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ABSTRACT

A student attrition research methodology and results of attrition research at Barber-Scotia College are examined. Questionnaire responses from 137 students indicated the degree of student satisfaction with academic and social services provided by the college. Data are presented on student enrollments by class during 1970-1980, and on student attrition rates from freshmen to senior year. Questionnaire responses included the following: (1) library and work/study supervision--well-satisfying; (2) teaching methods, advising, and course scheduling--satisfying (good); (3) course materials, classroom environment, dormitory living conditions, and financial aid information--partially satisfying; and (4) recreational activities, college regulations, sports equipment, and food services--partially satisfying or dissatisfying. A condensed version of students' suggested changes, comments on services, and educational experiences is appended. Reasons for student attrition (fall 1979-1981) are indicated, along with data on student age groups and sources of student funds. Since about 18 percent of the recorded explanations on student attrition were attributable to poor performance and academic suspension, it is recommended that student educational support programs be provided. It is suggested that Barber-Scotia enrollments could be increased by: introducing additional occupational and technical programs; sending a college recruiter to the public schools to provide information on programs and job opportunities; and improving food, health, and recreational services. A questionnaire is appended. (SW)

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BARBER-SCOTIA COLLEGE
CONCORD, NORTH CAROLINA

DIRECT ASSESSMENT AND TREATMENT
OF ATTRITION AND RETENTION PROBLEMS

Amos O. Olagunju, Director
Institutional Research

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FOREWORD

This document diagnoses attrition and retention problems in a college environment. Among the many problems educational administrators face today is that of the school dropout. Attrition and retention are crucial problems confronting many colleges and universities.

Educators need more general descriptions of an approach to reduce attrition and improve retention without relaxing academic standards and recruitment strategies. This document discusses a direct assessment approach to the study of attrition and retention problems---a methodology which evaluates the problems of students in an environmental context.

This project was financially supported by a federal grant for Strengthening Developing Institutions under Title III. The author welcomes your constructive suggestions and corrections.

The author sincerely appreciates the contributions of the various campus offices towards the successful outcome of this project. Sincere gratitude is extended for the excellent cooperation and secretarial assistance from Mrs. Brenda Lott (IR Office Secretary), Miss Cynthia Pepper, Mr. Steve Wiseman, Mr. Marston Adams, Miss Gloria Spriggs, and Miss Cheryl Bagley (work/study students).

Many thanks to Dr. Sammie Potts who administered the distribution and collection of the survey questionnaires.

Special acknowledgements are given to Dr. Richard Fields, Mrs. Emma Witherspoon, Mr. Henry Wilson, and Mr. John Black for their valuable

contributions in setting up the criteria for evaluating attrition and retention problems.

The continued permission to use relevant parts of the Fact Book by Dr. Julian Pyles and the Enrollment Statistics Reports by Mrs. Joyce Huntley is gratefully acknowledged.

Concord, North Carolina
October, 1981

Amos O. Olagunju
Director

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SECTION I
INTRODUCTION

1.1 Motivation

When student enrollments in an institution show a significant decline from one semester to the other, educational administrators and assessment specialists need an evaluation procedure that will generate useful recommendations for more effective activities that will reduce the attrition rate of students and improve student retention rates. Educators require more comprehensive descriptions of a method to combat attrition without relaxing academic standards and recruitment strategies.

Colleges and universities need more specific information with which to develop remedial programs on the specific problems of students. Such information can be obtained by a direct evaluation of the students' needs in an environmental context; a context that includes the teaching strategies, the instruction material, the student-faculty relationship, the services provided to students, academic and social regulations and restrictions, and so on.

Attrition is a nation-wide problem confronting many colleges and universities. Barber-Scotia College is not exempted from the ills of attrition. A recent analysis of the student enrollments in the present study shows the following observations:

1. In the last 10 years, at least 50% of all students who enroll at the College as freshmen each year do not return the following year to enroll as sophomores.
2. There are no evidences (attrition reasons unknown) to justify the cause of attrition for at least 45% of the students

who left the College without completing their degree programs in the last 2 years.

3. Seventeen percent of the recorded attrition problems are attributed to academic suspension.
4. The attrition problem is attributed to education transfers to other colleges and universities for 20% of the recorded attrition reasons at Barber-Scotia College.

The first observation by itself is a sufficient reason to seek alternative ways of predicting and preventing attrition and enhancing student retention by making changes in the academic and social services rendered to students.

The second observation suggests the existence of potential college-student dropouts--those students who evacuate colleges before graduation or completion of a program of study. Thus, there is a need to determine a methodology which solves attrition problems by recognizing college students who are likely to be dropouts.

The third observation is a crucial problem which requires advanced study. When student attrition problems in a college is caused by academic suspension and/or expulsion, it becomes necessary for educators to find alternative ways to cure learning disabilities of students.

The fourth observation suggests that Barber-Scotia College students who transfer to other colleges are not pleased with their academic program and/or social environment. This calls for a need to survey the opinions of students to determine how to improve the student retention rate. However, we do not eliminate the possibility of "student raiding" by other colleges and universities who, from time to time, visit our College and address our students.

The attrition and retention problems at Barber-Scotia College cannot be received willingly as natural phenomena. The crucial attrition problems

outlined above are diagnosed in detail in this document. First we will review a background study of attrition problems at Barber-Scotia College.

1.2. Background Work

Pyles, Byerly, and Huntley, [1], first recognized attrition and retention problems at Barber-Scotia College as campus-wide concern and responsibility which require team effort. In their two-page project report, they appealed to all staff and faculty members to become retention agents. Their report identified poor facilities, personal reasons, and education transfers as the main known reasons for attrition at the College in 1979.

In a student satisfaction opinion survey, Pyles' report, [1], suggested a number of student services which needed improvements in order to improve the student retention rate and reduce attrition. However, the report does not include a statement of how to implement the suggested improvements. The suggested changes are useful hints in the initial setup of criteria for measuring the degree of student satisfaction with the various services provided by the College. Pyles' report serves as a useful reference at the initial stage of the study of retention problems.

