#### DOCUMENT RESUME

ED 110 102

JC 750 408

AUTHOR

Shearon, Ronald W.; And Others

TITLE

Profile of Students in North Carolina Community Colleges and Technical Institutes, 1974. Progress

Report.

Jul 75

INSTITUTION

North Carolina State Univ., Raleigh. Dept. of Adult

and Community Coll. Education.

SPONS AGENCY

North Carolina State Dept. of Community Colleges. Raleigh.; North Carolina State Dept. of Public

Instruction, Raleigh. Occupational Pesearch Unit.

PUB DATE

NOTE

59p:; Paper presented at the annual meeting of the Southeast Region AFRA Special Interest Group in Community College Research (Boone, North Carolina,

July 22, 1975)

EDRS PRICE

MF-\$0.76 HC-\$3.32 PLUS POSTAGE

College Choice: Day Students: \*Educational Attitudes; DESCRIPTORS

Evening Students: \*Junior Colleges: \*Junior College Students: Socioeconomic Status; State Surveys; \*Student Characteristics; Student Employment;

\*Technical Institutes; Terminal Students; Transfer

Students

IDENTIFIERS

Extension Students: \*North Carolina

#### ABSTRACT

The objectives of this research project were to: (1) replicate and update data gathered in 1969 about North Carolina Community College System (NCCCS) credit students: (2) provide a similar profile of non-credit students; (3) provide a profile of all North Carolina adults (over 18) in 1970 to serve as a comparison basis; (4) examine student value orientations toward education and reasons for attending institutions in the NCCCS; and (5) analyze the relationships found between selected programmatic, demographic, and socioeconomic variables. In order to achieve these objectives, a 45 sitem questionnaire was administered to 13,723 students enrolled in 16 NCCCS community colleges/technical institutes during the spring quarter of 1974; 10,074 (73 percent) were returned in usable form. Data presented includes demographic, socioeconomic, academic, and attendance characteristics for the entire sample, compared characteristics of curriculum vs. extension (non-credit) students, characteristics of students by major educational program area, characteristics of the adult population of the state, changes in credit student characteristics since 1968, student employment information, future plans of students by program area, and the . institutional characteristics which influence student selection of a college. Sampling and data analysis techniques are detailed. (Author/DC)

# EUHCATION EUHCATION THE SET OF THE SET OF FROM THE SET OF THE S

# PROGRÈS S REPORT

PROFILE OF STUDENTS IN NORTH CAROLINA COMMUNITY COLLEGES

AND TECHNICAL INSTITUTES, 1974

by

Ronald W. Shearon Robert G. Templin, Jr. David E. Daniel

July, 1975

Department of Adult and Community College Education North Carolina State University at Raleigh

[This report was prepared in response to interest expressed in several areas and repeated requests for a progress report on the research project. Information contained herein pertains only to data that have been analyzed, interpreted, and are currently available. The formal report on this project will be available upon completion of the analysis, and interpretation of the remaining raw data,]

408

787 - 2 - 2

#### ABSTRACT

SHEARON, RONALD W., TEMPLIN, ROBERT G., JR., and DANIEL, DAVID E. Profile of Students in North Carolina Community Colleges and Technical Institutes, 1974

The purpose of this research project was to gather, analyze, and update data regarding the characteristics of students currently enrolled in the North Carolina Community College System. Specific objectives of the project were to:

- --Replicate and update the data in Bolick's 1969 study, Socio-Economic Profile of Credit Students in the North Carolina Community College System, for the purpose of detecting changes in student profiles over the past six years;
- --Provide a similar socioeconomic profile of noncredit students in the North Carolina Community College System in terms of age, sex, race, geographical area, and program area for comparative purposes;
- --Provide a socioeconomic profile of North Carolina adults 18 years of age and older in 1970 in terms of age, sex, race, geographical area, and level of formal education to serve as a comparison basis;
- --Examine student value orientations toward education and reasons for attending institutions in the North Carolina Community College System; and
- --Analyze relationships between selected programmatic, demographic, and socioeconomic variables studied in the attainment of the foregoing objectives.

Data were obtained from a smaple of 10,074 curriculum and extension students enrolled in 16 community colleges/technical institutes during the spring quarter of 1974. A two-step, circular-systematic design was used in selecting the institutions and the students. A 45-item research questionnaire was designed and administered to 13,723 students with 73 percent of the returned questionnaires being usable.

Some of the major changes between 1968 and 1974 among students enrolled in the curriculum programs were:

--A trend toward a greater percentage of married, fe-1 male, nonwhite students between the ages of 26 and 49 who were living in residences other than with their parents.

- --A tendency toward a greater representation of higher income groups and a larger proportion with a higher level of formal education.
- --An increased enrollment in technical programs, evening classes, part-time students, full-time employees, and students who would not have attended any other institution of higher learning had it not been for the availability of a community college/technical institute.

General characteristics of the 1974 enrollees (curriculum and extension) were:

--A majority were male, white, over 25 years of age (averaging 33), married, North Carolina residents, attendan institution in their home county, living with their spouse and/or children, earning less than \$7500 per year, high school graduates with parents having less than a high school education, earned at least a "B" average in high school, attending evening classes, and enrolled in one course.

When curriculum and extension students were compared:

- --A majority of the curriculum students were male; a majority of extension students were female.
- --A larger percentage of nonwhite students were in extension programs than curriculum programs.
- --A majority of the curriculum students were less than 25 years of age; a majority of the extension students were over 25 years of age.
- --Most curriculum students attended class during the day and most extension students attended evening classes.

When students sampled in 1974 were compared with all North Carolina adults who were 18 years of age and older in 1970, the findings were:

- --All segments of the State's adult population were represented among the various educational programs. However, a slightly higher proportion of "disadvantaged" racial minority and low-income students were being served in 1974 than existed in the 1970 adult population.
- --Older adults and persons with lower levels of formal education were underrepresented in community college/ technical institute enrollments in 1974.

Regarding student value orientations toward education:

- --Most curriculum students were continuing their education to be able to earn more money or to be able to get a better job.
- --The major reason for extension students continuing their education was to learn more things of interest.

Reasons given by students for attending community colleges/technical institutes in North Carolina were:

- --Primarily because of the institutions's location (nearness to home), educational programs or courses available, and low cost.
- --The lowest ranked reasons were job placement services and student-centered activities and instruction.

Relationships found between selected programmatic, demographic, and socioeconomic variables were:

- --A positive relationship between educational program area selected and primary income and father's, mother's, and student's level of formal education.
- --A positive relationship between high school rank and program area selected even when socioeconomic characteristics were controlled.
- --Students' level of formal education, race, and primary income accounted for the greatest portion of wariation in program areas selected.
- --These relationships were relatively weak in that less than 10 percent of the variation in program areas selected were accounted for by these variables.

Overall, community colleges/technical institutes tended to fulfill their claim of being the "people's colleges." If these institutions are to claim they are comprehensive; not only in the programs they offer but also in terms of the people they serve, they cannot substantiate that claim by making reference solely to their full-time day students in degree programs. It is only when all students—day and evening, full-time and part-time—and all programs—extension as well as curriculum—are considered that these institutions approximate their comprehensive philosophy.

PROFILE OF STUDENTS IN NORTH CAROLINA COMMUNITY COLLEGES AND TECHNICAL INSTITUTES, 1974\*

by

Ronald W: Shearon, Robert G. Templin, Jr., and David E. Daniel\*\*

## INTRODUCTION

## Statement of the Problem

A continuing challenge facing community college/technical institute trustees, administrators, and instructional leaders is that of assessing the effect of changing populations on those institutions' administrative policies, practices, and instructional programs. In comprehensive adult education institutions like community colleges/technical institutes, where participation is on a voluntary basis and open admissions policies abound, it seems axiomatic that educational leaders study and analyze learner characteristics, interests, and needs as a basis for developing and renewing educational programs. According to Bolick, "the comprehensive community college or technical institute cannot be understood without a clear, factual, and unbiased understanding of its students." This statement may be even more true



<sup>\*</sup>A progress report prepared for the Southern Association of Community College Researchers' (A Special-Interest Group of the American Educational Research Association) Conference for Researchers in Two-Year Institutions held in Boone, North Carolina, July 22-23, 1975. This research project is being supported by the N. C. Department of Public Instruction, Occupational Research Unit, Vocational Education Amendments of 1968 (P.L. 90-576) Title I--Part C, Sec. 131(b); the Department of Community Colleges; the State Board of Education; and the Department of Adult and Community College Education, N. C. State University at Raleigh.

<sup>\*\*</sup>About the authors: Ronald W. Shearon, Project Director and Associate Professor, Adult and Community College Education, NCSU; Robert G. Templin, Jr., Research Associate and Dean of Instruction, Somerset (Kentucky) Community College; and David E. Daniel, Research Associate and Dean of Instruction, Isothermal Community College, Spindale, North Carolina.

lGerald M. Bolick, Socio-Economic Profile of Credit Students in the North Carolina Community College System, HEW Project No. 8-C-033 (Raleigh, N. C.: Department of Community Colleges, 1969), p. 1.

today than it was in 1969. However, no major study of community college/technical institute student characteristics has been undertaken in North Carolina since Bolick's study.

Since 1969, student enrollments have increased, new institutions have emerged, maturing ones have become more comprehensive, and many educational program areas have been added and/or modified. While continuing financial support at the State and local levels has risen to unprecedented levels, even in view of recent reductions, the spiraling cost of post-secondary education, compounded by the effects of inflation, economic recession, and cutbacks in federal support, has evoked the identification of new educational priorities with emphasis upon "accountability" in terms of both educational programs and fiscal management.

For example, since 1969 student enrollment in the North Carolina Community College System has increased by more than 190,000 students. Further, enrollment in the System's regular programs increased from 59,000 in the fall of 1973 to 72,000 in the fall of 1974, and enrollments in off-campus extension courses increased from 104,000 to 127,000 in the same time period. In addition to the aforementioned increases in student enrollments, the System is experiencing further enrollment increases as a result of the current economic crunch. Enrollments in educational programs tend to increase during periods of economic crisis.

Meanwhile, national commissions and numerous authorities have called attention to the changing types of students entering community colleges/technical institutes: the "new" student; the Vietnam veteran; the homemaker; the full-time, middle-aged student; the part-time recent high school graduate; the elderly, to mention a few. 4 Concurrently, the findings of several recent national research projects have explicitly challenged the reality of accessibility and equality of

North Carolina Community College System Report, 19631970 (Raleigh, N. C.: State Board of Education, 1970), p. 101;
"North Carolina Community College System Enrollment 1972-73
School Year'" (Raleigh, N. C.: Department of Community Colleges, 1973). Mimeographed.

<sup>3</sup>Data obtained from Dr. Benjamin E. Fountain, Jr., State President, Department of Community Colleges, April 3, 1975.

