

DOCUMENT RESUME

ED 289 395

HE 020 854

**AUTHOR** Pugh, Nathaniel; And Others  
**TITLE** Trends in Major Fields of Study at Southern Colleges and Universities: Implications for Equity.  
**PUB DATE** Oct 87  
**NOTE** 25p.; Paper presented at the Annual Meeting of the Southern Association for Institutional Research (New Orleans, LA, October 28-30, 1987).  
**PUB TYPE** Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

**EDRS PRICE** MF01/PC01 Plus Postage.  
**DESCRIPTORS** Agribusiness; Agricultural Education; Allied Health Occupations Education; Black Colleges; \*Black Students; \*College Students; Computer Science Education; Engineering Technology; \*Enrollment Trends; \*Equal Education; Females; Higher Education; \*Majors (Students); Males; Mathematics Education; Minority Groups; Public Affairs Education; Racial Differences; \*Sex Differences

**IDENTIFIERS** \*United States (South)

**ABSTRACT**

A study was conducted to: (1) analyze trends in the number of minorities and women enrolled at undergraduate and graduate levels in managerial, technical, and scientific fields; (2) examine the number of undergraduate and graduate minorities and women who major in these fields; and (3) examine the impact of these trends on equity and access. Four years (1983-1986) and 5 years (1981-1985) of student data were obtained from two statewide systems of higher education. Data on enrollments by level, race, and sex were obtained to assess trends. Analyses are presented for black females, black males, white females, and white males. Enrollments are summarized by level of instruction for both states and by major field of study for one of the states. In addition, enrollments at traditionally black colleges were compared to those at other institutions. Among the major findings are: the proportion of minority enrollments over time tended to be stable; black females tended to be highly represented in the fields of Business/Office, Public Affairs, Health Sciences, Protective Services and Allied Health; the greatest percentages of black males were found in the fields of Protective Services, Engineering Technologies, Computer and Information Sciences, Mathematics, Parks and Recreation, and Public Affairs; enrollment trends at traditionally black colleges showed a tendency toward a decline in enrollment of black males, a trend that was not evidenced for black males at other institutions; and the proportion of black females at both traditionally black colleges and other institutions tended to remain stable or increase overtime. (KM)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED289395

Trends in Major Fields of Study at  
Southern Colleges and Universities:  
Implications for Equity

Nathaniel Pugh

Georgia Southern College

Carol A. Hand

and

James E. Prather

Georgia State University

Paper prepared for presentation at the  
Southern Association for Institutional Research,  
New Orleans, October 28-30, 1987

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.  
 Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy.

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY  
Nathaniel Pugh

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

8574  
020

Trends in Major Fields of Study  
at Southern Colleges and Universities:  
Implications for Equity

As of 1984, approximately forty-five percent of all black students in the United States were enrolled in colleges and universities that comprise the states served by the Southern Regional Education Board (SREB) and almost twenty-nine percent of all the states in the nation. With a significant percentage of all blacks and about one-third of all women enrolled in post-secondary institutions within these states, information on enrollment trends in this area is vital for addressing important questions related to equity in higher education. What are the trends of minority and women students majoring in agricultural, architectural, managerial, scientific, engineering and professional fields of study? What is the educational quality of these students who major in these fields of study?

The purposes of this paper are 1) to analyze the trends in the number of minorities and women enrolled at the undergraduate and graduate levels in the highly competitive managerial, technical, and scientific fields; 2) to examine the number of undergraduate and graduate minorities and women who major in these fields of study; and 3) to examine the impact of these trends on equity and access as constituted in specific policies in higher education. Equity in this paper will be examined using part of Astin's (1977) expanded definition of access.

Previous Research

Thomas (1980) presented 1974-1976 national data which revealed that race and sex were related to choice of major fields of study in higher education at the undergraduate, graduate and professional institutions in the United States.

Mingle (1978a) provided data in 1978 for the SREB states on blacks enrolled in selected managerial, technical and scientific fields of study. This data indicated that, generally, undergraduate and graduate institutions in the southern region had a higher percentage of blacks enrolled in these selected fields than did the nation as a whole. At the graduate level this region had a higher percentage of blacks enrolled in these selected fields, with the exception of engineering (1.4% vs. 1.2%).