1.3 Objectives

The primary goal of this research is to investigate attrition and retention problems in an environmental context by introducing a new methodology which can prevent and combat student attrition problems in most colleges and universities. That is, to introduce a methodology which investigates attrition and retention problems based on the students' past attrition reasons in a higher institution and the students' supportive services provided by the institution.

In order to satisfy the requirements of our research, the following goals must be accomplished:

1. The factors leading to student attrition in an institution must be identified with recommendations on how to cure attrition at the particular institution.
2. Each identifiable attrition problem must be defined with realistic and measurable goals.
3. A survey on students' degree of satisfaction with the academic, social, and financial services provided by the institution must be analyzed in detail to bear on students' opinions, and recommendations on improvements must be outlined where necessary.

In the present study, Barber-Scotia College is the institution of higher education, and all our objectives apply to Barber-Scotia College.

1.4 Overview of Report

As stated earlier, the primary aim of this research is to introduce a methodology whereby educational administrators and assessment specialists can select useful portions of the results of this work to combat student attrition problems and improve retention rates in an institution.

Section 2 of this document outlines the experimental framework of this project. In other words, the approaches to our various investigations are detailed in section 2.

In section 3, we introduce the various measures that are considered relevant and consistent with the study of student attrition and retention rates. In the same section, the results of our findings on a case study of student attrition in a college are presented and evaluated.

Finally in section 4, we consider the implications of the various attrition and retention problems and suggest useful methods on how to prevent and cure attrition in an institution.

SECTION 2

EXPERIMENTAL FRAMEWORK

This section presents the various approaches to our investigations on attrition and retention problems. The section introduces the basic questions which served as basis for the definitions of measures of attrition outlined in section 3.

2.1 Student Enrollment and Attrition List

The study of attrition problems cannot be conducted in isolation from the recorded information of student enrollments and attrition over a period of time. An understanding of student enrollment data and the attrition list allow us to address certain attrition questions such as:

1. Which classes of students (freshmen, sophomores, juniors) are more vulnerable to attrition?
2. Based on students' past enrollment, what are the projected enrollments for each class of students?
3. What are the causes of attrition?

The information required to obtain solutions to the questions above was derived from the student enrollment data, which was extracted from the Enrollment Statistics reports, [2], compiled by the Office of Admissions and Records. The attrition list was also included in the Enrollment Statistics reports.

2.2 Student Services

In order to bring student opinions, responses, and suggestions on the causes and prevention of attrition, the survey questionnaire of appendix A was designed. The sole purpose of the questionnaire was to measure the degree of student satisfaction with the various academic and social services provided by Barber-Scotia College.

It is our philosophy that the student body is the one and only important source of ideas for establishing effective student-faculty communications and providing better services. We believe the net result will be a reduced student attrition rate. For this reason, 200 survey questionnaires were distributed at random to each class (freshmen, etc.) and sex of students.

Of the 200 questionnaires distributed, 137 were completed and returned to the Office of Institutional Research. We noted, however, that some students did not express their opinions on certain questions. In order to avoid a biased judgement of student opinions, the number of students who expressed their minds on each question were used to evaluate the degree of student satisfaction with the services provided by the College.

An examination of the degree of student satisfaction with the College services allows us to consider the following questions:

1. What services (rendered by the College) are students most satisfied/dissatisfied with?
2. What areas of student services need immediate improvements?
3. Based on previous attrition and retention studies at the College, are there any improvements in the services rendered to student?
4. What general changes are required to curb student attrition rates?

In section 3, we will examine in detail the degree of students' satisfaction with their academic environment.

SECTION 3

SATISFACTION MEASURES, RESULTS, AND EVALUATION

This section discusses the various parameters that are consistent with the measurement and improvement of attrition and retention rates. The section also presents and evaluates the results of our investigations.

3.1 Measure of Student Attrition Rate

Table 3.1 contains the student enrollment information at Barber-Scotia College over an eleven-year period (1970-1980). The values of the attributes freshmen, sophomores, juniors, and seniors in Table 3.1 allow an examination of the nature of student attrition at the College. For example, in 1970, 221 students enrolled as freshmen, but the enrollments reduced to 90 sophomores in 1971. Further still, the enrollment reduced to 86 juniors in 1972, and only 50 students were enrolled as seniors in 1973. In a perfect enrollment situation (one in which there is no student attrition), all 221 students who enrolled as freshmen in 1970 would have enrolled as seniors in 1973. Note that the arrows (-->) in Table 3.1 illustrate the trend of student attrition at the College.

In order to study the student attrition rate from one year to the other, we introduce the following parameters:

- (1) Let $X_1, X_2, X_3,$ and X_4 denote the number of students enrolled in one year as freshmen, sophomores, juniors, and seniors respectively; y the particular year for which student attrition is being considered, and H the total student head count
- (2) Let $R_1, R_2,$ and R_3 represent the respective attrition rates of freshmen, sophomores, and juniors; R the overall student attrition rate from the freshman y to the senior $y+3$; and P the percentage change in student enrollments from year y to year $y+1$.
- (3) Let R_4 and R_5 be the attrition rates from the freshman year to the junior year and from the sophomore year to the senior year respectively.

Thus, R_1 , R_2 , R_3 , R_4 , R_5 , R , and P for the year y are defined as follows:

$$(a) \quad R_{1y} = \frac{X_{1y} - X_{2y} + 1}{X_{1y}}$$

$$(b) \quad R_{2y} = \frac{X_{2y} - X_{3y} + 1}{X_{2y}}$$

$$(c) \quad R_{3y} = \frac{X_{3y} - X_{4y} + 1}{X_{3y}}$$

$$(d) \quad R_{4y} = \frac{R_{1y} + R_{2y} + 1}{2}$$

$$\hat{=} 1 - \frac{(X_{2y} + 1)^2 + X_{1y} X_{3y} + 2}{2(X_{1y} X_{2y} + 1)}$$

$$(e) \quad R_{5y} = \frac{R_{2y} + R_{3y} + 1}{2}$$

$$(f) \quad R_y = \frac{R_{1y} + R_{2y} + 1 + R_{3y} + 2}{3}$$

$$(g) \quad P_y = \frac{H_{y-1} - H_y}{H_y - 1} \times 100 \quad \text{Where } y \geq 2$$

The various calculated values of R_1 , R_2 , R_3 , R_4 , R_5 , and R for the student enrollments from 1970 to 1980 are shown in Table 3.2.