<sup>4</sup>The Carnegie Commission on Higher Education, The Open Door (New York: McGraw-Hill, 1970); K. Patricia Cross, Beyond the Open Door (San Francisco: Jossey-Bass, Inc., 1971); Terry O'Banion, Teachers for Tomorrow (Tucson: University of Arizona Press, 1972); Florence B. Brawer, "The Thirteenth Year,"

educational opportunity in the current structure of postsecondary education in the United States.<sup>5</sup>

The aforementioned events and activities, all of which have occurred since 1969, point to the increasing importance of community college/technical institute policy-makers and educational leaders knowing who their students are. In view of such sweeping changes, six-year-old data are inadequate for purposes of planning, offering, evaluating, and standing accountable for educational program areas at the community college/technical institute. This research project was designed to gather, analyze, and update data regarding the characteristics of students enrolled in the North Carolina Community College System in the spring quarter of 1974.

## Objectives

The specific objectives of this research project were to:

- 1. Replicate and update the data in Bolick's 1969 study,
  Socio-Economic Profile of Credit Students in the North
  Carolina Community College System, for the purpose of detecting changes in student profiles over the past six years?
- 2. Provide a similar profile of noncredit students in the North Carolina Community College System in terms of age, sex, race, geographical area, and program area for comparative purposes.
- 3. Provide a socioeconomic profile of North Carolina adults 18 years of age and older in terms of age, sex, race, geographical area, and level of formal education to serve as a comparison base.

Change (February, 1973), pp. 32a-d; J. Conrad Glass, Jr., and Richard F. Harshberger, The Full-Time Middle-Aged Adult Student in Higher Education, Journal of Higher Education (in process).

<sup>5</sup>Frank Newman et al., Report on Higher Education (Washington, D.C.: Government Printing Office, 1971); William H. Sewell, "Inequality of Opportunity for Higher Education," American Sociological Review, 36 (October, 1971), 793-809; Christopher Jencks et al., Inequality: A Reassessment of the Effect of Family and Schooling in America (New York: Basic Books, 1972); Frederick Mosteller and Daniel P. Moynihan, eds., On Equality of Educational Opportunity (New York: Random House, 1972).

- 4. Examine student value orientations toward education and reasons for attending specific institutions in the North Carolina Community College System.
- 5. Analyze relationships between selected programmatic, demographic, and socioeconomic variables studied in the attainment of the foregoing objectives.

## Research Questions

To facilitate the attainment of the project objectives, 15 specific research questions were formulated; i.e.:

- 1. Who are the students being served by the North Carolina Community College System in terms of their demographic, socioeconomic, academic, and attendance characteristics?
- 2. Which students are enrolling in what educational program areas (college-transfer, technical, vocational, academic extension, fundamental education, occupational extension, and recreation extension)?
- 3. What is the proportion of students enrolled in the Community College System compared to the proportion of the State's population who are eligible to enroll, in terms of their demographic and socioeconomic characteristics?
- 4. What group(s) is/are not being served by the Community College System, in terms of their demographic and socioeconomic characteristics?
- 5. What changes have occurred in the profile of curriculum students since the 1969 Bolick study?
- 6. Which students in what educational program areas would least likely continue their education were it not for the existence of technical institutes/community colleges, in terms of their demographic and socioeconomic characteristics?
- 7. Which students in what educational program areas are least likely to attend a community college/technical institute as the commuting distance to and from class increases?
- 8. Which students in what educational program areas are selecting community colleges/technical institutes as their first choice over other forms of postsecondary education?

- 9. What forms of recruitment strategies attract students in different educational program areas to community colleges/technical institutes?
- 10. Which students in what educational program areas are receiving financial assistance and what is the source of that aid, in terms of their demographic and socioeconomic characteristics?
- 11. Which students in what educational program areas are employed and to what extent?
- 12. Which students in what educational program areas plan to work toward a four-year degree?
- 13. Which students in what educational program areas plan to work in North Carolina following the completion of their formal education?
- 14. What are the major reasons for continuing education among curriculum and extension students?
- 15. Which institutional characteristics have the most influence on curriculum and extension students in their selection of an institution for continuing their education?

Data for questions 1 through 5 and 10 through 15 have been analyzed and the findings are presented in this progress report. Raw data for questions 6 through 9 have been gathered and are in the process of being analyzed. Findings from those analyses will appear in the final project report due for publication in December, 1975.

## · RESEARCH DESIGN

This investigation utilized survey research design procedures and techniques to generate data on the 15 research questions and 5 objectives enumerated in the Introduction. For purposes of this progress report, a brief description of the population, sampling design, sample, instrumentation, data collection, and analysis procedures will be provided.

## Population

The population for this research project was all students enrolled in the 57 community colleges/technical institutes in the North Carolina Community College System during the spring quarter of 1974. The total student body enrolled in all educational program areas was projected to be 181,767 during the 1974 spring quarter by the Management Information Services Division of the Department of Community Colleges.

## Sampling Design

A two-step, circular-systematic sampling design was developed in cooperation with C. H. Proctor<sup>2</sup> and used in selecting the sample. Briefly, the procedures were:

- 1 Spring, 1973, enrollments by institution were developed for both curriculum (credit) programs and extension (noncredit) programs
- 2. Projections for Spring, 1974, enrollment were made on the basis of predicting a 15 percent increase over the Spring, 1973, enrollment in curriculum programs and no growth in extension programs.

lFor a more detailed description of the methodology, see Robert G. Templin, Jr., "Profile of Students in North Carolina Community Colleges and Technical Institutes, 1974," doctoral dissertation in process (Raleigh: N. C. State University, 1975), and David E. Daniel, "Value Orientations Toward Education of Students in the North Carolina Community College System," unpublished doctoral dissertation (Raleigh: N. C. State University, 1975), pp. 42-59.

<sup>&</sup>lt;sup>2</sup>Professor, Department of Statistics, N. C. State University at Raleigh.

- 3. All 57 institutions, along with their projected enrollments, were listed in alphabetical order, stratified by type of institution (community college/
  technical institute), geographical region (mountain/
  piedmont/coastal plains), and population density of
  the county in which they are located (rural/urban),
  with enrollments listed cumulatively.
- 4. Students within 16 institutions—7 community colleges and 9 technical institutes—were selected through circular—systematic sampling with self-correcting weighting for size of institution, using the sampling ratios

$$N/R = TSG$$
,

where N = target population size (181,767), R = institutional sampling size (16), and TSG = total sampling gap (9566-68). After randomly selecting a six-digit number from a table of random numbers, that number was matched with its corresponding counterpart on the list of cumulative enrollments. By adding the "total sampling gap" to that and each subsequent cumulative enrollment figure, students within 16 institutions were selected.

- 5. For each of the 16 selected institutions, a list of all classes in process during the spring quarter, 1974, along with a report of the average headcount in the classes, was secured.
- 6. Knowing the approximate number of students to be sampled from each institution (965), the number of classes to be included in the sample was determined on the basis of the formula,

$$M_i s_i / S_i = m_i$$

where  $M_i$  = total number of classes conducted by a given institution;  $s_i$  = desired number of students at a given institution (965);  $S_i$  = total number of students enrolled in all classes at a given institution; and  $m_i$  = number of classes included in the sample at a given institution.

7. A list of all classes being conducted at the institution was obtained and reordered so that all curriculum classes were listed together, followed by all noncredit extension classes listed together.

8. Students within each institution were selected through circular-systematic sampling using the sampling ratio,

# $M_i/s_i = ISG_i$ ,

where ISG = institutional sampling gap at a given institution. Using a table of random numbers, a five-digit number (if S>9999) or a four-digit number (if S<9999), the class within which that number fell was located on the listing of cumulative average class size. By a process of adding the ISG to numbers drawn from the table of random digits and locating the class within which the new number fell, the desired number of students was selected.

## <u>Sample</u>

Based on the sampling design, the following 16 institutions were identified for the research project:

#### Community Colleges

Caldwell Community College & Technical
Institute
Central Piedmont Community College
Coastal Carolina Community College
Gaston College
Rockingham Community
College
Southeastern Community
College
Wilkes Community College

## Technical Institutes

Anson Technical Institute
Blue Ridge Technical Institute
Cape Fear Technical Institute
Central Carolina Technical
Institute
Forsyth Technical Institute
Halifax County Technical
Institute
Roanoke-Chowan Technical
Institute
Rowan Technical Institute
Technical Institute
Technical Institute of Alamance

A total of 15,440 students were expected to be included in the sample. However, 13,723 research instruments were actually administered and a total of 10,074 usable question-naires were actually returned. Responses from the 16 institutions ranged from 36 to 89 percent. Overall, 73 percent of the questionnaires were returned in a usable form.

#### Instrumentation

A 45-item research questionnaire was designed to collect the necessary wata. Questions and categories similar to those used by Bolick were included so that comparisons could be made

9

between the two studies. The instrument was revised several times after pretesting in two institutions that were not included in the study sample.

Face validity of the instrument was established through the cooperation of the Occupational Research Unit's Review Panel in the Department of Public Instruction and the Deparment of Community Colleges. Test-retest reliability coefficients were obtained with a sample of the pretest population and by comparing student responses with institutional records.

#### Data Collection

Data were collected during the spring quarter of 1974. Each participating institution's president designated a staff member to serve as the project coordinator. The researchers then visited each of the 16 institutions and drew the sample with the aid of the institution's project coordinator. After the sample of classes had been drawn, the project coordinators were asked to distribute all questionnaires to the class instructors. The instructors actually administered the research instruments to their class and returned all instruments to the project coordinator. All questionnaires were delivered personally to and picked up from the project coordinators by members of the research team.

## Data Analysis

All questionnaires were edited upon receipt by the researchers. The data were then transferred to data cards and computer tapes for data analysis.

Since the basic sampling unit consisted of classes, the possibility existed that the same student might be enrolled in two or more classes. Therefore, a decision was made to weight the responses according to the number of courses or hours enrolled in by full-time and part-time students. After weighting the responses, the frequencies usually fell within 1 percent of the actual enrollment statistics during the spring quarter, 1974.

<sup>3</sup>Ronald W. Shearon, Robert G. Templin, and David E. Dan-iel, "Rationale and Criteria for the Determination of Student Nonresponses and Percentage of Student Response by Institution," (Raleigh: Department of Adult & Community College Education, N. C. State University, 1974). Mimeographed.

Data were descriptively analyzed by using frequency distributions, percentages, and weighted means. Other statistical techniques included factor analysis, Man-Whitney U test, Kruskal-Wallis analysis of variance, chi-square test, correlations, multiple regression, and F-tests and t-tests. The :05 level of confidence was used as the criterion for statistical significance.

#### RESULTS

The findings reported herein are only partial results, since data analyses and interpretations are still in progress, particularly for Research Questions 6, 7, 8, and 9. The findings regarding the remainder of the research questions are presented to the degree that analyses have progressed. The findings are presented in two parts—a descriptive profile and hypothesis testing.

## Part I: Descriptive Profile

## Research Question 1

Who are the students being served by the North Carolina Community College System in terms of their demographic, socioeconomic, academic, and attendance classifications?

#### Demographic Characteristics

The data in Table 1 show that 55 percent of the students attending community colleges/technical institutes were males compared with 45 percent females. Three-fourths of the students were white and one-fourth were nonwhite.