In terms of degrees awarded in 1975-1976, Mingle (1978b) analyzed data which indicated that blacks at the undergraduate level received substantially fewer degrees in the scientific and technical majors than whites. At the graduate level blacks received substantially more degrees in only one field -- education-- than whites. Trent (1983) indicated that blacks and females are less likely to obtain bachelor's degrees in engineering, mathematics, and the computer sciences than whites and males.

Several studies (Angle and Wissman, 1981; Herzog, 1982; Lederer, 1983; Rosenfeld, 1980) have pointed out that to some extent the disadvantage that minorities and women experience in educational and occupational attainment may be attributed to the difference in their choice of major field and career aspirations. Other studies (Brown and Stent, 1977; Lederer, 1983; Thomas, 1980; Trent, 1983) have presented data on how various groups have been distributed among college majors and the extent to which these distributional patterns have changed over time.

#### Methods

Four years (1983-1986) and five years (1981-1985) of student data were obtained from two state-wide systems of higher education. Data on enrollments

by level, race and sex were obtained. This data base was used to analyze trends in enrollment from 1981 to 1985 for State T and 1983 to 1986 in State G. These five-year and four-year data are divided into four gender and minority status groups. These groups are black females, black males, white females, and white males. Minorities other than blacks are also included in the total. These enrollments are summarized by level of instruction for both states and by major field of study for State G. Additionally, enrollments at traditionally black colleges were compared to those at other institutions.

## FINDINGS

### Enrollment by Level and Year for State T

Table 1 presents enrollment percentages by year and level for black females, black males, white females, and white males in State T for the years 1981 through 1985. The total number of students by level for each year is also provided.

#### Undergraduate Students

Enrollment figures for freshman students ranged from 21,695 in 1985 to a high of 27,089 in 1982. The black female group constituted 15% of the total for all years except 1985 when it dropped to 14%. The percentage of black males dropped slightly from 9% to 8% over the five year period. The white female group varied from 40% to 42%, while the white male group steadily increased from 31% in 1981 to 33% in 1985.

At the sophomore level, enrollment varied from 12,758 in 1981 to 14,436 in 1983. The percentage of black females varied between 14% and 15% over the five year period. The percentage of black males dropped from 10% in 1981 to 8% in 1985. Enrollment for white females has been consistently around 40%, while for white males it has varied slightly around 33%.

At the junior level enrollment was up in 1985 to 9024 from a low of 8028 in 1981. The percent enrollment for each race and gender group has been stable over the five year period. The black female group was 12% of the total for four out of five years, while black males were at 9% for four years, dropping to 8% in 1985.

Enrollment at the senior level increased consistently from 10,132 in 1981 to 11,651 in 1985. Black females varied between 12% and 13%, while black males were consistently at 8% to 9%. White females increased over time from 36% to 37%, while white males decreased from 39% in 1981 to 37% in 1985.

#### Non-degree-seeking Students

For nondegree-seeking students at both the undergraduate and graduate levels, the percentage of black females has been increasing over time. In 1985 15% of the undergraduates and 9% of the graduate students in the nondegree-seeking category were black females. Percentages of non-degree-seeking white males tended to decline at the undergraduate and graduate levels.

#### Graduate Students

At the Master's degree level enrollments peaked in 1983 at 5556, and declined to 4916 in 1985. Black females consistently made up 8% to 9% of the total, with black males varying between 4% and 5%. Percentages for white females hovered around 45%, while enrollment for white males ranged from 37% in 1982 to 34% in 1985.

Among professional first and second year students, the percentage of black females has increased over the five year period, with 6% in 1983 and 1984 for the first-year black female students at the professional level, and 4% in 1984 and 1985 for second-year professional black female students. Similar increases

were not found for the black male group. Percentages for white females in the first or second years at the professional level have tended to decrease. Enrollment for white males varied from 64% in 1981 to 56% in 1982 and 1983 for first-year professionals, and from 54% in 1984 to 64% in 1982 and 1985 for second-year professional level students.

At the doctoral level, the black females group jumped from 7% in 1981 to 11% in 1982, and remained at the 10% to 11% level over the next three years. The black male group was stable at 6% from 1981 to 1984, but dropped to 4% in 1985. The white female group has tended to increase over time, while the white male group has declined from 49% in 1981 to 42% in 1985.

#### Enrollments by Level and Year for State G

Table 2 presents enrollment percentages for State G by year and level for black females, black males, white females, and white males. The total number of students by level for each year, 1983 through 1986, is also given.