ENROLLMENT BY CLASSIFICATION

(Fall Semester)

1970-1980

| YEAR | FRESHMEN*1 | SOPHOMORES | JUNIORS | SENIORS | SPECIAL | TOTAL HEAD COUNT | PERCENT CHANGE*2 |
|------|------------|------------|---------|---------|---------|------------------|------------------|
| 1970 | 221 | 124 | 98 | 92 | 2 | 537 | |
| 1971 | 269 | 90 | 103 | 84 | 4 | 550 | 2.4 (+) |
| 1972 | 266 | 16# | 86 | 141# | 4 | 513 | 6.7 (-) |
| 1973 | 263 | 101 | 44 | 50 | 2 | 460 | 10.3 (-) |
| 1974 | 209 | 120 | 90 | 48 | 4 | 471 | 2.4 (+) |
| 1975 | 203 | 103 | 85 | 80 | 9 | 480 | 1.0 (+) |
| 1976 | 200 | 98 | 89 | 106# | 33 | 526 | 9.6 (+) |
| 1977 | 221 | 91 | 72 | 67 | 0 | 451 | 14.3 (-) |
| 1978 | 217 | 86 | 45 | 53 | 0 | 401 | 3.1 (-) |
| 1979 | 181 | 79 | 43 | 32 | 3 | 338 | 15.7 (-) |
| 1980 | 168 | 72 | 42 | 38 | 3 | 323 | 4.4 (-) |

Some degree of doubt is attached to this value

*1 Includes second-year students

*2 a plus (+) indicates an increase over previous year
a minus (-) indicates a decrease over previous year

Table 3.1

3.2 Test of Student Attrition

The values of the parameters R_1 , R_2 , R_3 , R_4 , R_5 , and R in Table 3.2 express the rate of student attrition from the freshman year to the sophomore year, from the sophomore year to the junior year, from the junior year to the senior year, from the freshman year to the junior year, from the sophomore year to the senior year, and from the freshman year to the senior year respectively.

Clearly, the closer to zero the values of R_1 , R_2 , R_3 , R_4 , R_5 , and R are, the better the student attrition rate is in a college. Note that the values of R_1 for the period 1970-1980 are greater than 0.50 indicating that Barber-Scotia College has always lost at least 50% of its students from the freshman year to the sophomore year. The values of R_1 and R_2 are relatively small compared to the values of R_1 for each year indicating that the greatest student attrition problem lies in the power to retain all students who are currently enrolled as freshmen.

Note that the power of a college to reduce the student attrition rate is indicated by a value of R_1 , R_2 , and R_3 being negative. The values of R express the overall attrition-retention rate for the particular students who enrolled in a year as freshmen and continue to enroll until they graduate.

3.3 Measure of Student Satisfaction

Table 3.3 presents the expression of Barber-Scotia College Students' satisfaction with the various services provided by the College. The domain RATING consists of the attributes EXCELLENT, VERY GOOD, GOOD, FAIR, and POOR. Each SERVICE Rendered by the College is rated by the students according to their satisfaction using the attributes of RATING. The values in Table 3.3 show the number of students who rated each service according to their degree of satisfaction.

CALCULATED VALUES OF ATTRITION RATES

1970 - 1980

| YEAR | R1 | R2 | R3 | R4 | R5 | R |
|------|------|--------|--------|--------|--------|--------|
| 1970 | | | | | | |
| 1971 | 0.59 | 0.17 | 0.14 | | | |
| 1972 | 0.94 | 0.07 | -0.37# | 0.33 | -0.10# | |
| 1973 | 0.62 | -1.75# | 0.42 | -0.41# | 0.25 | 0.36 |
| 1974 | 0.54 | 0.11 | -0.09# | 0.36 | -0.92# | -0.30# |
| 1975 | 0.51 | 0.29 | 0.11 | 0.42 | 0.11 | 0.28 |
| 1976 | 0.52 | 0.14 | -0.25# | 0.33 | 0.02 | 0.19 |
| 1977 | 0.55 | 0.27 | 0.25 | 0.40 | 0.20 | 0.30 |
| 1978 | 0.61 | 0.51 | 0.26 | 0.53 | 0.27 | 0.35 |
| 1979 | 0.64 | 0.50 | 0.29 | 0.56 | 0.40 | 0.45 |
| 1980 | 0.60 | 0.47 | 0.12 | 0.56 | 0.31 | 0.61 |

TABLE 3.2

#Indicates a reduced student attrition rate

STUDENT SATISFACTION BY SERVICE AND RATING

| SERVICE | RATING* | | | | | |
|-------------------------------------------|-----------|-----------|------|------|------|-------|
| | Excellent | Very Good | Good | Fair | Poor | Total |
| Course Materials Presented by Instructors | 2 | 18 | 44 | 24 | 42 | 130 |
| Instructors' Teaching Methods | 2 | 21 | 34 | 33 | 25 | 115 |
| Classroom Environment (Neatness) | 2 | 7 | 27 | 30 | 31 | 97 |
| Relationship With Your Advisor | 7 | 17 | 35 | 22 | 22 | 103 |
| Course Schedules by Your Advisor | 7 | 17 | 35 | 19 | 36 | 114 |
| Library Services | 17 | 29 | 36 | 13 | 19 | 114 |
| SGA Services | 2 | 5 | 34 | 22 | 57 | 120 |
| Dormitory Services (Living Conditions) | 0 | 9 | 24 | 32 | 34 | 99 |
| Financial Aid Information | 7 | 7 | 30 | 27 | 27 | 98 |
| Work/Study Supervision | 19 | 14 | 35 | 9 | 11 | 88 |
| Food Services (quality & quantity) | 1 | 4 | 11 | 26 | 55 | 97 |
| Time for Meals | 3 | 2 | 20 | 40 | 22 | 87 |
| Weekend Activities (Movies, Disco, etc.) | 2 | 1 | 8 | 20 | 64 | 95 |
| Sports Equipment | 0 | 5 | 22 | 34 | 42 | 103 |
| Sports Hours | 0 | 4 | 20 | 31 | 37 | 92 |
| Recreational Activities | 0 | 2 | 14 | 25 | 48 | 89 |
| College Restrictions & Regulations | 0 | 4 | 10 | 25 | 49 | 88 |

Table 3.3

*The values in rating represent the number of students who expressed their satisfaction accordingly with each service.

