURSES FAILURE RATES

PERCENT FAILED IN SELECTED MATH COURSES 90F - 93D

AY	COURSE	TOTAL GRADED	TOTAL FAILED	PCT-F
---	-----	-----	-----	-----
90-91	MATH108	1196	335	.280
	MATH113	873	220	.252
	MATH114	623	156	.250
*TOTAL	90-91	2692	711	.264
91-92	MATH108	698	107	.153
	MATH113	664	123	.185
	MATH114	529	93	.176
*TOTAL	91-92	1891	323	.171
92-93	MATH108	654	143	.219
	MATH113	684	249	.364
	MATH114	467	104	.223
*TOTAL	92-93	1805	496	.275
TOTAL		6388	1530	.240

^* PERCENT FAILED IN UNDERGRADUATE MATH COURSES 90F - 93D

AY	MATH CRS LEVEL	TOTAL GRADED	TOTAL FAILED	PCT-F
---	-----	-----	-----	-----
90-91	100	3692	801	.217
	200	411	75	.182
	300	1330	168	.126
	400	219	14	.064
*TOTAL 90-91		5652	1058	.187
91-92	100	3544	610	.172
	200	562	88	.157
	300	1103	116	.105
	400	200	17	.085
*TOTAL 91-92		5409	831	.154
92-93	100	3822	718	.188
	200	937	118	.126
	300	538	58	.108
	400	208	20	.096
*TOTAL 92-93		5505	914	.166
TOTAL 3 AY'S		16566	2803	.169

*Includes only students who received a final grade of A,B,C,D,F or S. (i.e, Excludes non-standard grades - INcompletes, Withdrawals, etc.)

Each academic year includes three terms - Fall, Spring, Summer.

APPENDIX F
DESCRIPTION OF INSTRUMENTATION
RESEARCH QUESTIONS, PROGRAM OBJECTIVES,
INTERVIEW QUESTIONS FOR STUDENTS AND STAFF

MATRIX
DESCRIPTION OF INSTRUMENTATION

Research Questions

1. How well did the program meet its stated objectives the 1990-1991 academic year.

1.To improve the levels of academic performance through developmental and academic courses in English, reading and mathematics.

2. To familiarize students with institutional support services.

3. To acclimate students to the overall college environment and to facilitate a positive transition to George Mason University

4. To assist students in persisting to graduation.

**Interview Ques
Student**

1. What did you understand the objectives of the program to have been?

2. Describe your experience in VSTP.

3. What courses did you take?

4. What were your academic needs in English and writing?

5. What were your academic needs in mathematics?

6. What were your academic needs in reading?

7. Describe your academic exp in freshmen English developmental writing?

8. Describe your academic experience reading.

9. Describe you academic experience in developmental mathematics or precalculus.

13. Describe your orientation to the university and how the program assisted you with your transition from high school to GMU.

13. Describe your orientation to the university and how the program assisted you with your transition from high school to GMU.

18. Describe your experience in the various activities that you participated in during the summer.

20. What things did you learn during the program that has or will help you continue your education?

**Interview Ques
Staff**

2. What did you think about the objectives of the program?

3. Describe how these objectives were communicated to the program participants?

4. Describe how the program addressed the students'academic needs in freshmen English or developmental writing?

5. Describe how the program addressed the students academic needs in reading?

6. Describe how the program addressed the students academic needs mathematics?

8. Describe the orientation the students received in academic support services available on campus?

8. Describe the orientation the students received in academic support services available on campus?

9. what do you think the students learned that will assist them in continuing their education at GMU?

Research Questions

2. How did the 1990 VSTP participants perceive the impact the program had on their academic performance during their first-year of college?

3. What impact did the program have on the first-year retention rate of the 1990 VSTP students?

Program Objectives

5. To design individually tailored supportive learning activities

6. To provide exposure to role model sat the university who might inspire students to achieve.

7. To provide a counseling component to address academic, and career goals, and personal needs.

(The same information provided for research question one).

2. to familiarize students with institutional support services.