#### Undergraduate Students

The number of remedial students enrolled ranged from 11,108 in 1985 to 13,534 in 1986. The percentage of black females at the remedial level was 21% in 1986, the lowest percent for this group in the four year period. The percentage of black male remedial students remained constant at 14% in 1983, 1984, and 1985, dropping to 12% in 1986. The percentage for white females increased to 32% in 1986, while black males increased to 30% in the same year.

At the freshman level the peak enrollment for the four-year period was 42,448 in 1986. The percentage of black female freshmen was steady at 8%, while black males were at 5% for the four years. The percentage of white females at this level increased slightly to 43%, with white males remaining constant at 40%.

At the sophomore level enrollment was at its highest in 1986 with 30,142. The percentage of black females increased slightly from 8% to 9%, with the black male group remaining constant at 5%. The percentage of white females varied from 42% to 43% over four years, while white males declined steadily to 38% in 1986.

The highest enrollment at the junior level was 19,224 in 1985. The black female group remained constant at 8%, while black males dropped slightly in 1986 to 4%. The percentage of white females hovered around 40%, while white males again declined steadily from 43% in 1983 to 41% in 1986.

Enrollment at the senior level was highest in 1986, with 24,771. Black female and black male percents were constant over the four year period, with 8% and 5% respectively. White female enrollment was up slightly in 1986 with 40%, while the white male group declined from 45% in 1983 to 42% in 1986.

#### Non-degree-Seeking Students

For non-degree-seeking students at the undergraduate and graduate levels, enrollment for black females was fairly stable, with 12% and 13% respectively in 1986. For black males at the undergraduate level, the low was in 1986 with 6%, while at the graduate level it varied from 4% to 5%. For white females the percentage at the undergraduate level varied from 42% to 44%, with an increase at the graduate level from 51% in 1983 to 55% in 1986. For white males the percentages declined over time at both the undergraduate and graduate levels.

#### Graduate Students

The percentage of black females at the graduate level remained at 6% over the four year period. The percentage of black males was steady at 3% for three years, dropping to 2% in 1986. White females increased slightly to 48%, while white males dropped to 35%.

### Professional Students

Enrollment percentages for black females and males have been constant at 3% and 2% respectively. Percentages for white females have increased from 38% in 1983 to 42% in 1986. The white male percentages have dropped over time from 54% to 48%.

### Medical Students

The percentage of black female medical students declined slightly from 2% for three years to 1% in 1986. Black males also declined slightly from 4% to 3%. The percentage of white female medical students has increased considerably, from 11% in 1983 to a peak of 20% in 1985, and dropping slightly to 19% in 1986. Percentages for the white male group have declined consistently from 74% in 1983 to 71% in 1986.

### Enrollments by Major for State G

Enrollment percentages for the four race/gender groups are given in Table 3 by major for the years 1983 through 1986. Total numbers of students enrolled are also provided.

### Black Females

The majors with the greatest percentage of black females in 1986 are Business/Office (22%), Public Affairs (18%), Health Sciences (17%), Protective Services (16%), and Allied Health (15%). Majors with a very low percent of black females in 1986 include Agribusiness (1%), Architecture (1%), Engineering (2%), Foreign Languages (2%), Law (4%), Interdisciplinary Studies (4%), Visual and Performing Arts (4%), and Physical Sciences (5%).

The percentage enrollment of black females has increased over time for several majors, including Business/Office, Communications, Computer/Information Science, Engineering Technologies, Health Sciences, Law, Life Sciences, and

Social Sciences. The greatest percent increases were for Business/Office, which increased from 19% in 1983 to 22% in 1986, and for Health Sciences, which increased from 14% to 17% in four years.

Areas experiencing declines in the percentage of black females enrolled include Marketing, Education, Foreign Languages, Home Economics, Letters, Liberal/General Studies, Interdisciplinary Studies, Parks and Recreation, Psychology, Protective Services, and Public Affairs.

#### Black Males

The majors with the greatest percentages of black males in 1986 were Protective Services (17%), Engineering Technologies (12%), Computer and Information Sciences (8%), Mathematics (8%), Parks and Recreation (7%), and Public Affairs (7%). Majors with only one percent of black males in 1986 include Marketing, Foreign Languages, Health Sciences, and Home Economics.