In order to make a better judgement of students' opinions on various services rendered by the College, Table 3.4 presents the percentages of satisfaction with each service. Note that the number of students who responded to each service is used to compute the percentages. This helps to avoid a biased judgement, since all students may not express their opinions on each service.

In the terms of language use, the percentages of students' satisfaction with each service in Table 3.4 does not preset the admissible values for good and poor qualities of student services. For this reason, we now introduce a quality measure of students' satisfaction with a student service.

Let E, V, G, F, and P represent Excellent, Very Good, Good, Fair, and Poor services respectively, and E1, V1, G1, F1, and P1 the respective percentages of students who rated a service as Excellent, Very Good, Good, Fair, and Poor.

Let an Excellent service, $E = 5$;
 a Very Good Service, $V = 4$;
 a Good Service, $G = 3$;
 a Fair service, $F = 2$;
 and a Poor service, $P = 1$.

A single measure of the quality of a service S(rendered by the College) as rated by students with respect to their degrees of satisfaction is defined as:

$$S = \frac{1}{5} (E * E1 + V * V1 + G * G1 + F * F1 + P * P1)$$

A service with a perfect students' satisfaction would result in a value of $S = 100$. However, in order to provide for the insincerity or biased judgement of the services rated by students, we regard a score of 70 and above as the acceptable region for very well-satisfying services. A score of S in the range of 60 to 70 is regarded as a well-satisfying student service. A satisfying service (good service) is indicated by a

STUDENT SATISFACTION BY SERVICE AND RATING

| SERVICE | RATING* | | | | | |
|-------------------------------------------|-----------|-----------|-------|-------|-------|--------|
| | Excellent | Very Good | Good | Fair | Poor | Total |
| Course Materials Presented by Instructors | 1.53 | 13.85 | 33.85 | 18.46 | 32.31 | 100.00 |
| Instructors' Teaching Methods | 1.74 | 18.26 | 29.56 | 28.70 | 21.74 | 100.00 |
| Classroom Environment (Neatness) | 2.06 | 7.22 | 27.84 | 30.93 | 31.95 | 100.00 |
| Relationship With Your Advisor | 6.80 | 16.50 | 33.98 | 21.36 | 21.36 | 100.00 |
| Course Schedules by Your Advisor | 6.14 | 14.91 | 30.70 | 16.67 | 31.58 | 100.00 |
| Library Services | 14.91 | 25.44 | 31.58 | 11.40 | 16.67 | 100.00 |
| SGA Services | 1.67 | 4.17 | 28.33 | 18.33 | 47.50 | 100.00 |
| Dormitory Services (Living Conditions) | 0 | 9.09 | 24.24 | 32.33 | 34.34 | 100.00 |
| Financial Aid Information | 7.14 | 7.14 | 30.62 | 27.55 | 27.55 | 100.00 |
| Work/Study Supervision | 21.59 | 15.91 | 39.77 | 10.33 | 12.50 | 100.00 |
| Food Services (quality & quantity) | 1.03 | 4.13 | 11.34 | 26.80 | 56.70 | 100.00 |
| Time for Meals | 3.45 | 2.30 | 22.99 | 45.98 | 25.28 | 100.00 |
| Weekend Activities (Movies, Disco, etc.) | 2.11 | 1.05 | 8.42 | 21.05 | 67.37 | 100.00 |
| Sport's Equipment | 0 | 4.85 | 21.35 | 33.03 | 40.77 | 100.00 |
| Sport's Hours | 0 | 4.34 | 21.75 | 33.69 | 40.22 | 100.00 |
| Recreational Activities | 0 | 2.24 | 15.74 | 28.08 | 53.94 | 100.00 |
| College Restrictions & Regulations | 0 | 4.54 | 11.37 | 28.40 | 55.69 | 100.00 |

Table 3.4

*The values in rating represent the percentage of students who rated each service according to their degree of satisfaction.

value of S in the range of 50 to 60. The range of 40 to 50 represents the region of S for partial students' satisfaction. Any score of S which is less than 40 represents students' partial or total dissatisfaction with the service S .

3.4. Test of Student Satisfaction

In the last section, we defined the parameter S as the measure of students' satisfaction with the College services as expressed by the calculated S values shown in Figure 3.5.

An examination of Figure 3.5 reveals the following observations:

- (1) Barber-Scotia students are provided with well-satisfying library and work/study supervision services.
- (2) Satisfying (good) services are provided in the areas of teaching methods, advising, and course scheduling.
- (3) Barber-Scotia students are partially satisfied with the course materials presented by instructors, classroom environment, dormitory living conditions, financial aid information, and time for meals.
- (4) Barber-Scotia students expressed partial or total dissatisfaction with the recreational activities, College restrictions and regulations, sport's equipment, sport's hours, weekend activities, food services, and SGA services.

In order to recommend changes in the services in which students expressed partial satisfaction, or partial or total dissatisfaction, a condensed summary of students' suggested changes, comments on services, and educational experiences at the College are presented in Appendix B.