Fifty-eight percent of the students were over 25 years of age. Relatively few were "older" adults, with only 6 percent being 60 years or older. According to a recent report, a need exists for new educational services for 23 million Americans over age 65 (10 percent of the nation's population). Further, the report recommended that community colleges assume primary responsibility for developing such programs.

Most of the students were married (60 percent) and 24 percent were military veterans. Ninety-two percent of all students were residents of North Carolina, and 75 percent lived in the county in which the institution they were attending is located. Sixty percent of the students lived with their spouse and/or children.



<sup>1</sup> AEA Dateline, Vol. II, No. 2 (June, 1975), 1.

Table 1. Weighted percentage distribution of curriculum and extension students enrolled in North Carolina community colleges/technical institutes, 1974, by sex, race, age, marital status, military veteran, North Carolina residence status, location of institution, and place of residence

Variable		/ Students <sup>a</sup>			
		Curriculum	Extension	Total	
Sex:		, , ,	•		
Male		60.8	31.4	54.6	
Female		$\frac{\sqrt{39.2}}{\sqrt{39.3}}$	68.6	45.4	
Total .		$\sqrt{100.0}$ (6922)	100.0 (2890)	100.0	
		(0322)	, 2030)	(3012)	
Race: Nonwhite	•	17.8	32.3	25.4	
1011 1 4 -		82.2	67.7	74.6	
white Total		$\frac{02.2}{100.0}$	$\frac{01.1}{100.0}$	$\frac{100.0}{100}$	
	//	(6920)	(2885)	(9805)	
Age: ` .		•		•	
19 or less		22.5	. 8.3	15.1	
20-25 . •		35.0	20.4	27.3	
26-29		· 13.8 28.3	11.0 50.2	12.3 39.8	
30-59 60 or more	•	0.4	10.2	5.6	
Total		100.0	$\frac{100.0}{100.0}$	100.0	
,	•	(6931)	(2886)	(9817)	
Marital Status:					
Single		43.8	18.8	30.7	
Married , .		51.0	ุ67.8	·59.9	
Widowed .		0.8	7.9	4.6	
Separated		2.1	2.8	2.5	
Divorced		$\frac{2.2}{80.0}$	$\frac{2.6}{00.0}$	$\frac{2.4}{100.0}$	
Total		99.9 (6934)	· <u>99.9</u> (2890)	100.0 (9824)	
		(0934)	(2050)	(3024)	
Military Veteran:		25 2	10.7	02 =	
Yes		35.2 64.8	12.7 87.3	23,5 76.5	
No '	ı	$-\frac{64.8}{100.0}$	$\frac{87.3}{100.0}$	$\frac{76.3}{100.0}$	
Totaļ		(6920)	(2811)	(9731)	

ERIC

Table 1 (continued)

7

Variable	Students <sup>a</sup>				
,	Curriculum	Extension	Total		
North Carolina resident: Yes	92.6	90.4 9.6	91.5 8.5		
Total 5.	.100.0 (6921)	100.0 (2864)	100.0 (9875)		
Institution in home county: Yes No Total Residence while enrolled:	71.7 28.3 100.0 (6410)	$\begin{array}{c} 77.4 \\ \underline{22.6} \\ 100.0 \\ (2563) \end{array}$	74.6 25.4 100.0 (8973)		
Live with parents Live with spouse and/or children	34.2 49.8	. 9.8	21.5		
Live with other relative Live with another family Live alone Live with other students Other Total	2.5 1.3 5.8 3.7 2.7 100.0 (6759)	68.8 3.6 0.9 8.5 1.8 6.6 100.0 (2765)	59.7 3.1 1.1 7.2: 2.7 4.7 100.0 (9524)		

a Numbers in parentheses in this and subsequent tables represent the total number of persons responding in the respective category.

## Socioeconomic Characteristics

Based on the data in Table 2, 54 percent of the students had an annual income of less than \$7500. Forty percent had parents whose annual income was less than \$7500.

Regarding occupation of students' heads-of-household, over one-third were in "white-collar" occupations and approximately another one-third were in "blue-collar" occupations. Some 20 percent of the students were less than high school graduates, while 45 percent had earned a high school diploma. Mothers of students had attained a higher level of formal education than their fathers. Sixty-four percent of the fathers had less than a high school education as compared to 56 percent of the mothers.

#### Academic Characteristics

Most students (48 percent) came to the institution from a general high school curriculum (Table 3). Almost 75 percent reported that, in terms of high school rank, they graduated in the upper two-thirds of their class. Two-thirds of the students reported earning a "B" or better average while in high school, and 27 percent reported a "C" average. Approximately 18 percent had been full-time students at a four-year college or university.

## Attendance Characteristics

Fifty-three percent of the study sample were registered in one of the extension program areas and 47 percent were in a curriculum program area (Table 4). The highest percentage (26 percent) were enrolled in occupational extension classes, followed by 22 percent in technical programs.

A few more students (54 percent) attended class in the evening than during the day (46 percent). A majority were enrolled in one course and attended classes 10 or less hours per week. Slightly more than one-half of the extension students were enrolled in their first course.

## Curriculum Versus Extension Students

It is obvious from the data in Tables 1-4 that considerable variation in demographic, socioeconomic, academic, and attendance characteristics existed between curriculum and extension students.



Table 2. Weighted percentage distribution of curriculum and extension students enrolled in North Carolina community colleges/technical institutes, 1974, by student's income, parents' income, household head's occupation, student's education, father's education, and mother's education

. 760

Variable	Students				
	Curriculum	Extension	Total		
Student's income:		•			
Less than \$1,000	14.6	9.7	12.2		
\$1,000-1,999	10.0%	6.7	8.3		
\$2,000-2,999	8.1	7.6	7.8		
\$3,000-5,999	17.4	18.4	17.9		
\$6,000-7,499	7.8	გ. <b>5</b> .	8.2		
\$7,500-9,999	11.6	13.3	12.5		
\$10,000-14,999	19.0	21.6	20.3		
\$15,000-19,999	7.7	· 8.6 5.6	$8.1 \\ 4.7$		
\$20,000-or more	$\frac{3.9}{100.1}$	$\frac{3.6}{100.0}$	$\frac{4.7}{100.0}$		
Total	(6486)	(2409)	(8895)		
•	(0400)	(2403)	(0050)		
Parents income:			10.0		
Less than \$3,000	9.3	19.2	, 13.8		
\$3,000-5,999	16.4	16.1	16.2		
\$6,000-7,499	9.8 12.3	9.2 ·8.8	9.5		
\$7,500-9,999	24.8	14.3	20.0		
\$10,000-14,999	10.2	5.4	8.0		
\$15,000-19,999 \$20,000-or more	10.2	7.6	9.9		
Parents no longer living	5.4	19.4	11.8		
Total	$\frac{100.0}{100.0}$	$\frac{100.0}{1000}$	100.0		
,	(5934)	(1908)	(7840)		
Household head's occupation: Professional, technical, and					
kindred workers	13.4	13.7	13.6		
Business owners, managers,		_			
administrators, and offi-	10.0		100		
cials	13.3	. 12.8	13.1		
Sales, clerical, and kin- dred workers	12.2	10.2	11.2		
Craftsmen, foremen, and	. 14.4	10.2	11.2		
kindrad workers	20.8	17.0	18.9		
Operatives .	15.8	17.5	16.6		
- <u>Fr</u>					

Table 2 (continued)

Variable	s	Students			
·	Curriculum		Total		
Laborers, except farm	5.1	5.9	5.5		
Service workers	8.6	9.0	8.8		
Unskilled workers, except	,	π·>			
farm	0.9	1.9	$^{-}1.4$		
Farm owners and managers	4.4	3.8	4.1		
Farm foremen	0.4	0.3	0.4		
Farm laborers	.8	3.1	1.9		
Other '	4.4	4.8	4.6		
•	$\frac{4.4}{100.1}$	$\frac{4.8}{100.0}$	$\frac{100.1}{100.1}$		
Total					
•	(6494)	(2498).	(8992)		
Student's education:	. *	•			
Grammar school or less	1.3	14.4	8.1		
Some high school	4.1	20.6	12.7		
High school graduate .	45.4	35.0 ಚಿ	40.0		
GED diploma	7.7	3.2	5.3		
Some postsecondary		•			
education	34.8	15.2	24.6		
college graduate or more	6.7	11.6 '	9 ,3		
Total	$\overline{100.0}$	100.0	100.0		
	(6879)	(2819)	(9698)		
Father's education:			,		
Grammar school or less	38.2	55.2	. 46.8		
Some high school	19.2	15.2	17.2		
High school graduate	23.8	17.7	20.7		
GED diploma	1.2	0.6	0.9		
Como nontrocondavy	1		_		
education	9.4	5.6	7.5		
education	8.3	5.8	•		
College graduate or more	$\frac{0.3}{100.1}$	$\frac{3.8}{100.1}$	$\tfrac{7.0}{100.1}$		
Total	(6756)	(2571,)	(9327)		
•	(8738)	(231 13)	(3021)		
lother's education:			<i>4</i>		
Grammar school	24.5	44.6	34.6		
Some high school .	22.4	19.6	21.0		
High school graduate	34:1	22.7	28.4		
GED diploma	<b>.</b> 0 19	0.4	υ.6		
Some postsecondary .	•				
education	10.4	6.8	8.6		
College graduate or more,	7.7	6.0	6.8		
Total	$\frac{100.0}{100}$	100.1	100.0		
local.	(6796)	(2577)	(9373)		
♥ `	(3,59)		• /		

Table 3. Weighted percentage distribution of curriculum and extension students enfolled in North Carolina community colleges/technical institutes, 1974, by high school rank, high school average, and four-year college or university attendance

Variable		tudents{	,
variable ,	Curriculum	Extension	Total
High school curriculum: Business College preparatory	11.8	13.0 24.4 52.9	12.3 29.6 48.0
General Vocational Other Total	$ \begin{array}{c} 43.5 \\ 8.8 \\ \hline 1.6 \\ \hline 100.1 \\ (6681) \end{array} $	7.0 2.7 100.0 (2241)	7.9 2.1 99.9 (8922)
High school rank: Upper one-third Middle one-third Lower one-third	32.5 48.5 8.5	29.1 38.7 5.5	30.8 43.6 7.0
Did not graduate from high school Total	$\frac{10.5}{100.0}$ (6710)	$\begin{array}{c} 26.7 \\ 100.0 \\ (2458) \end{array}$	18.6 100.0 (9168)
High school average: A (90-100) B (80-89) C (70-79) Below C (Less than 70) Did not go to high school Total	$   \begin{array}{c}     14.2 \\     52.6 \\     30.2 \\     \hline     1.5 \\     \hline     100.0 \\     (6822)   \end{array} $	15.5 50.3 24.1 2.2 8.0 100.1 (2610)	$   \begin{array}{r}     14.9 \\     51.4 \\     27.1 \\     1.8 \\     \underline{4.8} \\     100.0 \\     (9432)   \end{array} $
Full-time student at four-year college or university: Yes No Total	17.7 82.3 100.0 (6926)	17.3 82.7 100.0 (2870)	17.5 82.5 100.0 (9796)

Table 4. Weighted percentage distribution of curriculum and extension students enrolled in North Carolina community colleges/technical institutes, 1974, by program area, enrollment in fundamental education, student classification, when they attend class, number of courses taking this quarter, hours in class per week, and extension student enrollment in first class.