The percentage of black male enrollment has increased for five majors: Agribusiness, Computer and Information Science, Parks and Recreation, Life Sciences, and Interdisciplinary Studies. Declines were found for ten majors, while 14 areas remained constant over time. Most of the increases and declines were slight, usually changing only one percent.

#### White Females

Majors with a high percentage of white females in 1986 include Home Economics (81%), Education (66%), Foreign Languages (66%), Allied Health (64%), Marketing (61%), Health Sciences (61%), and Psychology (57%). Majors with small percents of white female students include Engineering Technologies (9%), Natural Resources (10%), Engineering (13%), Agribusiness (17%), and Physical Sciences (21%).

The percent enrollment of white females increased over the four year period for a majority (19) of the majors. Areas with the greatest increases include Foreign Languages, Law, Agribusiness, and Parks and Recreation. Moderate increases were also found for Marketing and Education. The percent of white females enrolled declined over time for six majors: Natural Resources, Communications, Computer and Information Sciences, Letters, Indisciplinary Studies, and Protective Services. The declines in these areas tended to be slight, with the exceptions of Computer and Information Science, which declined from 28% in 1983 to 23% in 1986, and Interdisciplinary Studies, which decreased from 40% to 35% over the four year period. The percentage of white females enrolled was unchanged over time for five areas.

#### White Males

Majors with the highest percent of white male enrollment in 1986 include Natural Resources (85%), Agribusiness (70%), Engineering (69%), Engineering Technology (69%), Architecture (61%), and Physical Sciences (57%). Majors with a relatively low percentage of white males enrolled include Home Economics (5%), Allied Health (13%), Business/Office (14%), Health Sciences (16%), and Education (19%).

The percent enrollment for white males declined over the four year period for 19 majors. The largest decline was for Law, followed by Life Sciences, Mathematics, and Agribusiness. Increased percentages were found for eight majors, with all increases being slight except for Marketing, which was up from 25% in 1983 to 30% in 1986.

## Comparison of Enrollment at Traditionally Black Colleges and Other Colleges

In an effort to determine if differing patterns of enrollment exist at Traditionally Black Colleges (TBC) and other colleges, enrollment summaries were compiled by level and college type. These summaries are presented in Table 4 for State T and Table 5 for State G.

### Comparisons for State T

#### Freshmen

The overall trends show that in Table 4 for State T freshmen have been declining for both TBC and other institutions.

#### Sophomores

There are, however, increases at the sophomore level in both groups. At the TBC institutions the percentage of black males showed declines along with white females. At the other institutions, both black females and black males were found to have declines in percentage terms.

#### Juniors

Students at the junior level increased by about 20%. At the TBC institutions, however, black males were found to have declined proportionally.

#### Seniors

While seniors increased 8% at the TBCs, the other institutions showed 12% increase. At the TBCs, both black female and black male groups showed percentage increases.

#### Non-degree Undergraduates

TBCs showed a decline in non-degree undergraduates, but other institutions increased by 53%. At the TBC, black males declined in this group while at other institutions black females increased from 8% to 14% in 5 years.

### Non-degree Graduate

At other institutions there was a 18% decline in non-degree graduate students. There appeared to be little change among the gender and minority status groups.

### Masters Level

Both groups of colleges showed a decline in the number of Masters level students. The proportion of black males increased at both types of institution.

### Comparisons for State G

The data for the TBC and other institutions for State G are given in Table 5.

### Remedial

At this level the TBCs showed a 12% decline while at other institutions students increased by 21%. At other institutions black males showed a decline from 9% to 8%.

### Freshmen

At TBCs freshmen declined by 20% but at other institutions freshmen increased by 16%. The percentage of black female students declined at the TBCs, while black male students increased.

### Sophomores

A decline of 17% for sophomores was found at the TBCs. At other institutions they increased by 6%. Black female students increased proportionally at both types of institutions. Black male students decreased at the TBCs.

### Juniors

A steady level of enrollment for juniors was found at both types of institutions. Proportionally, black male students declined at both types of

institutions.

### Seniors

It was found that the proportion of black males declined at the TBCs.

### Non-degree Undergraduates

At TBCs these students declined 9%, but at other institutions they increased by 9%. At TBC black females increased proportionally while black male students declined proportionally.

### Nondegree Graduate

The TBC had less than 15% of these types of students.