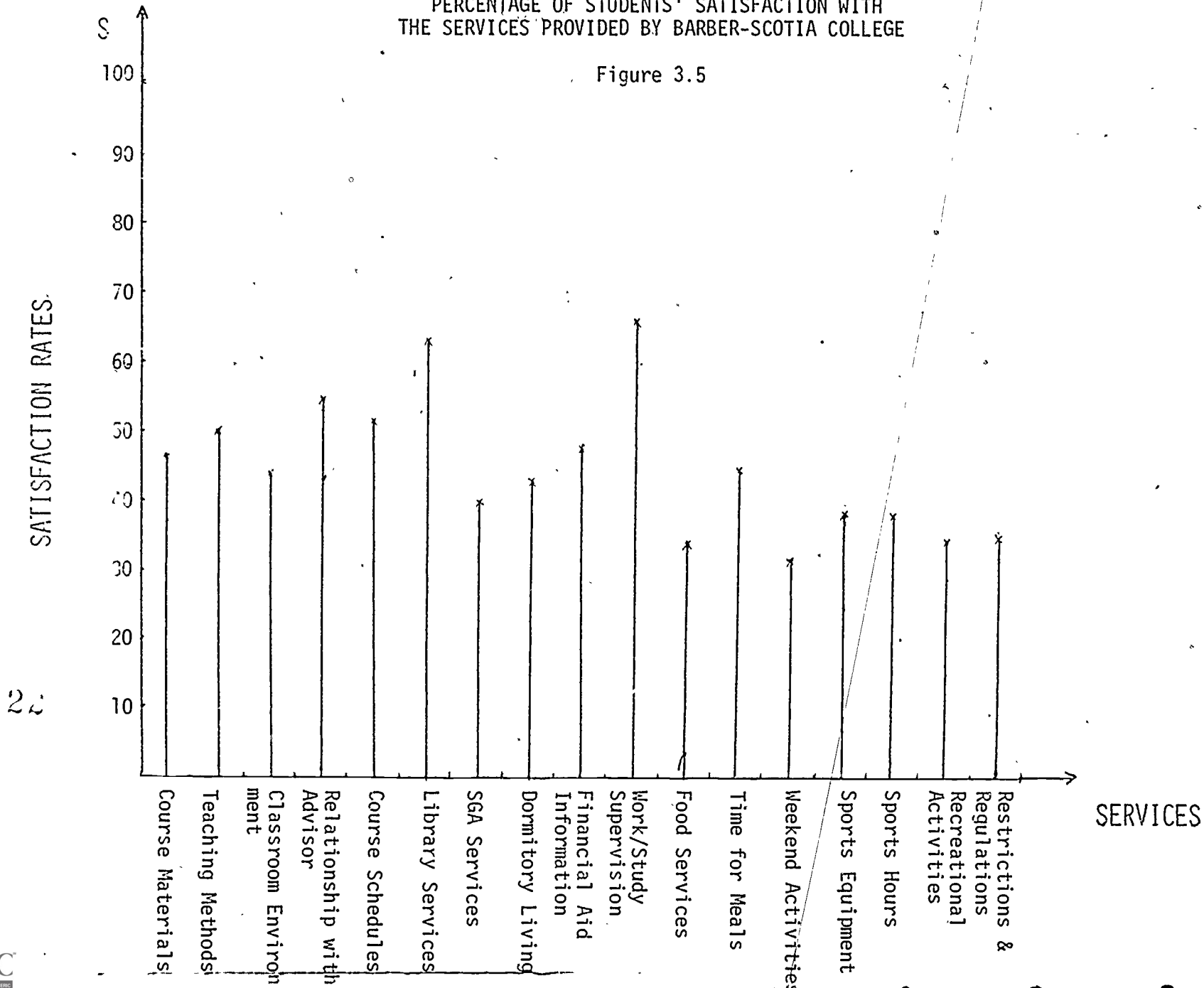
3.5 Factors of Attrition

One of the most important tasks in a research on student attrition is that of identifying the causes of student attrition in an institution.

The factors causing attrition in a college may be predicted from the past reasons for student attrition in a college. Unfortunately, the stu-

PERCENTAGE OF STUDENTS' SATISFACTION WITH
THE SERVICES PROVIDED BY BARBER-SCOTIA COLLEGE

Figure 3.5



dent attrition lists for only the academic years 1979-80 and 1980-81 are available. The percentage contribution of each attrition factor (to all recorded attrition problems for the years 1979-1981) is presented in Table 3.6.

An examination of the percentage contribution of each attrition reason in Table 3.6 reveals the following:

- (a) Reasons are unknown for nearly half of all students who evacuated the college (in the last two academic years) without completing their degree programs.
- (b) Academic suspension and education transfers contribute significantly to student attrition at the college.

The later observation requires the identification of students' academic and social problems, and make recommendations where necessary. For this reason, we have conducted a student opinion survey which was reported in sections 3.3 and 3.4.

3.6 Other Results

In order to recommend realistic and objective changes towards the improvement of student retention rates, the age groups of students who specified their ages in the survey questionnaires are presented in Table 3.7. The age of a student, we believe, reflects on his/her social expectations, peer group, thinking, activities, and so on.

Note that many of the students who filled out the questionnaires are adolescents and young adults. In particular the mean age is 19.93, the median age is 20, and the modal age is 20.

STUDENT ATTRITION REASONS

Fall 1979 - 1981

| REASONS | TOTAL STUDENTS | PERCENTAGE |
|------------------------------------------------|----------------|------------|
| Academic Suspension | 18 | 17.65 |
| Transfer to Other Colleges and Universities | 21 | 20.59 |
| Financial Reasons | 4 | 3.92 |
| Withdrawal | 5 | 4.90 |
| Personal Reasons | 2 | 1.96 |
| Medical Reasons | 1 | .98 |
| Employment | 1 | .98 |
| Unknown Reasons | 50 | 49.02 |
| TOTAL | 102 | 100.00 |

Table 3.6

AGE GROUP OF STUDENTS

| AGE | 18 | 19 | 20 | 21 | 22 | 23 | 25 |
|-----------------|----|----|----|----|----|----|----|
| NO. OF STUDENTS | 18 | 23 | 26 | 17 | 4 | 1 | 1 |

Table 3.7

We have omitted the social background of the students from this study because we only seek approximate measures of his/her expectations which are expressed by the students' comments and suggestions in Appendix B.

Of the 79 students who specified their sexes, 69 are female while 10 are male.

Of the 114 students who specified their classifications, 38 are freshmen, 44 are sophomores, 24 are juniors, and 8 are seniors.

Very many students refused to declare their countries of citizenship or states of origin. Of the 59 students who identified their citizenship, 31 are American, and 28 are from the Islands. Because of the insufficiency of this information, we omitted it from our analysis. Note, however that the origin background of a student may reflect on his social expectations and student services such as, food and sports.

Eighty-six percent of the students feel a sense of belonging in the Barber-Scotia College environment, while the remaining 14% feel a bit uncomfortable.