Variable	Students				
variable	Curriculum	Extension	Total		
Program areacurriculum:	15.2		7.2		
College-transfer	7.5		3.6		
General Education	10.4		4.9		
Special Credit	47.0	~-	22.3		
Technical	19.9		9.4		
Vocational ,	$\frac{19.9}{100.0}$		`		
Total -	(6937)				
	(0337)				
Program areaextension:		10.0	9.6		
Academic Extension		18.3	0.4		
Apprenticeship		0.8	7.2		
Fundamental Education		13.8	0.5		
MDC Job Training		1.0	$0.3 \\ 0.4$		
Mannower Development (MDTA)	<del></del>	0.8	0.0		
New and Expanding Industry		0.0	26.0		
Occupational Extension		49.3	8.4		
Recreation Extension	}	$\frac{16.0}{100.0}$			
Total		<del>-</del> '			
	<del>-,-</del> -	(2900)	•		
*	****	, <b></b>	99.9		
Program areatotal:	<u></u>	·	(9837)		
	jaga Sagar	•			
Fundamental education:		4.0			
Adult Basic Education (ABE)	<b>*</b> -	46.2			
High School Diploma Program	<u></u>	23.4			
High School Equivalency	-yer e	<b>u</b> 0			
Certificate Program (GED)		8.9			
Learning Laboratory	* **** <del></del>	$\frac{21.6}{100.1}$			
Total	*	100.1			
•		(494)			
_					

Table 4 (continued)

Variable	Students				
	· Curriculum	Extension	Total		
Student classification: Noncredit Extension student New freshman Returning freshman Sophomore Total	5.5	96.7	55.0		
	24.3	2.2	12.3		
	39.1	0.7	18.2		
	31.2	0.4	14.5		
	100.1	100.0	100.0		
	(6119)	(2640)	(8759)		
Attend classes:  Day Evening Total	65.5	29.3	46.5		
	34.5	70.7	53.5		
	100.0	100.0	100.0		
	(6924)	(2885)	(9809)		
Number of courses this quarter: One Two Three Four Five Six Seven Eight Over eight Total	24.0	88.8	57.8		
	13.5	8.4	10.8		
	19.2	1.4	9.9		
	22.7	0.9	11.3		
	14.3	0.3	7.1		
	4.6	0.1	2.3		
	1.1	0.0	0.5		
	0.3	0.0	0.2		
	0.1	0.0	0.0		
	100.0	99.9	99.9		
	(6929)	(2842)	(9771)		
Hours in class 1-5 6-10 11-15 16-20 21-25 26-30 Over 30 Total	15.8	54.9	36.4		
	14.6	28.6	22.0		
	21.6	2.5	11.5		
	17.2	3.7	10.1		
	10.4	0.8	5.5		
	12.6	1.5	6.7		
	7.8	8.0	7.9		
	100.0	100.0	100.1		
	(6937)	(2900)	(9837)		
Extension students enrolled in first course: Yes No Total	, ,	54.5 45.5 100.0 (2533)			

Regarding demographic characteristics (Table 1), 61 percent of curriculum students were males, while 69 percent of extension students were females. Thirty-two percent of the nonwhites were in extension programs compared to 18 percent in curriculum programs. Most curriculum students were 25 years of age or younger; over two-thirds of the extension students were more than 25 years of age. A higher percentage of extension students were married than was the case for curriculum students. Curriculum students were almost three times more likely to be veterans than were extension students. A majority of both groups were North Carolina residents.

When comparing extension and curriculum students by socioeconomic characteristics (Table 2), a higher percentage of curriculum than extension students were in lower income groups; however, the two groups were relatively equal in terms of the "other" income categories. Both groups were similar in relation to major occupational category. Parents of curriculum students tended to have higher incomes than extension students' parents. Considerable differences were noted between the two groups in regard to educational variables. Ninety-five percent of curriculum students had a high school education compared with 65 percent of the extension students. On the other hand, 12 percent of the extension students had college or graduate educations compared with 7 percent for curriculum students. While mothers of students in both major programs tended to have more education than their fathers the parents of curriculum students tender to have more education than parents of extension students.

The greatest differences between curriculum and extension students were noted among their attendance characteristics. Sixty-five percent of curriculum students attended classes during the day; 71 percent of extension students attended in the evening. Most students in curriculum programs were enrolled in three or more courses; 97 percent of extension students were enrolled in only one or two courses.

## Research Question 2

Which students are enrolling in what educational program areas (college-transfer, technical, vocational, academic extension, fundamental education, occupational extension, and recreation extension)?

#### Curriculum Programs

All three major curriculum program areas were composed of a majority of males (Table 5). Vocational programs tended to have a larger percentage (73 percent) of males than either



Table 5. Weighted percentage distribution of college-transfer, technical, and vocational students enrolled in North Carolina community colleges/technical institutes, 1974, by sex, race, age, marital status, military veteral Worth Carolina resident status, location of institution, and place of residence

			•	
Variab	le	Students		
•	r.	College-		,
		transfer	Technical	Vocational
Sex:		<b>b</b>		•
Male		60.0	, EO C	<b>50</b> 4
		60.0	59.6	73.4
Female		40.0	40.4	26.6
Total		100.0	109.0	$\overline{100}$ , $\overline{0}$
,		(1290)	(37(15)	(1159)
Race:			ų	
Nonwhite	•	'` 10 0 <b>4</b>	1.0	00 = .
White		10.0	16.8	28.7
Total	<b>#</b>	90.0	83.2	71.3
lotal	•	100.0	100.0	100.0
•	•	(1285)	*(3712)	(1165)
Age, year		•	•	
19 or less	•	30.0	0.4.0	•
20-25		32.0	24.0	22+2
•	• 1	42.5	34.6	<b>35.7</b>
26-29		9.8	14.6	12.4
30-59		15.5	26.7	<b>29.</b> 6 .
60 or more	<u> </u>	0.2	$\underline{0.2}$	0.0
Total	•	$(\overline{100.0})$	$\overline{100.1}$	√ 99.9
		( <del>1</del> 290) \$	(3720)	. (1164)
Manital atatuana				``
Marital status:		C7 0	, ,	
•		61.8	44.2	40.5
Married		33.8	50.7	<b>354.5</b>
Widowed		1.3	0.7	0.7
Separated .	<b>*</b>	1.6	2.2	2.0.
Divorced		<u>1.6</u> .	$\frac{2.2}{}$	2.4
Total		100.1	100.0	$\overline{100.1}$
	•	(1290)	(3720) `	(1166)
W. 1	*	- P		4'
Military veteran:	Wil Widows	00 -	r .	
Yes		23.9	38.1	42.9
No		76.1	61.9	57.1
Total		100.0	100.0	100.0
•	د	_(1286)	(3713)	. (T164)
•		, α		•

Table 5 (continued)

Variable	Students				
- · <i> 1</i> _	College- transfer	Technical	Vocational		
Na ath Gangaille and ideas	- ,				
North Carolina resident:	. 01 1	ha i	01.0		
Yes	. 91.1	94.1	91.2		
No / .	8.9	$\frac{1.5.9}{100.0}$	$\frac{8.8}{100.0}$		
Total	100.0				
<b>:</b> .	(1287)	(3716)	(1161)		
Institution in home county:	•		5		
Yes	73.5	72.2	68.0		
No	26.5	<b>27.</b> 8	32.0		
Total	$\overline{100.0}$	$\overline{100.0}$	$\overline{100.0}$		
	(1171)	(3452)	(1086)		
Residence while enrolled:	ø				
Live with parents	51.6	35.2 ·	30.7		
Live with spouse and/or		00,0	,		
children	33.4	49.7	51.0 · •		
Live with other relative	3.2	2.3	3.1		
Live with another family	1.3	1.1	. 1.9		
Live alone	5.5	5.6	4.6		
Live with other students	3.5	4.7	1.8		
Other	1.6	1.3	6.8		
Total	100.1	99.9	99.9		
- · · · -	(1268)	(3634)	(1118)		
	•		•		

college-transfer (60 percent) or technical programs (60 percent). A majority of the students in all three program areas were white; 90 percent in college-transfer, 83 percent in technical, and 71 percent in vocational programs. The largest percentage of nonwhites (29 percent) was in the vocational program area.

The college-transfer program area generally seemed to enroll a larger percentage of younger students than either of the two occupational program areas (Table 5). Seventy-five percent of all students in that program area were 25 years of age or younger as compared to technical and vocational programs in which only about half of the students were in that age group.

A higher percentage of college-transfer than other curriculum program area students were single and more likely to be living with their parents. The largest percentage of veterans was enrolled in the vocational program area, followed by technical and then transfer programs. Little difference was noted between students in the three curriculum program areas by resident status and attendance at an institution in their home county.

## Extension Programs

All extension programs except fundamental education enrolled more females than males (Table 6). In terms of race,
again, fundamental education was the exception; <u>i.e.</u>, over 60
percent of the students in that program area were nonwhite.
Ninety-six percent of recreaction extension students were
white.

Fundamental education was the only extension program area in which more than one-half of the students were under 30 years of age. Academic extension had the largest proportion of students in the 60 years or more age category (Table 6).

A majority of all the students in all extension programs were married and lived with their spouse and/or children. However, over one-third of the fundamental education students were single and, as a group, were most likely to be living with their parents. More than 80 percent of all extension students were nonveterans and the same proportion attended an institution in their home county.