### Graduate

There was a 9% increase at the TBCs and a 5% increase at other institutions. At the TBCs black female students increased and black male students declined, while at other institutions the enrollments were stable proportionally.

## Summary and Conclusions

The important question of equity and access to colleges and universities remains a key policy issue. National trends in recent years have evidenced a decline in the number of black students attending college. The purpose of this paper has been to review enrollment trends for colleges and universities in two southern states.

The method of analysis consisted of summarizing enrollment trends by level of instruction and major field of study for four gender and minority status groupings. These groupings are black females, black males, white females, and white males. Additionally, enrollments at traditionally black colleges were compared with those at other institutions.

The major findings of this analysis are:

- 1) For both states, the proportion of minority enrollments over time tended to be stable, with the exception of occasional declines or increases by one or two percent.
- 2) Enrollments by major field of study showed that black females tended to be highly represented in the fields of Business/Office, Public Affairs, Health Sciences, Protective Services and Allied Health. Proportionally few black females were found in Visual and Performing Arts, Physical Sciences, Interdisciplinary Studies, Law, Foreign Languages, Engineering, Architecture, and Agribusiness.
- 3) The greatest percentages of black males were found in the major fields of study of Protective Services, Engineering Technologies, Computer and Information Sciences, Mathematics, Parks and Recreation, and Public Affairs. Proportionately very few black males were found in the fields of Marketing, Foreign Languages, Health Sciences, and Home Economics.
- 4) Trends over time in enrollments at traditionally black colleges in both states showed a tendency for a decline in the percentages of black males enrolled. The same trend was not evidenced for black males at other institutions.
- 5) The proportion of black females at both traditionally black colleges and other institutions tended to remain stable or increase over time.

Table 1

## Enrollments by Race and Gender for State T, 1983-1986

<u>Level</u>	<u>Year</u>	<u>Black Females %</u>	<u>Black Males %</u>	<u>White Females %</u>	<u>White Males %</u>	<u>Total</u>
Freshmen	1981	15	9	42	31	26316
	1982	15	9	41	31	27089
	1983	15	9	40	32	26807
	1984	15	8	41	32	25383
	1985	14	8	41	33	21695
Sophomores	1981	15	10	39	32	12758
	1982	14	9	41	33	13348
	1983	15	8	39	34	14436
	1984	14	8	40	34	14261
	1985	15	8	40	33	13468
Juniors	1981	12	9	38	36	8023
	1982	12	9	39	36	8089
	1983	13	9	39	35	8766
	1984	12	9	39	36	8963
	1985	12	8	38	37	9024
Seniors	1981	13	8	36	39	10132
	1982	12	9	36	38	10475
	1983	12	9	37	38	11079
	1984	13	9	37	37	11388
	1985	12	8	37	37	11651
Non-degree Under- graduates	1981	11	8	43	33	3949
	1982	14	9	39	34	4443
	1983	12	6	44	33	5195
	1984	13	6	45	30	4081
	1985	15	6	45	29	5056
Non-degree Graduates	1981	7	3	51	33	3368
	1982	7	4	50	34	3189
	1983	9	4	50	32	3481
	1984	8	4	50	32	2923
	1985	9	4	54	29	2857
Masters	1981	9	4	46	36	5445
	1982	8	5	44	37	5086
	1983	9	5	46	34	5556
	1984	9	5	44	35	5058
	1985	8	4	45	34	4916

(Continued)

Table 1 (Continued)

<u>Level</u>	<u>Year</u>	<u>Black Females %</u>	<u>Black Males %</u>	<u>White Females %</u>	<u>White Males %</u>	<u>Total N</u>
Professional First Year	1981	3	3	28	64	426
	1982	5	3	33	56	329
	1983	6	3	32	56	415
	1984	6	2	30	59	342
	1985	5	3	27	61	265
Professional Second Year	1981	3	1	33	62	206
	1982	3	2	29	64	214
	1983	2	3	31	60	207
	1984	4	3	36	54	212
	1985	4	1	29	64	200
Doctoral	1981	7	6	34	49	357
	1982	11	6	37	43	438
	1983	10	6	36	44	390
	1984	11	6	35	44	377
	1985	10	4	38	42	428
Continuing Education	1981	8	6	40	39	1822
	1982	9	6	44	32	1969
	1983	4	8	43	40	1181
	1984	3	1	58	29	1476
	1985	6	4	50	32	1200