3. To acclimate students to the overall college environment and to facilitate a positive transition to George Mason University.

Interview ques Student

17. Describe your academic experience in other courses that you took during the summer program.

7. How was your academic program tailored or not to fit your academic needs?

14. Describe your interaction with the program coordinator?

15. Describe your interaction with the peer counselors.

16. Describe your interaction with other faculty, administrators and staff.

11. Describe how your academic, and career counseling needs were or were not met.

20. what things did you learn in the program that assisted you with your academic performance during your first year in college?

23. Do you believe that school will be beneficial in your lifetime based on your experience in this program?

21. What things did you learn during the program that has or will help you continue your education assisted.

22. Do you plan to stay in school to completion based on your experience in this program.

13. Describe your orientation to the university and how the program assisted you with your transition from high school to GMU.

Interview Ques Staff

10. Describe how the program tailored learning services to meet the students needs.

11. What kind of interaction did you observe between the students and the peer counselors.

12. What kind of interaction did you observe between the students and the program coordinator.

13. Do you think that the students were aware of the academic, career and personal counseling was available, and if they were, how often do you think they used it, if they were not, why?

15. What did you hear from students about their academic performance?

16. What did you hear from students about their classroom experiences?

9. What do you think the students learned that will assist them in continuing their education.

8. Describe the orientation the students received to the academic support services available on campus and with their transition to the campus.

Research Questions

Program Objectives

Interview Ques Student

Interview Ques Staff

- | | | | |
|---|---|---|---|
| | <p>5. To design individually tailored supportive learning activities.</p> <p>6. To provide exposure to role models at the university who might inspire students to achieve.</p> | <p>10. How was your academic program tailored or not tailored to fit your academic needs?</p> <p>14. Describe your interaction with the program coordinator.</p> <p>15. Describe your interaction with the peer counselors.</p> <p>16. Describe your interaction with other faculty, administrators and staff.</p> | <p>10. Describe how the program tailored learning services to met student academic needs.</p> <p>11. What kind of interaction did you observe between students and the peer counselors?</p> <p>12. What kind of interaction did you observe between students and the program coordinator?</p> <p>13. What kind of interaction did you observe between students and other faculty, staff and administrator?</p> <p>14. Do you think that students were aware of the academic, career and personal counseling that was available, and if they were, how often do you think they used it, if they were not, why?</p> |
| <p>5. What were the most beneficial and least beneficial aspects of the program as perceived by the participants?</p> <p>6. What part of the program would the participants retain or change?</p> | <p>7. To provide a counseling component to address academic and career goals and personal needs.</p> | <p>11. Describe how your academic, and career needs were or were not met by the program.</p> <p>12. Describe how your personal needs were or were not met by the program.</p> <p>24. What were the most beneficial aspects of the program?</p> <p>25. What were the least beneficial aspect of the program?</p> <p>26. What components of the program would you retain?</p> <p>27. What components of the program would you change?</p> | <p>18. What were the most beneficial aspects the program?</p> <p>19. What were the least beneficial aspects of the program?</p> <p>20. What components of the program would you change?</p> <p>21. What components of the program would you retain?</p> |

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EDUCATION

Doctorate of Higher Education Administration Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 1993

M.S. Rehabilitation Counseling, Virginia Commonwealth University, Richmond Virginia, 1980

B.S. Psychology, Virginia Commonwealth University, Richmond, Virginia, 1976

PROFESSIONAL EXPERIENCE

George Mason University, Fairfax, Virginia, 1989-present
Director Minority Affairs and Special to Assistant to the Provost

Serve as chief administrator for academic and retention decisions pertaining to minority students.

Serve as an advisor to the Vice Provost and Dean of Student Affairs Task Force for Retention and the Intellectual Development of students

Assist the Vice President of Equity and Affirmative Action Office with the adjudication of cases involving students (i.e. sexual and racial harassment).

Advise the President, Vice Presidents, Provost, and other administrators on matters relating to the welfare of minority students and the general student population.

Serve as Chair of Cultural Diversity Committee, a university committee with third faculty members and twenty administrators and students, focusing on issues of university wide diversity.