Ninety-Four percent of the 53 students who responded to the appeal for a summer school program are interested, while only 72% of them would attend a summer program on a full-time basis.

The financial sources for students' education are summarized in Table 3.8. Apart from only one of the respondents, every student benefits from at least one source of finance. Note, however, that 29% of the students benefiting from financial sources are involved with loans.

STUDENT SOURCES OF FINANCE

| SOURCE | NUMBER OF STUDENTS |
|-------------------------|--------------------|
| Grants | 38 |
| Grants and Scholarships | 7 |
| Loans | 2 |
| Grants and Loans | 18 |
| Scholarships | 4 |
| None | 1 |

Table 3.8

In section 4, we will consider the significance and the implications of the various results presented in this section.

SECTION 4

RECOMMENDATIONS AND CONCLUSION

Student attrition and retention are two major related problems facing Barber-Scotia College administrators. The student attrition problem cannot be cured and prevented unless an attitude of loyal, caring, and committed services permeate the entire College environment from the College administrators to all staff and faculty members. In one way or the other, every staff and faculty member has some responsibilities as a retention agent.

This section considers the implications of the various results of the attrition problems at Barber-Scotia College, and recommends specific improvements and changes to enhance retention and reduce student attrition.

4.1 Student Services

As emphasized earlier, the student body is the best source of information for identifying the problems of students. The opinions of students on their degree of satisfaction with the College services carries a significant weight on the power of a college to retain the students for a period of time. If students become totally dissatisfied with many of the College services, the unpleasant result would probably be an increased student attrition rate. There is a need to please students by providing better services in the areas where they expressed partial and total dissatisfaction.

The student body also represent the information source for what accounts for satisfying services. The comments and suggested improvements by students on specific services must be respected. If the complaints and suggestions of students are taken care of, the net result will be an improved

retention rate. To neglect the complaints and recommendations of students on changes would intensify the student attrition rate in a college. The complaints of students on the College services are listed under section B2 of Appendix B. The recommendations on service improvements suggested by students are summarized under sections B3 and B4 of Appendix B. We will now recommend our changes and improvements on academic and social services based on the needs of Barber-Scotia College students.

4.1.1 Potential Dropouts and Academic Services

When the factors leading to the attrition of students is not in the student's repertoire, there is a need for a task analysis of the educational objectives of a college. Dickinson, [3], utilized a task analysis approach in a direct assessment of high school student problems. Following Dickinson, a task analysis of attrition assessment includes a step-by-step analysis of the factors leading to student attrition to generate useful recommendations from the results of a test on student satisfaction with academic and social services rendered by a college. We will now diagnose the student attrition problems at Barber-Scotia College using a task-analysis approach.

The reasons are unknown for about 50% of the student attrition problems in the last two years, indicating the probable existence of potential dropouts among our students. About 18% of the recorded explanations on student attrition are attributed to poor performance and academic suspension. The academic success of every student at Barber-Scotia College should be of major interest and concern to every staff and faculty member at the College. As suggested by Muia, [4], in a study on the potential high school dropouts, there is a need to recognize which students are likely to become dropouts.

In 1969, J. B. Hicks described a sequence of stages that a dropout typically goes through before deciding to leave school as follows:

The potential college dropout first loses interest in course work, thus obtaining lower grades. Frustrated, he begins to skip classes, thus coming in conflict with college authorities. In rebellion, he begins to exhibit abnormal and disruptive behavior, and eventually he is forced out of classes or suspended or expelled from college.

Most important to the educator are the academic factors that influence the student's decision to drop out of college. The student's serious problems with course work, tardiness or irregular class attendance, grade retention, non-participation in extracurricular activities, disruptive behavior at college, poor academic performance due to learning disabilities, all must be handled carefully. Instructors should avoid unrealistically high expectations as students' self-images, because failures are augmented when they are unable to meet the standards of their instors. Instructors should become more interested in the progress of students and give them the much-needed companionship.

In order to meet students' differing needs, several types of learning programs such as the student education supportive program (the Total Student Development program at Barber-Scotia College) should be provided. Instructors should begin to use the assistance of prospective and brilliant senior students to provide tutorial assistance to the freshmen and the sophomores.

There is an obvious need for an early identification of potential college dropouts. Guidance counselors and instructors should recognize potential dropouts (through student grades) and show them approval and love. By providing educational experiences which students cannot get at home and ensuring some degree of success in their work by helping them to overcome their academic handicaps, the potential dropouts and the under-

prepared students will be saved from unhappiness, frustration, and hostility. Of course, all these require the total caring attitude and commitment of every faculty and staff member.

4.1.2 Student Involvement in Curriculum Planning

Hogg and Guisti, [57], first recognized the question of what to do to meet the needs of all students in a college (whose students are not only sons and daughters of the well-motivated middle class, but also students of the alienated and disadvantaged lower class) as an imperative for action. This observation suggests that all students should be given a conceptual base for more direct involvement with developing the curricular experiences in which they will be involved. There is a need for a broad attack on major curriculum problems at the College. The global attack on the problems would be accomplished only under the auspices of various students and faculty committees.

The administrators will only continue to increase the student attrition rate by turning deaf ears to the cries of students on the need to relax the rigid academic regulations on the freshman and sophomore years which are full of general, compulsory, and required core courses. These core courses deny the students the opportunity to gain an early insight into their major areas of specialization. For what use is it for a student who is interested in computer science but cannot take even a beginning course in computer science until the junior year because of the College's academic regulations. Ideally, every division or department should develop a core course requirement which will introduce students to their major areas beginning from the sophomore year at the latest (if not the freshman year). Of course, the curriculum and course scheduling of a division should comply with the overall college graduation requirements.

4.2 Recruitment Strategies and Student Raiding

Today, all predominantly black colleges and universities, in the attempt to increase their student enrollments, not only compete among themselves, but they also compete with the predominantly white institutions who are interested in recruiting brilliant and promising black students. All four-year institutions are intensifying their efforts to recruit high-ability students. Many other colleges and universities are lowering their admission standards to upgrade their enrollments. I submit that if in the interests of greater enrollments, predominantly black colleges concentrate their efforts on courses, activities, and programs that have little currency in higher education, students with aspirations beyond mere attendance will continue to seek their education elsewhere.