Table 6. Weighted percentage distribution of academic, fundamental education, occupational, and recreation extension students enrolled in North Carolina community colleges/technical institutes, 1974, by sex, race, age, marital status, military veteran, North Carolina resident status, location of institution, and place of residence

Variable		Students <sup>a</sup>			
, <u>.</u>	AGAD	FUND '	OCCU	REC	
	EXT	EDUC	EXT	EXT	
Sex':	,				
Male	42.1	50.3	29.5	9.6	
Female	57.9	49.7	70.5	90.4	
Total	$\overline{100.0}$	100.0	100.0	$\frac{100.0}{100}$	
2002	(507)	(528)	(1407)	(448)	
Race:				•	
Nonwhite	25.6	61.5	35.5	4.1	
White	74.4	38.5	64.5	95.9	
Total .	$\overline{100.0}$	100.0	100.0	100.0	
2 4 4 5 5	(508)	(527)	(1403)	(447)	
Age:					
19 or less	7.8	23.6	5.7	4.4	
20-25	24.6	23.7	18.3	18.9	
26-29	, 9.6	9.3	11.3	12.8	
30-59	<sub>.:</sub> 40.6	35.9	56.0	54.7	
60 or more	17.4	7.5	8.7	<u>9.2</u>	
Total	$\overline{100.0}$	100.0	100.0	100.0	
	(513)	(527)	(1398)	(448)	
Marital status:			٠,	,	
•Single	22.4	36.0	16.7	6.9	
Married	61.4	49.8	69.6	85.4	
Widowed	11.8	6.0	7.9	5 . K	
Separated	2.8	5.4	2.9	0.3	
Divorced	1.6	2.9	3.0	2.3	
, Total	$\overline{100.0}$	100.1	100.1	100.0	
•	(512)	(527)	(1404)	(447),	

Table 6 (continued)

Variable .	Students <sup>a</sup>			
	ACAD	FUND	OCCU	REC
	EXT	EDUC	ŁXT	EXT
Military veteran: Yes No Total	15.7	9.9	14.1	7.4
	84.3	<u>90.1</u>	<u>85.9</u>	92.6
	100.0	100.0	100.0	100.0
	(506)	(517)	(1350)	(438)
North Carolina resident:	77.9	92.5	95.5	86.4
Yes	22.1	7.5	4.5	13.6
No	100.0	100.0	100.0	100.0
Total	(507)	(524)	(1391)	(442)
Institution in home county:	81.4	79.4	$\begin{array}{c} 72.8 \\ 27.2 \\ \hline 100.0 \\ (1317) \end{array}$	87.7
Yes	18.6	20.6		12.3
No	100.0	100.0		100.0
Total	(393)	(474)		(374)
Residence while enrolled: Live with parents Live with spouse and/or children Live with other relative Live with another family Live alone Live with other students Other Total	5.2	15.7	11.6	4.0
	'60.9	48.4	72.0	85.6
	3.1	·3.7	3.8	3.6
	0.7	1.2	1.2	0.0
	10.9	6.5	8.8	6.6
	5.2	1.8	1.0	0.0
	14.1	22.7	1.6	0.1
	100.1	100.0	100.0	99.9
	(485)	(516)	(1339)	(425)

 $a_{\rm In}$  this and succeeding tables, ACAD EXT = Academic Extension, FUND EDUC = Fundamental Education, CCU EXT = Occupational Extension, and REC EXT = Recreation Extension.

## Research Questions 3 and 4

What is the proportion of students enrolled in the Community College System compared to the proportion of the State's population who are eligible to enroll, in terms of their demographic and socioeconomic characteristics?

What group(s) is arc not being served by the Community College System, in terms of their demographic and socio-economic characteristics?

Since questions 3 and 4 were so plosely related, they were treated together here. The claim has been made that community colleges/technical institutes are the "people's colleges" in that they are assumed to serve all segments of society. To examine the validity of that assumption, comparisons were made between selected characteristics of 1974 enrolless and those of the total adult population of North Carolina as reported in the 1970 Census.

The data in Table 7 show that a significantly higher proportion (55 percent) of males were enrolled in all programs than were in the 1970 adult population (48 percent). These percentages break down even more when comparing curriculum and extension students separately. In curriculum programs, 61 percent of the 1974 students were males compared to 48 percent in the 1976 adult population. The reverse was true in extension programs, with 69 percent of the 1974 students being female compared with 52 percent females, 18 years of age and older, in the total 1970 State adult population.

In 1970. 80 percent of the adult population in North Carolina were white, while 75 percent of all students enrolled in the Community College System in 1974 were white (Table 7) This tendency to serve racial minorities disproportionately is mainly attributable to enrollments in extension programs, where one—third of all 1974 students were from minority groups. Curriculum programs in 1974 enrolled a significantly higher percentage of white than nonwhite students. Overall, however, community colleges/technical institutes enrolled a significantly higher percentage of nonwhites than were reported in the 1970 North Carolina adult population (Table 7).

Likewise, a significantly higher proportion of students who were less than 23 years of age were enrolled in the institutions in 1974 than were in the State's total 1970 adult population. For example, the data in Table 7 show that 15 percent of the 1970 adult population were less than 23 years of age, while 31 percent of all students enrolled in the institutions in 1974 were in that age category. This tendency



Table 7. Percentage distribution of North Carolina's adult population (1970) as compared with student enrollments in North Carolina community colleges/technical institutes (1974), by demographic characteristic and program area

	•			
Demographic		Stude	ent enroî	iment
characteristic	Population .		Curric-	Exten-
		Total	ulum	sion
0				•
Sex: ~	47 0	54.6	60.0	21.4
Male	47.9	54.6	60.8	31.4
Female	$\frac{52,1}{300,0}$	45,4	39.2	68.6
Total	100.0	100.0	100.0	100.0
	$(3,323,017)^a$	(9812)	(6922)	<b>(</b> 2890)
Race:				
White	79.7	<b>.</b> 74.5	82 . 2	67.7
Nonwhite	20,3	25.4	17.8	32.3
Total	100.0	100.0	100.0	100.0
	(3,323,017)a	(9805)	(6920)	(2885)
	• • • •	, ,		, ,
Age group, yr:				
22 or less	15.5	31.2	44.3	19.4
23-29	15.3	23.5	27.1	20.3
30-39	17,6	19.2	17.0	21.3
40-49	18.0	13.0	9.1	16.4
50~59	15.2	7.6	2.1	12.6
6u-69	10.7	3.7	0.3 🦐	6.7
70 or more	7.7	1.8	0.1	3.3
Total	100.0	100.0	100.0	100.0
	$(3,323,017)^a$	(9817)	(6931)	(2886)
	· , , , - ,	( /		, ,
Educational level:				
Grammar school or less	37.2	8.1	1.3	14.4
Some high school	24.4	12.7	4.1	20.6
High school graduate	21,6	45.3	53. <b>2</b>	38.1
- 1-3 yr postsecondary	8.4	24.6	34.8	15.3
College graduate or	8.4	9.3	6.7	11.6
more				
Total .	100.0	100.0	100.0	100.0
•	$(2,646,272)^{b}$	(8922)	(6681)	(2241)
	· · · · · · · · · · · · · · · · · · ·			

Table 7 (continued)

Demographic		Student enrollment		
characteristic	Population	Total	Curric- ulum	Exten- sion
Occupation of student's head-of- household: White collar Blue collar Unskilled Farm Total	38.6	37.9	38.9	36.8
	40.8	35.5	36.6	34.5
	16.0	20.3	19.0	21.5
	4.6	6.4	*5.5	7.2
	100.0	100.0	100.0	100.0
	(1,984,402) <sup>C</sup>	(8992)	(6494)	(2498)
Family income (1970) compared with student's primary income (1974), in 1969 dollars: \$3,999 or less \$4,000-7,999 \$8,000-11,999 \$12,000 or more Total	21.0	26.8	22.8	34.3
	30.7	38.9	40.1	36.1
	26.2	25.9	28.0	22.5
	22.1	8.4	9.1	7.1
	100.0	100.0	100.0	100.0
	(1,292,466) <sup>d</sup>	(8320)	(6115)	(2205)

aSOURCE: U.S. Bureau of the Census, <u>Census</u> of <u>Population</u>: 1970, <u>General Population Characteristics</u>, Final Report PC(1)-B35 North Carolina (Washington, D.C.: U.S. Government Printing Office, 1972), p. 56.

bSOURCE: U.S. Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, Final Report PC(1)-C35 North Carolina (Washington, D.C.: U.S. Government Printing Office, 1972), p. 208.

<sup>c</sup><u>Ibid</u>., pp. 214-215.

d<sub>Ibid</sub>., p. 220.

to serve younger adults disproportionally was more prevalent among curriculum students (44 percent) than among extension students (19 percent).

The average age of students enrolled in all programs in 1974 was 33 years, and the median age was 28 years. Forty percent of all curriculum students were between ages 26 and 49, while 60 percent of all extension students were 30 years of age or older. Age groups that were seriously underrepresented were the 50 years of age and older categories (Table 7).

The greatest discrepancy between characteristics of the 1970 adult population and 1974 community college/technical institute students was in the area of educational attainment (Table 7). According to the 1970 Census data, over 60 percent of North Carolina adults had not achieved high school graduation or its equivalent, yet only 21 percent of the 1974 enrolees in all programs were in that same category.

The data in Table 7 indicate an underrepresentation in 1974 of students with low levels of formal education in both curriculum and extension programs. Further, there was an overrepresentation in extension programs of students with college and graduate educations.

Regarding major occupational groupings, no significant differences were found between the 1970 adult population and 1974 enrolles in all programs (Table 7). In 1974 the Community College System enrolled students in all major occupational areas in proportion to the 1970 State adult population.

When the income characteristics of community college/
technical institute students were compared with those of the
1970 adult population, after adjusting for the effects of
inflation between the time the Census was taken and the data
were gathered for this study, community colleges/technical
institutes appeared to be serving a larger proportion of lowincome groups than were present in the 1970 adult population.
Table 7 shows the institutions were overrepresented with lowfacome students and underrepresented with students from the
upper-income categories.

## Research Question 5

What changes have occurred in the profile of curriculum students since the 1969 Bolick study?

The data for Bolick's study actually were collected in 1968; the data for this study were collected in 1974, giving a six-year period of time over which to observe changes in



curriculum student characteristics. Variables used in the comparisons between the two studies were grouped under major categories of demographic and socioeconomic characteristics, factors related to student attendance, and student plans. Table 8 presents the comparative data for curriculum students enrolled in 1974 and those enrolled in 1968, by demographic characteristics. The findings are discussed in the section that follows

# Demographic Characteristics

The data in Table 8 indicate that the proportion of females enrolled in curriculum programs increased significantly since 1968. A slight increase in the percentage of minority students enrolled in curriculum programs, also was noted.

Significant shifts occurred in the age categories over the six-year period. In 1974 the System was serving a much older student population than in 1968. Major increases in enrollment occurred in the 23-49 age groups.

Paralleling the trend of serving a greater proportion of older students was the significant increase in the percentage of married students and the decrease in numbers of single students. Likewise, there was a decrease in the percentage of students living with their parents and an increase in the percentage of students living with their spouse and/or children.

## Socice conomic Characteristics

Between 1968 and 1974, curriculum students' income characteristics shifted dramatically when adjustments were made for inflation (Table 9). In 1967 dollars, the percentage of students who earned less than \$7500 annually decreased from 97 percent in 1968 to 69 percent in 1974. At the same time, the percentage of students earning \$7500 or more annually increased from 3 percent in 1968 to 31 percent in 1974. Much of that change could be accounted for in the increasing enrollment of older students who tended to be employed full time and to earn higher wages than their younger counterparts.

The percentage of parents whose annual income was less than \$7500 decreased from 69 percent in 1968 to 49 percent in 1974, and those whose income was more than \$7500 increased from 31 to 47 percent (Table 9). The correlation between student age and parental income was r = -.24, which indicated that the younger students were from wealthier familes. Thus, when parental income was considered, there appeared to be a tendency for community colleges/technical institutes to serve a larger proportion of higher income students in 1974 than in 1968.