Table 2

Enrollments by Race and Gender  
for State G, 1983-1986

<u>Level</u>	<u>Year</u>	<u>Black Females %</u>	<u>Black Males %</u>	<u>White Females %</u>	<u>White Males %</u>	<u>Total N</u>
Remedial	1983	23	14	30	29	11673
	1984	24	14	30	28	11176
	1985	23	14	30	29	11108
	1986	21	12	32	30	13534
Freshmen	1983	8	5	42	40	37155
	1984	9	5	42	40	35424
	1985	8	5	43	40	42448
	1986	8	5	43	40	42448
Sophomores	1983	8	5	42	40	28763
	1984	8	5	43	39	27730
	1985	9	5	42	39	27372
	1986	9	5	43	38	30142
Juniors	1983	8	5	40	43	19148
	1984	8	5	39	42	18886
	1985	8	5	40	42	19224
	1986	8	4	41	41	18977
Seniors	1983	8	5	39	45	23082
	1984	8	5	38	44	23419
	1985	8	5	39	43	24175
	1986	8	5	40	42	24771
Non-degree Under- graduates	1983	11	7	43	34	11210
	1984	12	7	42	33	10386
	1985	12	7	43	32	10689
	1986	12	6	44	32	12100
Non-degree Graduates	1983	14	4	51	26	4237
	1984	13	5	52	25	3932
	1985	14	5	54	23	4389
	1986	13	4	55	23	4597
Graduates	1983	6	3	47	37	22863
	1984	6	3	47	36	22344
	1985	6	3	48	35	22852
	1986	6	2	48	35	23966
Professional	1983	2	2	38	54	3608
	1984	3	2	40	52	3789
	1985	3	2	40	51	3853
	1986	3	2	42	48	3805
Medical	1983	2	4	11	74	407
	1984	2	3	15	72	447
	1985	2	2	20	71	470
	1986	1	3	19	71	456

Table 3  
Enrollments by Major  
for State G, 1983-1986

Major	CIP Code	Year	Black Females %	Black Males %	White Females %	White Males %	Total N
Agribusiness	01	1983	1	4	12	77	712
		1984	1	5	12	76	663
		1985	1	5	12	73	555
		1986	1	5	17	70	594
Agricultural Science	02	1983	1	6	23	60	919
		1984	1	5	20	62	812
		1985	2	5	24	56	694
		1986	2	5	26	54	657
Natural Resources	03	1983		1	12	83	412
		1984			12	83	400
		1985			9	87	393
		1986			10	85	376
Architecture	04	1983	1	4	24	62	829
		1984	1	2	24	61	853
		1985	1	2	24	62	924
		1986	1	2	26	61	992
Business	06	1983	8	6	35	46	23286
		1984	8	6	36	45	24013
		1985	8	5	37	45	25111
		1986	8	5	37	45	27241
Business/Office	07	1983	19	4	55	19	3223
		1984	21	4	56	16	2830
		1985	23	4	55	14	2339
		1986	22	4	55	14	2552
Marketing	08	1983	8	6	58	25	924
		1984	9	5	57	27	1040
		1985	8	4	59	27	1132
		1986	4	1	61	30	1130
Communications	09	1983	11	6	51	28	1699
		1984	11	5	50	29	1916
		1985	12	5	49	30	2101
		1986	12	4	50	29	2294

(Continued)

Table 3 (Continued)

Major	CIP Code	Year	Black Females %	Black Males %	White Females %	White Males %	Total N
Computer/Information Science	11	1983	9	7	28	49	6313
		1984	9	7	27	49	7047
		1985	10	8	24	48	6539
		1986	10	8	23	49	5662
Education	13	1983	10	4	63	21	16495
		1984	10	3	63	21	18345
		1985	9	3	65	20	19232
		1986	9	3	66	19	20104
Engineering	14	1983	2	4	12	72	8185
		1984	2	4	12	70	8132
		1985	2	4	12	70	8193
		1986	2	4	13	69	8306
Engineering Technologies	15	1983	2	12	9	72	5032
		1984	2	12	9	71	4896
		1985	3	12	8	70	4842
		1986	4	12	9	69	5198
Foreign Languages	16	1983	3	1	60	27	424
		1984	3	1	57	26	396
		1985	1	1	62	24	395
		1986	2	1	66	21	483
Allied Health	17	1983	15	4	62	15	2208
		1984	17	3	62	14	1945
		1985	17	3	62	14	1840
		1986	15	3	64	13	1840
Health Sciences	18	1983	14	1	61	20	10590
		1984	14	1	62	19	9408
		1985	15	1	62	19	9137
		1986	17	1	61	16	8482
Home Economics	19	1983	9	1	81	4	749
		1984	10	1	81	4	720
		1985	10	1	79	5	702
		1986	7	1	81	5	675
Law	22	1983	3	3	30	60	1087
		1984	4	3	33	56	1198
		1985	4	3	35	54	1237
		1986	4	3	38	50	1218
Letters	23	1983	8	2	57	30	1785
		1984	8	2	57	29	1745
		1985	8	3	56	30	1792
		1986	5	2	56	32	1878