In order to upgrade the student enrollments at Barber-Scotia College, there is a need to introduce more occupational and technical programs. The failure to introduce career-oriented programs will increase the transfer of students' education to other institutions.

In order to promote and boost the name of the College, there is a need for more publicity of our education curriculum and activities to society. There is a need for more recognition of our faculty members by their participation and attendance at professional workshops and conferences. Every faculty member should become involved in research activities worth publication at conferences and in journals.

There is a need for a college recruiter who would visit public schools to present the various programs (along with the job opportunities) at Barber-Scotia College. The same recruiter should also visit two-year colleges offering associate degrees.

Student raiding is a new problem confronting many black colleges. The richly endowed universities are visiting self-supporting colleges to present their education curriculum to the freshmen. The result is always a transfer of education after the first academic year or the first semester. As much as is possible, the recruitment specialists from other institutions should be allowed to address our junior and senior students only.

4.3 Food, Health, Social, and Other Services

The brain cannot function unless the body and soul are warm, and a hungry man is an angry man. We cannot get much support and cooperation from the students unless we provide them with better quality and more varieties of food. Good quality in food does not incur additional expenses on the College's budget but requires a caring attitude from the cafeteria staff.

The decision to provide more of a quantity of food will introduce additional expenses into the College's budget. The only feasible solution to this problem would be the removal of feeding expenses from school fees of students and allow them to "pay as you eat". The appeal by students for an extension in time for meals is not an unsolvable problem-- all we need to do is to comply with their suggestions by providing their breakfast between 7:00 a.m. and 8:30 a.m., lunch: 11:00 a.m. - 1:00 p.m., and dinner: 4:00 p.m. - 6:00 p.m.

The question on what to do on weekends (as raised by many students) is simply answered: Encourage the various student organizations and clubs to become more active by developing schedules of activities and events which will vary from movies, dancing, picnics, club fund-raising activities, debates, workshops, and games to intercollege visits,

visits to industries, and so on. Of course, the advisors to student organizations and clubs should assist students in developing interesting and motivating activities that are consistent with the constitution and objectives of the particular club or organization.

The Student Government Association should become more visible to students and assist various student clubs in planning their activities. The SGA officials should become more interested in identifying the social needs and complaints of students, and convey the feelings of students on specific problems to the appropriate administrator at the College, and also make sure that the grievances of students are resolved

Keeping classrooms, restrooms, and dormitories neat will not introduce additional cost on the College's budget but requires more attention and dedication of the janitorial staff. The administrators should pay more surprise visits to classrooms, restrooms, and dormitories and ensure their neatness.

Medical attention is a crucial problem in which many students want to see immediate action. The directors of the residence halls should make it possible for the students to contact them for medical assistance on weekends and in cases of emergency. Arrangements should be made with the College nurse so that she can be available for medical service on weekends.

Communication by telephone is one of the major areas in which students expressed total dissatisfaction. Students cannot communicate with their parents and friends on weekends because no one is available at the switchboard most of the time. This is not a crucial problem since arrangements can be made with the switchboard operator to be more readily available. It may probably be possible to extend the switchboard hours during

weekends, since the security officers do control the switchboard. Work/study student assistance can possibly be used to monitor the switchboard during the day on weekends, then the security officers could take over at night.

The demand by students to relax the College's social rules and regulations would probably be difficult to meet in view of the fact that our College is church affiliated. A statement of social expectations on good morals should be included in the College Catalog (if not already in it) so that the students will not feel disappointed when they come to Barber-Scotia College. The majority of our students already perceive themselves as adults even though very many of them are still adolescents. We recommend that a counseling team look into the social demands of co-ed visitation and its implications.

Sporting hours, we believe, can easily be extended to meet the demands of our students.

The Financial Aid Office should assist students in completing applications for grants and loans, and provide them with available sources of financial assistance.

Instructors should ensure that library books and materials for student assignments are readily available to all students. Photocopying the relevant parts of recommended texts for specific assignments and placing the copied materials in the reserved section would ensure an even distribution of materials to students.

At this juncture, the educational administrators who care about the progress of their students should stop and meditate on what accounts for education barriers (as presented in section B2 and B3 of Appendix B) and hearken to the voices of students on their demands which are presented in section B4 of Appendix B.

4.4 Summary

In this study, we have introduced a methodology for the study of student attrition and retention problems. The methodology was applied to the Barber-Scotia College environment. The factors leading to student attrition at the College have been identified with specific recommendations on how to combat each attrition factor. The opinions of students were surveyed to bear on their degree of satisfaction with each academic and social service that the college renders to students. The students were dissatisfied with a reasonable number of the College services. We have recommended specific changes which we hope the College administrators will take advantage of in order to improve the student retention rate. Other methods for the study of attrition and retention problems might be proposed, but the results of this study make us feel the successful outcome of this work.

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Barber-Scotia College
Concord, North Carolina 28025
A COLLEGE OF THE UNITED PRESBYTERIAN CHURCH
IN THE
UNITED STATES OF AMERICA

OFFICE OF INSTITUTIONAL RESEARCH

September 15, 1981

Dear Student,

We want very much to improve the student services and build a better Student-faculty relationship at Barber-Scotia College. We think that you, as one of our Students, could provide information and ideas to help toward that end.

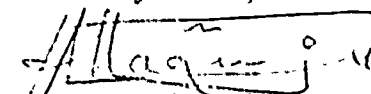
An important source of ideas for establishing an effective Student-faculty Communication and providing better services is the student body. We think that with your help, there is a way to bring Students' opinions effectively to bear on the services provided by the College.

Our plan is to tap the wisdom of our students about what makes for successful student-faculty interaction and what accounts for satisfying services. Your ideas will be presented in a systematic way to the whole faculty and we shall use them as a vehicle to start the new Student-faculty dialogues on the student services. This letter and the accompanying questionnaire comprise the first stage in implementing our plan.

We respect the fact your time is limited. We ask for your aid because we are confident that what you feel about Barber-Scotia College will carry substantial weight.