Table 8. Percentage distribution of curriculum students enrolled in North Carolina community colleges/. technical institutes, 1974, as compared to those enrolled in 1968, by demographic characteristics

Demographic		Student enrollment	
characteristic ,	1968	1974	change
Sex: Male Female Total	$\begin{array}{r} 67.8 \\ \underline{32.2} \\ 100.0 \\ (11,122) \end{array}$	60.8 39.2 100.0 (6922)	-7.0 +7.0
Race: White Black American Indian Other	86.8 12.3 0.8 0.0 99.9 (11,055)	82.2 16.2 0.7 0.8 99.9 (6920)	-4.6 +3.9 -0.1 +0.8
Age group, yr: 17 or less 18 19 20-22 23-25 26-29 30-39 40-49 50 or more Total	0.8 19.7 28.4 24.8 7.5 5.7 8.3 3.8 0.9 99.9 (11,149)	0.3 7.6 14.6 21.7 13.3 13.8 17.0 9.2 2.5 100.0 (6931)	- 0.5 -12.1 -13.8 - 3.1 + 5.8 + 8.1 + 8.3 + 5.4 + 1.6
Marital status: Single Married Widowed Separated Divorced Total	68.7 28.1 0.8 1.0 1.4 100.0 (11,131)	43.8 51.0 0.8 2.1 2.2 99.9 (6934)	-24.9 +22.9 0.0 + 1.1 + 0.8
Residence: With parents With spouse Boarding student Other Total	57.2 24.6 10.6 7.5 99.9 (11,048)	34.2 49.8 1.3 14.7 100.0 (6759)	-23.0 +25.2 - 9.3 + 7.2

Table 9. Percentage distribution of curriculum students enrolled in North Carolina community colleges/ technical institutes, 1974, as compared to those enrolled in 1968, by socioeconomic characteristics

Socioeconomic characteristic	Student en 1968	rollment 1974	Percentage change
Student income in 1967 dollars:	1		
\$2,999 or less	76.0	38.6	-37.4
\$3,000-5,999	17.1	22,5	+ 5.4
\$6,000-7,499	3.8	8.3	+ 4.5
\$7,500-9,999	2.0	19.0	+17.0
\$10,000 or more	<u> 1.2</u>	11.5	+10.3
Total	$\overline{100.1}$	99.9	
	(10,334)	(6486)	-
Parents' income		ı	,
1967 dollars:			
\$2,999 or less	17.5	15.9	- 1.6
\$3,000-5,999	34.9	23.3	-11,6
\$6,000-7,499	16.6	8.6	- 8.0
\$7,500-9,999	14.7	18.1	+ 3.4
\$10,000 or more	16.2.	28.8	+12.6
Parents no longer living		<u>5.3</u>	1
Total	99.9 ( 9.944)	100.0 (593 <b>2</b> )	•
77. 41 7 . 44.5 4.	Garage Control		
Educational attainment:	1.6	1 2	, 0 3
Grammar school or less Some high school	1.6 4.9	1.3 4.1	- 0.3 - 0.8
High school graduate	64.0	45.4	-18.6
GED Certificate	5 <b>.2</b>	7.7	+ 2.5
l yr beyond high school	18.2	20.3	$+$ $\begin{array}{cccccccccccccccccccccccccccccccccccc$
2-4 yrs beyond high school	5,8	19.3	+13.5
Graduate work or above	0.3	1.9	+ 1.6
Total	100.0	100.0	
•	(11,054)	(6879)	
Father's education:			
6th grade or less	15 <b>.8</b>	19.0	+ 3.2
7th-8th grade	21.5	19.3	- 2.2
Some high school	26.6	19.2	- 7.4
High school graduate	24.9	25.0	+ 0.1
Some postsecondary to college graduate	8.8	15.0	+ 6.2
Graduate work or above	2.5	2.6	+ 0.1
Total	100.1	$\frac{100.1}{100.1}$	
- · · · · · · · · · · · · · · · · · · ·	(10, 810)	(6756)	(
•	· ,	• • • • • • • • • • • • • • • • • • • •	

ERIC

Table 9 (continued)

Socioeconomic characteristic	Student er 1968	1974	Percentage change
Mother's education: 6th grade or less 7th-8th grade Some high school High school graduate Some postsecondary to college graduate Graduate work or above Total	$8.3$ $15.8$ $31.9$ $31.7$ $10.6$ $\frac{1.8}{100.1}$ $(10,871)$	9.0 15.5 22.4 35.0 16.2 1.8 99.9 (6796)	+ 0.7 - 0.3 - 9.5 + 3.3 + 5.6 0.0

When comparing student educational attainment in 1968 and 1974, the proportion of students whose highest achievement was high school graduation or its equivalent dropped from 69 percent to 63 percent, while the proportion of those having postsecondary educations increased from 24 to 41 percent (Table 9). Thus, the percentage of high school graduates decreased and the percentage of students with postsecondary education increased in the curriculum program areas. No significant differences were noted in fathers' and mothers' educational levels.

#### Attendance Characteristics .

No significant change occurred between 1968 and 1974 in the percentage distribution of curriculum students who came to community colleges/technical institutes from various high school curricula. A majority of students continued to be from a general high school curriculum (Table 10)

No significant differences were noted between 1968 and 1974 regarding curriculum program areas in which students enrolled. A slight trend was noted in increased enrollment in technical programs.

Curriculum student attendance patterns changed considerably over the six-year period. A significant increase was noted in the percentage of students enrolled in evening classes as contrasted to daytime classes. Likewise, a significantly greater proportion of students enrolled with 15 or fewer class contact hours per week in 1974 than in 1968 (Table 10). Similarly, the percentage distribution of students employed full time more than doubled over the six-year period.

Attendance patterns related to the proximity of System institutions to the communities they serve remained relatively unchanged with regard to the distance students traveled to classes and the percentage of students residing in the county in which the institution is located. However, a significant increase was noted in the percentage of curriculum students who reported they would not have attended any other institution if theirs had not existed (Table 10). Seventy-five percent of the curriculum students reported living 15 or fewer miles from their classes, which was much the same as for students in 1968.

#### Student Plans

Since 1968, there was a significant increase in the percentage of curriculum students who planned to work toward a four-college degree and those who planned to be employed in



Table 10. Percentage distribution of curriculum students enrolled in North Carolina community colleges/ technical institutes, 1974, as compared to those enrolled in 1968, by attendance characteristics.

	<del></del>	•	<del></del>
Attendance	Student e		Percentage
characteristic	1968	1974	change
High school curriculum:		•	
College preparatory	24 2	24 0	. 0 6
	34.3	34.9	+ 0.6
General	54.9	56.2	+ 1.3
Vocational	10.8	8,9	- 1.9
Total	100.0	100.0	
	(10,756)	(6577)	
Attendance:			
Day	83.7	65.4	-18.3
Evening	16.3	34.5	+18.2
Total .	$\frac{100.0}{100.0}$	99,9	1,0.2
,	(11,111)	(6924)	•
,	(11, 111)	(0324)	,
Hours in class/week:	•		
15 or less	27.0	<b>52</b> ,0	+25.0
16-20	26.0	17.2	- 8.8
21-25	17 <b>.2</b>	10.4	- 6¥8
<b>26-3</b> 0	14.4	12.6	- 1.8
31 or more	15,4	7.8	- 7.6
Total	100.0	100.0	•
•	(10,937)	(6937)	
	•		
Program area <sup>a</sup> :			_
College-transfer	23.7	18.5	<b>-</b> 5.2
Technical	47.3	57.3	+10.0
Vocational	<u> 29,0</u>	24.2	- 4.8
Total	100.0	100.0	v
	(11,095)	(5693)	
Employment status		•	
Employment status: Full-time	21.4	45.5	
Part-time	32.6	25.4	+24.1
			- 7.2
Unemployed or other Total	<u>46.0</u>	29.2	-16.8
• ·	100.0	100.0	,
•	(11,079)	(6805)	
Distance to classes, mi:			
Less than 1	6.0	6.5	+ 0.5
1-15	66.4	68.7	+ 2.3
16-25	13.9	16.3	+ 2.4
26-30	5.7	3.7	- 2.0
More than 30	8.0	4.7	- 3.3
Total	$\frac{3.0}{100.0}$	99.9	- J.J
, ·	(11,108)	(67 <b>8</b> 9)	
	(11,100)	(6/88)	•

Table 10 (continued)

Attendance characteristic	Student e	nrollment 1974	Percentage
Institution in home county: Yes No Total	62.2 37.8 100.0 (11,081)	66.4 33.6 100.0 (6921)	+ 4.2 - 4\2
Would have attended an- rother institution if their's had not existed: Yes No Total	69.6 30.4 100.0 (10,880)	59.3 40.7 100.0 (6890)	-10.3 +10.3

aCategories of students who reported "General Education" and "Special Credit" for their program area in the present study were deleted from this comparison since the 1968 data contained no such categories.



*"* 1

North Carolina (Table 11). In 1968 only 40 percent of curriculum students planned to work toward a four-year degree as compared to 55 percent in 1974. Regarding those who did not plan to be employed in North Carolina, the percentage decreased from 18 to 12 percent over the six-year period. The percentages of those with other employment plans showed the following changes: those planning to enter military service decreased from 25 to 4 percent; those planning marriage decreased from 20 to 6 percent, and those planning to be employed outside of North Carolina increased from 41 to 77 percent (Table 11).

Table 11. Percentage distribution of curriculum students enrolled in North Carolina community colleges/technical institutes, 1974, as compared to those
enrolled in 1968, by educational plans, North
Carolina employment plans, and other employment
plans

Student plans	Student er		Percentage		
<del></del>	1968	1974	<u>change</u>		
Plan to work toward four-			•		
			•		
year degree:	90.6	. 54.0	. 15 0		
Yes	39.6	54.9	+15.3		
No ·	60,4	45.1	-15.3		
Total / .	100.0	100.0			
	(10,703)	(4426)			
Plan to be employed in	•		•		
North Carolina:	<i>a</i>				
Yes	81.8	87.9	+ 6.1		
No	18,2	12.1	- 6.1		
Total	100.0	100.0	, , , , , , , , , , , , , , , , , , ,		
•	(10,768)	(4791)	,		
Other employment plans:		(			
Military service	24.9	3.6	-21.8		
Marriage	20.0	5.8	-14.2		
Employment outside N: C.	41.1	77.1	+36.0		
Other	14.0	13.5	- 0.5		
Total	100.0	100.0	- 0,5		
TOTAL					
	(2,725)	( 574)			

## Research Question 10

Which students in what educational program areas are receiving financial assistance and what is the source of that aid, in terms of their demographic and socioeconomic characteristics?

ERIC

The major sources of income for all 1974 students were regular full-time or part-time employment, students' spouses, Veterans Administration (VA) benefits, students' parents, and savings, in that order (Table 12). Among curriculum students, the income for 60 percent was from regular full-time or part-time employment, 30 percent from VA benefits, 25 percent from parents, 20 percent from spouses, and 18 percent from savings. Extension students, on the other hand, reported only three major sources of income: regular full-time or part-time employment, their spouses, and savings.

## Research Question 11

Which students in what educational program areas are employed and to what extent?