Manage a team of seven employees responsible for the coordination of services and efforts in educating the campus community to the needs and concerns of minority students, and serve as co-supervisor of the Multicultural Center staff.

Manage several budgets in the amount of 1.5 million dollars.

Serve as liaison and adviser to all Minority Alumni Chapters and Community Organizations For Community Outreach with High Schools and Parent Groups.

Present annual Retention Report to the Board of Visitors

Serve as liaison to the State Council of Higher Education for special populations, scholarship development, and proposal writing.

George Mason University, Fairfax, Virginia, 1989
Director of Minority Student Services

Advised the President, Vice Presidents, Provost, Deans and other administrators on policy and procedural matters relating to the welfare of minority students.

Coordinated the University's efforts with respect to minority students, assist and advise University offices to initiate, develop and implement programs relating to minority student concerns.

Provided leadership in developing student services and coordinating them within the University units as they relate to minorities and other students.

Initiated and implement the development of programs to secure financial support from external sources to implement minority student programs.

Worked with the Office of Institutional Planning and Research to ensure the collection and analysis of appropriate data regarding minority students.

George Mason University, Fairfax, Virginia, 1986-1988
Coordinator of Minority Student Retention

Organized and managed the Summer Transition Program, which is the summer component of the Retention Program.

Coordinated all components of the Retention Program during the academic year.

Advised the Dean of Undergraduate Studies and the Director of Minority Student Services of the needs of the program participants and design methods for satisfying those needs.

Fiscal management, hire instructors and peer assistants. Design workshops and seminars, and contract with consultants for these workshops.

Gulf Coast Community College, Panama City, Florida, 1984-1986.
Director Special Services Project and Assistant Professor Psychology

Managed the Special Services Project; fiscal management; designed and implemented programs to increase the retention and graduation of disadvantaged students.

Selected project participants; Hired project personnel. Assist with curriculum development and publicity; serve on Student Development council.

Established the tutorial program and orient the faculty and students to the goals and objectives of the Project.

Saint Paul's College, Lawrenceville, Virginia, 1982-1984.

Director Special Services Project and Assistant Professor Honors Program.

Managed the Special Services Project; fiscal management; serving on college committees, providing orientation for the faculty, staff, and students to the goals and objectives of the.

Provided leadership for other college departments; selected participants; maintained records; coordinated and evaluated in-service training for personnel;

Served as College's liaison with the U.S. Department of Education, and taught an Interdisciplinary honors course.

Saint Paul's College, Lawrenceville, Virginia, 1981-1982.

Counselor/Coordinator Special Services Project

Screened Special Services applicants, maintained records on Project students; supervised and documented the tutorial, academic, personal, financial aid, and cultural programs; assisted in coordinating cultural enrichment activities; designed programs and workshops to meet specific counseling needs of Project students.

AWARDS/HONORS

- o Black Student Alliance Award, 1991
- o Excellence Award (GMU), 1989
- o Outstanding Young Men of America, 1983
- o Leadership and Service Award, Virginia Commonwealth University, 1980
- o Black Awakening Choir, 1979
- o Service Award, Omega Psi Phi Fraternity, Inc., Virginia Commonwealth University
- o Black Awakening Choir, 1976
- o Black Student Life Award, Virginia Commonwealth University, 1976
- o Leadership and Service Award, Virginia Commonwealth University, 1975

ORGANIZATIONS AND AFFILIATIONS

- o American College Personnel Association
- o Member Committee Multicultural Affairs (ACPA)
- o Past Chair African American Network (CMA-ACPA)
- o Association of American Council Higher Education
- o American Council of Education
- o National Council of Educational Opportunity Program Personnel (NCEO)
- o National Association for the Advancement of Colored People (NAACP)
- o Member of Omega Psi Phi Fraternity (Chaplain & Parliamentarian)
- o Member Alumni Association (VCU)
- o Member, Board of Advisors, Project Discovery, Alexandria Chapter
- o Member, Board of United Campus Ministries