We would like to complete the first stages of the plan by September 30, 1981. We are eager to have an early impact on student services at the College and hope that you will share our enthusiasm for this project. We are enclosing a self-addressed return envelope and are looking forward to receiving your completed questionnaire as soon as possible. Please drop the return envelope in the campus mailbox at the Barber-Scotia Post Office.

Sincerely Yours,



Amos Olagunju
MIS Director

STUDENT FOLLOW-UP QUESTIONNAIRE

Name: _____ School Telephone: _____
 (Optional) (Optional)

Sex: _____ Marital Status, _____ Age: _____

Country of Citizenship: _____ State of Origin: _____

Year Entered B-S C: _____ Major: _____ Minor: _____

Present Classification: _____
 (Freshman, Sophomore, Junior, Senior)

Previous School/ College Records:

| Name | Location | Dates Attended | Certificate earned |
|------|----------|----------------|--------------------|
| | | | |
| | | | |
| | | | |

Check (✓) the appropriate boxes below to show your degree of satisfaction with the Academic and Student Services provided by Barber-Scotia College. Add Comments if necessary.

| | Excellent | Very Good | Good | Fair | Poor | Additional Comments |
|----------------------------------------------|-----------|-----------|------|------|------|---------------------|
| 1. Course Materials Presented by Instructors | | | | | | |
| 2. Instructors' Teaching Methods | | | | | | |
| 3. Classroom Environment (Neatness) | | | | | | |
| 4. Relationship with your Advisor | | | | | | |
| 5. Course Schedules by your Advisor | | | | | | |
| 6. Library Services | | | | | | |
| 7. SGA Services | | | | | | |
| 8. Dormitory Services (Living Conditions) | | | | | | |
| 9. Financial Aid Information | | | | | | |
| 10. Work Study Supervision | | | | | | |

(OVER)

| | Excellent | Very Good | Good | Fair | Poor | Additional Comments |
|------------------------------------------------|-----------|-----------|------|------|------|---------------------|
| 11. Food Services (quality & quantity) | | | | | | |
| 12. Time for Meals | | | | | | |
| 13. Weekend Activities (Movies, Disco, etc) | | | | | | |
| 14. Sport Equipments | | | | | | |
| 15. Sport Hours | | | | | | |
| 16. Recreational Activities | | | | | | |
| 17. College Restrictions & Regulations | | | | | | |

P.T.O.

College Activities or
Club Membership: _____

Outside Activities: (e.g. Hobbies, Sports, Civic groups. Please Specify)

Present Source of Finance: (Loan, Grant, Scholarship, etc.)

Do you see yourself as a part of Barber-Scotia Community? (Yes or No) _____
If No, Explain Why _____

A. List your Present Best Educational Experiences at Barber-Scotia College:

1. _____
2. _____
3. _____

B. List the Biggest Obstacles to your Education at Barber-Scotia College:

1. _____
2. _____
3. _____

C. List changes which you would be interested in seeing at Barber-Scotia College:

1. _____
2. _____
3. _____

By attending a summer school at Barber-Scotia College, you may graduate in less than 4 years. Are you interested in a summer school program? (Yes or No) _____ If yes, will you attend a summer school as a part-time or full-time student? _____

APPENDIX B

STUDENTS' EDUCATIONAL EXPERIENCES, COMMENTS, AND SUGGESTIONS

Summarized in this appendix are students' educational experiences, problems, comments on social and academic services, and suggestions on improvements.

B1

Best Educational Experiences

- (a) Improved learning skills in the areas of mathematics, biology, English, music, speech, history, and western civilization.
- (b) Appreciating values through activities such as vesper candlelighting, and convocation services.
- (c) Meeting people of different cultures, and learning more about others.
- (d) Some nice teachers
- (e) Assistance from PDS program and speeches from the President and the Vice President of Student Affairs.
- (f) Special teaching techniques employed by instructors like Mr. Majunda, and Mrs. Wilson.

B2

Educational Barriers

- (a) Courses are not taken in sequence by students due to lack of or poor advisement, and not being allowed to start work in major areas on time.
- (b) Materials by some instructors are not organized; especially in physical science, and some instructors are too fast in presenting classwork; some courses are boring.
- (c) Beneficial and career-oriented courses are not offered.
- (d) Being forced to take too many course that are not relevant to a student's major.
- (e) Insufficient library materials for assignments.
- (f) Worrying about living conditions, creates anxiety.
- (g) Classrooms are not in proper order.
- (h) Too many college rules and regulations that are unfair to young adults.

- (i) Insufficient finance for books and fees.
- (j) The quality and quantity of food is poor.

B3

Students' Comments on Services

(1) Food Service

- a. The quality of food is poor, and the quantity is too small.
- b. Meals are served cold or warm.
- c. The lines move too slow, so there is a need to serve meals at a faster rate.
- d. There is a need for more varieties of food as potatoes and pork are always served.

(2) Time for Meals

- a. Breakfast time should be extended - 7:00 a.m. - 8:30 a.m., lunch - 11:00 a.m. - 1:00 p.m., and dinner - 4:00 p.m. - 6:00 p.m. 7
- b. Meals should be served three times a day on weekends.

(3) Weekend Activities

- a. There is a need for more activities, as last year's activities were better.
- b. Weekends are boring, as there is nothing to do.
- c. The soccer team should be provided with food after practice.

(4) Restrictions and Regulations

- a. Too many restrictions
- b. Students should be treated as young adults rather than children.

B4

Students' Suggested Changes

- (a) Provide better, more, and a variety of meals, and extend meal hours.
- (b) Provide better living conditions and dormitory services (Graves Hall in particular). There is a need to improve restrooms and medical attention.

- (c) Extend telephone switchboard hours.
- (d) Provide more activities after class and on weekends, opening gameroom for a longer period, and organize visiting trips to industries and neighboring schools.
- (e) Improve classroom environments, e.g. the Grammar Room is bad.
- (f) Relax the academic and social rules and regulations.
- (g) Instructors need to show more caring attitudes and interests in the education of students.
- (h) Introduce a summer school program.
- (i) Introduce more courses, such as prep band or a music class.
- (j) Assist students in getting more financial aid.