Over 65 percent of all 1974 community college/technical institute students were employed at the time these research data were collected, with nearly 48 percent employed full time and 18 percent part time (Table 13). Of these, 63 percent indicated they were working 40 or more hours per week. Seventeen percent of all students reported they were upemployed, 13 percent said they were keeping house, and 4 percent were retired.

## Reséarch Question 12

Which students in what educational program areas plan to work toward a four-year degree?

Forty percent of all curriculum students enrolled in 1974 had either definite or probable plans to work toward a four-year college degree (Table 14). Among curriculum students, a much higher percentage of college-transfer students planned to work toward a four-year degree than either the technical or vocational students.

Only about one-third of the extension students planned to enter a credit program (Table 15). Among extension students, a higher percentage (50 percent) of those in fundamental education planned to enter credit programs.

Weighted percentage distribution and rank of curriculum and sion students by sources of income, 1974 Table 12.

C. C.

ERIC "
Full Text Provided by ERIC

Table 13. Meighted percentage distribution of curriculum and extension students enrolled in North Carolina community colleges/technical institutes, 1974, by employment status and hours per week worked

Variable	Students			
•	.: Curriculum	Extension	Total	
Employment status:	- 7			
Full-time	45.5	49.5	47.6	
Part-time	<b>2</b> 5.3	11.2	18.0	
Keep house .	<b>,5</b> .5	20.3	13.2	
Retired	2.0	5.8	3.8	
Unemployed	21.7	13.1	17.3	
Total	100.0	<del>99.9</del>	<del>99.9</del>	
	(6805)	(2745)	(9550)	
If employed, hours per				
week student works:	1		•	
Less than 5	<b>3</b> 2.0	0.5	1.3	
<b>5-</b> 9	4.8	4.4	4.6	
10-19	12.0	4.8	٥.6	
20-23	12.8	6.3	ษ.7	
30-39	11.1	14.3	12.6	
40-44	38.0	47.5	42.5	
45-49	9.6	8.1	હ. 9	
More than 49	9.6	14.1	11.7	
Total	99.9	100.0	<del>99.9</del>	
	(4421)	(1578)	(5999)	

Table 14. Weighted percentage distribution of collegetransfer, technical, vocational, and total curriculum students enrolled in North Carolina community colleges/technical institutes, 1974, by plans to work toward a four-year college degree

Plans to work toward Tour-year college		<b></b>	***	Total
degree	College- transfer	Tech - nical	Voca- tional	curric
		_	, -	00.0
Definitely yes	73.5	13.0	7.2	23.6
Thinks so	15.2	19.0	8.5	16.4
Undecided	7.6	32.9	32.0	2 <b>7</b> .2
Thinks not	2.7	21.6	25.5	18.5
Definitely no	1.0	13.6	26.9	14.3
Total	$\overline{100.0}$	$\overline{100.1}$	100.1	100.5
	(1205)	(3364)	(952)	(60 <b>5</b> 9)

Table 15. weighted percentage distribution of academic, fundamental education, occupational, recreation, and total extension students enrolled in North Carolina community leges/technical institutes, 1974, by plans to enter a credit program.

		Extension students				
	ns to enter dit program	ACAD EXT	FUND EDUC	OCCU EXT	REC EXT	Total
Yes No	Total	39.8 60.2 100.0 (433)	50.1 49.9 ,100.0 (472)	33.6 66.4 100.0 (1209)	$   \begin{array}{r}     30.6 \\     \underline{69.4} \\     \overline{100.0} \\     (399)   \end{array} $	$ \begin{array}{r} 36.6 \\ 63.4 \\ 100.0 \\ (2513) \end{array} $

### Research Question 13

Which students in what educational program areas plan to work in North Carolina following the completion of their educational program?

Of the total curriculum student body, 69 percent indicated that they had definite or probable plans to be employed in North Carolina after completing their formal education (Table 16). A higher percentage of technical and vocational students planned to work in North Carolina than did collegetransfer students.

Table 16. Weighted percentage distribution of collegetransfer, vocational, and total curriculum students enrolled in North Carolina community colleges and technical institutes, 1974, by plans to work in North Carolina

Plans to work	<u> </u>	Curriculum students				
in North Carolina	College- transfer	Tech- nical	Voca- tional	Total		
Definitely yes	31.9	45.3	46.0	43.8		
Thinks so	25.3	26.0	25.9	25.7		
Uncertain	32.8	19.7	16.8	21.0		
Thinks not	4.5	4.8	4.5	4.5		
Definitely not	5.6	4.2	6.9	5.0		
Total	100.1	$\sqrt{100.0}$	$\overline{100.1}$	100.0		
	(1197)	(3352)	(957)	(6069)		

#### Research Question 14

What are the major reasons for continuing education among curriculum and extension students?

Curriculum and extension students ranked vocationalmonetary oriented reasons as the most important for continuing their education. To earn more money and to be able to
get a better job were ranked first and second, respectively,
by all students (Table 17). Extension or noncredit students
however, considered to learn more things of interest their
most important reason for continuing their education. While
some differences were noted between curriculum and extension
students, one thing was clear. They were all going to school
to make more money and get better jobs.



Table 17. Reasons for continuing education for all students, curriculum and extension, by rank order

•	>	Rank orde	r
Reasons for continuing education	Exten-	Curric-	All
	sion	ulum	students
To be able to earn more money	2	1	1
To be able to get a better job	5	2	2
To learn more things of interest	1	5	3
To gain a general education	3	<b>3</b> ·	4
To be able to contribute more	4	4	5
to society			
To become more cultured	7	6, 1	6
To meet interesting people	6	7	7
To improve my social life	8	9	8
To improve my reading and study skills	9	8	. 9
Parents or spouse wanted me to go	10	10	10
There was nothing better to do	11	11	11

# Research Question 15

Which institutional characteristics have the most influence on curriculum and extension students in their selection of an institution for continuing their education?

Students in the study sample were asked to rank the five things about the community college/technical institute that influenced them most in deciding to attend that institution. All students considered location to be the most important reason for attending the institution (Table 18). Educational programs or courses available and low cost ranked second and third, respectively. Essentially no differences were found between curriculum and extension students regarding reasons why they elected to attend a certain institution. Thus, students predominately selected community colleges/technical institutes to attend because of their convenient location, programs available, and low cost.

Table 18. Reasons for selecting community colleges/technical institutes for all students, curriculum and extension, by rank order

		r	
Reasons for selecting institution	Exten-	Curric-	A11
	sion	ulum	students
Location (nearness to your home)	ĺ	1	. 1
Educational programs or courses available	2	2	. <b>2</b>
Low cost	3	3 ,	3
Quality of instruction	4	4	4 ,
Open-door admissions policy	5	5	5
Financial assistance available	. 9	6	6
Student-centered activities and instruction	6	8,	7
Job placement services	7	7	6 8
Other	8	9	9

### Part II: Hypothesis Testing

Four hypotheses were structured to guide this study. Each is stated and the findings from testing each hypothesis are presented.

Hypothesis I: There is a positive relationship between the socioeconomic status characteristics of students (primary income, head-of-household's occupation, parents' income, student's income, father's education, mother's education, and student's education) and educational program area of selection

Based on the data presented in Table 19, hypothesis I was accepted for primary income  $(X_1)$ , father's education  $(X_5)$ , mother's education  $(X_6)$ , and student's education  $(X_7)$ . Head-of-household's occupation  $(X_2)$ , parents' income  $(X_3)$ , and student's income  $(X_4)$  were not positively related to program area of selection.

Hypothesis II: There is a positive relationship between measures of student academic ability (high school average and high school rank) and educational programme of selection.

Hypothesis II was accepted on the basis of the positive relationship between high school rank (Z<sub>2</sub>) and educational program area of selection revealed in Table 20.

Table 19. Multiple regression with associated regression coefficients and statistics of FIT for educational program area of selection and the independent socioeconomic variables (N=4482)

Source	B-value	T for H <sub>O</sub> :B=0	Prob >±T	Standard B-value
Intorcont	1 044	65 015		
Intercept Primary income (X <sub>1</sub> )	1.344 0.019	25,315 5,448	0.0001 0.0001	$0.000 \\ 0.104$
Head-of-household's occupation (X <sub>0</sub> )	-0.007	-2.055	0.9880	-0.031
Parents' income (X <sub>3</sub> )	-0.005	-1.584	0.9434	-0.031
Student's income $(X_4)$	-0.019	-8.140	0.9999	-0.128
Father's education (X <sub>5</sub> )	0.015	2.437	0.0074	0.045
Mother's education (X <sub>6</sub> )	0.121	2.876	0.0020	0.053
Student's education (X <sub>7</sub> )	0.121	11.568	0.0001	0.170
				1

Table 20. Multiple regression with associated regression coefficients and statistics of FIT for educational program area of selection and the independent academic ability variables (N=4482)

	<del></del>			•
Source	B-value	T for H <sub>o</sub> :B=0	Prob > ±T	Standard B-value
Intercept High school	1.867	50.238	0.0001	0.000
average (Z <sub>1</sub> )	-0.022	-1.458	0.9275	÷0.026
High school rank (Z <sub>2</sub> )	0.118	8.998	0.0001	0.160
		~		3

Hypothesis III: There is a positive relationship between measures of academic ability (high school average and high school rank) and educational program area of selection when socioeconomic characteristics of students (primary income, head-of-household's occupation, parents' income, student's income, father's education, mother's education, and student's education) are controlled.

A positive relationship was noted between high school rank  $(Z_2)$  and educational program area of selection (Y) when socioeconomic characteristics were controlled (Table 21). However, no significant relationship was noted between high school average  $(Z_1)$  and program area of selection when the other variables were controlled.

Table 21. Multiple regression with associated regression coefficients and statistics of FIT for educational program area of selection and the independent socioeconomic and academic ability variables (N=4482)

	<del></del>	<del></del>		•
Source	B-value	T for H <sub>o</sub> :B=0	Prob > ±T	Standard B-values
Intercept	1,346	22.200	0.0000	0.000
High school average (Z <sub>1</sub> )	-0.033	-2.222	0.9868	-0.038
High school rank $(Z_2)$	0.069	5.295	0.0001	0.094
Primary income (X <sub>1</sub> )	0.018	5.178	0.0001	0.099
Head-of- household's				
occupation $(X_2)$	-0.007	-1.981	0.9761	-0.030
Parents' in- come (X <sub>3</sub> )	-0.006	-1.784	0.9628	-0.035
Student's in- come (X <sub>4</sub> )	-0.017	-7.252	0.9999	-0.116
Father's education (X <sub>5</sub> )	0.016	2.497	0.0063	0.046
Mother's education (X <sub>6</sub> )	0.019	2.644	0.0041	0.048
Student's edú- cation (X <sub>7</sub> )	0.110	10.273	0.0001	0.154
·				

Hypothesis IV: There is a positive relationship between socioeconomic characteristics of students and measure of academic ability (primary income, head-of-household's occupation, parents' income, student's income, father's education, mother's education, high school average, and high school rank) and educational program area of selection when demographic variables (age and sex) are controlled.

Based on the analyses reported in Tables 22 and 23, hypothesis IV was supported for primary income  $(X_1)$ , father's education  $(X_5)$ , mother's education  $(X_6)$ , student's education  $(X_7)$ , and high school rank  $(Z_2)$ . Socioeconomic variables accounted for the greatest portion of the explained variability in the dependent variable, program area of selection, with student's education, race, and primary income, respectively, making the greatest contributions. High school rank, found to be independently related to educational program area of selection, accounted for relatively little of the variability in the dependent variable, but did account for more than the two remaining socioeconomic variables—mother's and father's education—which contributed least. With all independent variables considered simultaneously, less than 10 percent of the total variation was accounted for in the dependent variable.

Table 22. Analysis of variance with associated F-values for educational program area of selection and the independent socioeconomic, academic ability, and demographic variables (N=4482)

Source	df	Seq.	Partial SS	F-value	Duob . E
Bource	<del>u</del> _	55		r-value	Prob >F
Age (D <sub>1</sub> )	1	21.685	0.279	0.784	0.3761
Sex (D <sub>2</sub> )	1	0.000	0.468	1.315	0.2515
Race $(D_3)$	1	31.149	16.791	47.197	0.0001
Primary income (X <sub>1</sub> )	1	8.341	9.239/	25.969	0.0001
Head-of-household's		•	<b>4</b>		
occupation $(X_2)$	1	0.009	1.3/18	3.706	0.0543
Parents' income $(X_3)$	1	1.480	1./358	3.818	0.0508
Student's income $(X_4)$	1	13.853	8/.344	23.452	0.0001
Father's education			/		• •
(X <sub>5</sub> )	1	11.931	$/_{2.216}$	6.227	0:0126
Mother's education		,	/		
$(x_6)$	1	4.703	/ 2.429	6.829	0.0090
Student's education		/	,		
(X <sub>7</sub> )	1	49.110/	37.303	104.850	0.0001
High scho verage		. /			an t
$(\mathbf{Z}_1)$	1	υ.15¢	1.412	3.970	0.0464
High school rank $(\mathbb{Z}_2)$	1	9.459	9.459	26.588	0.0001
_		1		Ą	

Table 23. Multiple regression with associated regression coefficients and statistics of FIT for educational program area of selection and the independent socioeconomic, academic ability, and demographic variables (N=4482)

Source	B-value ·	T for H <sub>O</sub> :B=0	Prob >±T	Ståndard B-values
Intercept Age (D <sub>1</sub> )	1.359	20.303 -0.885	· 0.0000 0.1880	0.000
Primary in- come (X <sub>1</sub> )	0.018	سر 5.096	0.0001	0.098
Head-of- household's occupation (X <sub>2</sub> ) Parents' in-	-0.007	-1.925	0.9723	-0.030
come (X <sub>3</sub> )	-0.007	-1.954	0.9742	-0.039
Student's in- come (X <sub>4</sub> ) Father's educa	-0.016	-4.843	0.9999	-0.106
tion $(X_5)$	0.016	2.495	0.0062	0.046
Mother's education (X <sub>6</sub> )	0.019	2.613	0.0004	0.048
Student's edu- cation (X <sub>7</sub> )	0.112	10.240	0.0001	0.157
High school average (Z <sub>1</sub> )	<b>-0.030</b> ,	-1.992	v 0.9 <b>7</b> 68	-0.035
$\begin{array}{c} \text{High school} \\ \text{rank } (\mathbf{Z}_2) \end{array}$	0,068	5.156	0.0001	0.093

#### SUMMARY

This research project was designed to gather, analyze and update data regarding the characteristics of students currently enrolled in the North Carolina Community College System. As mentioned earlier, the most recent major study of student characteristics in North Carolina was completed 11 1969 by Gerald M. Bolick. Six-year old data were assumed to be inadequate as a basis for developing and renewing educational programs, particularly in view of increased enrollments, the emerging "new" student, expanded program offerings, changing student interests, and the continuing emphasis on open admissions.

Survey research design procedures were used to generate data for 15 research questions formulated to help achieve the study objectives. Data were collected from a sample of 10,074 students enrolled in 16 community colleges/technical institutes during the spring quarter of 1974. A two-step, circular-systematic sampling design was used in identifying the sample from a population of all students (projected to be 181,767) enrolled in the 57 North Carolina Community College System institutions. A 45-item research question-naire was designed and used for collecting the data. The preliminary findings of this study are summarized according to each of the five objectives.

## Objective 1

Replicate and update the data in Bolick's study, Socio-Economic Profile of Credit Students in the North Carolina Community College System, for the purpose of detecting changes in student profiles over the past six years.

Some of the major changes in the profile of curriculum students that occurred between 1968 and 1974 are presented according to demographic, socioeconomic, and attendance characteristics.

### Demographic Characteristics

The proportion of females increased significantly. However, a majority of the students were male in 1968 as in 1974. A slight increase (4 percent) in minority students was indicated.

Significant changes occurred in age categories. The System enrolled a much older student population in 1974 than in 1968, with major increases occurring in the 23-49 age groups.

Likewise, significant changes were noted in marital and resident statuses of curriculum students. More students were married and living with their spouses and/or children.

#### Socioeconomic Characteristics

Income characteristics shifted dramatically over the sixyear period when adjustments were made for inflation. In 1967 dollars, more students earned higher incomes, which may have been due in part to the increased enrollment of older students who tended to be employed full-time and to earn higher wages than their younger counterparts. Significant increases were also found in parental incomes. A greater proportion of higher income groups were being served in 1974 than in 1968.

Significantly higher levels of formal education attainment were reported by curriculum students. No significant changes were found in the level of formal education of parents over the six-year period.

#### Attendance Characteristics

Attendance patterns changed considerably over the six-year, period. While a majority of the students continued to attend classes during the day, the percentage of students attending evening classes increased significantly. The percentage of those employed full-time more than doubled over the six-year period. Further, a significant increase was noted among those students who reported they would not have attended any other institution if theirs had not existed.

#### Objective 2

Provide a similar socioeconomic profile of noncredit students in the North Carolina Community College System in terms of age, sex, race, geographical area, and program area for comparative purposes.

Demographic, socioeconomic, academic, and attendance & characteristics of extension or noncredit students were as follows.

## Demographic Characteristics

More than two-thirds of the extension students were married, white females, 26 years of age or older, and living with their spouse and/or children. A majority attended the institution in their home county and were North Carolina residents.



# Socioeconomic Characteristics

Approximately one-half of the students as well as their parents earned less than \$7500 per year. Roughly one-third of the students had less than a high school level of formal education, another one-third reported a high school level education, and the remaining one-third reported they had achieved more than a high school level of education. Seventy percent of the students' fathers had less than a high school level of formal education compared with 64 percent of their mothers in the same category.

## Academic Characteristics

More than one-half of the students participated in a general high school curriculum, ranked in the upper two-thirds of their high school graduating class, and maintained a "B" average or higher. Roughly 18 percent had been full-time students at a four-year college or university.

# Attendance Characteristics

A slight majority (53 percent) of all students enrolled in the North Carolina Community College System were registered in one of the extension program areas. Roughly one-half (49 percent) of the extension students were enrolled in occupational extension program areas.

More than two-thirds of the students attended class in the evening and took one course. A majority of the students were enrolled in their first course and in class up to five hours per week.

# Objective 3

Provide a socioeconomic profile of North Carolina adults 18 years of age and older in 1970 in terms of age, sex, race, geographical area, and level of formal education to serve as a comparison base.

When comparing the students sampled in 1974 with all North Carolina adults who were 18 years of age and older in 1970, several significant differences were indicated. More male students were enrolled in all programs and curriculum programs than were in the 1970 adult population, however, a higher proportion of female students were enrolled in extension programs.



A significantly higher proportion of nonwhite students were enrolled in all programs in 1974 than were in the 1970 adult population. The reverse was true for curriculum students in that most of them were white. More nonwhites than whites were enrolled in extension programs.

A tendency to serve younger adults disproportionately was noted. This finding was more prevalent among curriculum than extension students. The 50 years and older age categories were underrepresented.

The largest discrepancy found was in the area of formal education. In 1970, more than 60 percent of the adults had not achieved a high school education, while only 21 percent of the 1974 students in all programs had less than a high school education.

In 1974, community colleges/technical institutes were serving a larger proportion of low-income groups and a smaller proportion of high-income groups than were present in the 1970 adult population. The System was overrepresented with low-income students and underrepresented with students from the upper-income categories.

# Objective 4

Examine student value orientations toward education and reasons for attending institutions in the North Carolina Community College System.

Vocational-monetary value orientations toward continuing education were found to be more important than improvement-learning, social-cultural, or external expectations-escape value orientations. The major rank-ordered reasons for all students were to be able to earn more money and to be able to get a better job.

Curriculum students were primarily vocational-monetary oriented, whereas extension students were primarily improvement-learning oriented. The most important reason extension students gave for continuing their education was to learn more things of interest.

The major reasons given by all students for attending community college/technical institutes in North Carolina, in rank order, were the institution's location (nearness to home), educational programs or courses available, low cost, quality of instruction, open-door admissions policy, financial assistance available, student-centered activities and instruction, and job placement services. Essentially no difference in reason given was indicated between c rriculum and extension students.

### Objective 5

Analyze relationships between selected programmatic, demographic, and socioeconomic variables studied in the attainment of the foregoing objectives.

A significant positive relationship was found between educational program areas selected and primary income; levels of formal education for students, mothers, and fathers: and high school rank. Educational program areas selected were identified as vocational, technical, and college-transfer (all curriculum programs). Data from extension students were not used in hypothesis testing.

Students having higher levels of formal education and higher high school rank were more likely to enroll in college-transfer or technical programs than vocational programs. Further, the higher the level of education of students' parents, the more likely the students were to enroll in college-transfer programs.

Students' level of formal education, race, and primary income level accounted for the greater part of the variation in program areas selected. All of these relationships, however, were relatively weak in that they accounted for only about 10 percent of the variation in program areas selected.

On the basis of the tentative findings reported herein, the "typical" 1974 community college/technical institute student may be described as being male, white, 33 years of age, married, a North Carolina resident, attending an institution in his home county, living with his spouse and/or children, earning less than \$7500 per year, a high school graduate (with parents having less than a high school education). He was attending evening classes, enrolled in one course as an extension student, employed full-time, continuing his education to earn more money or to get a better job, and attending the institution because of its location (nearness to home).

Underlying the specific objectives of this research project was a desire to determine if the North Carolina Community College System is, in fact, fulfilling its basic philosophy and living up to the claim of being the "people's colleges." Overall, community colleges/technical institutes tended to fulfill this claim. However, if these institutions are to claim they are comprehensive, they cannot substantiate that claim by making reference solely to the full-time, day students in degree programs. It is only when all students—day and evening, part-time and full-time—and all programs—extension asymptosismate curriculum—are considered that these institutions approximate their comprehensive philosophy.

, SEP 🧿 1975

CLEARINGHOUSE FOR JUNIOR COLLEGE INFORMATION

ERIC

Full Text Provided by ERIC