(Continued)

Table 3 (Continued)

<u>Major</u>	<u>CIP Code</u>	<u>Year</u>	<u>Black Females %</u>	<u>Black Males %</u>	<u>White Females %</u>	<u>White Males %</u>	<u>Total N</u>
Liberal/General Studies	24	1983	12	8	40	37	15877
		1984	12	8	40	37	14719
		1985	12	7	41	36	14594
		1986	10	6	42	37	20243
Life Sciences	26	1983	8	5	36	45	3427
		1984	8	6	35	44	3307
		1985	8	6	35	43	3303
		1986	9	6	37	37	3411
Mathematics	27	1983	10	10	27	45	2186
		1984	11	10	27	42	1863
		1985	11	8	29	40	1753
		1986	10	8	29	38	1531
Interdisciplinary Studies	30	1983	5	1	40	47	170
		1984	5	3	35	52	1080
		1985	4	3	34	53	1006
		1986	4	3	35	51	1031
Parks and Recreation	31	1983	6	6	43	41	358
		1984	6	7	44	40	333
		1985	5	7	47	38	332
		1986	5	7	48	37	378
Physical Sciences	40	1983	5	6	19	62	2346
		1984	5	6	19	60	2214
		1985	5	7	20	58	2184
		1986	5	6	21	57	2139
Psychology	42	1983	9	3	55	28	2881
		1984	9	3	56	28	2936
		1985	8	3	59	27	3086
		1986	8	2	57	29	3068
Protective Services	43	1983	17	17	23	41	1663
		1984	18	17	23	39	1746
		1985	17	18	22	40	1735
		1986	16	17	22	42	1699
Public Affairs	44	1983	20	7	46	24	1131
		1984	20	7	44	24	1040
		1985	19	6	47	23	1053
		1986	18	7	46	24	1178

(Continued)

Table 3 (Continued)

<u>Major</u>	<u>CIP Code</u>	<u>Year</u>	<u>Black Females %</u>	<u>Black Males %</u>	<u>White Females %</u>	<u>White Males %</u>	<u>Total N</u>
Social Sciences	45	1983	7	6	30	53	4342
		1984	8	6	29	52	4285
		1985	8	6	30	52	4222
		1986	8	6	32	50	4367
Visual and Performing Arts	50	1983	4	4	55	33	2704
		1984	4	5	54	33	3070
		1985	4	4	54	33	2984
		1986	4	4	56	32	3016
Undeclared	99	1983	10	5	43	37	38866
		1984	10	5	43	36	33536
		1985	11	5	44	36	35301
		1986	10	5	44	36	41858

Table 4

Enrollments at Traditionally Black Colleges  
and Other Colleges for State T, 1981-1985

		Traditionally Black Colleges					Other				
		Black Females %	Black Males %	White Females %	White Males %	Total N	Black Females %	Black Males %	White Females %	White Males %	Total N
Freshmen	1981	43	35	12	6	2550	12	6	45	33	23766
	1982	43	35	11	6	2458	12	6	44	34	24631
	1983	46	35	9	5	2434	12	6	43	35	24373
	1984	44	33	12	8	2559	12	6	44	34	22824
	1985	45	31	12	8	2228	10	5	45	36	19467
Sophomores	1981	42	38	12	5	1283	12	7	42	35	11475
	1982	42	37	12	5	1316	11	6	44	36	12032
	1983	45	33	10	6	1499	11	5	43	37	12937
	1984	47	36	8	5	1393	10	5	43	37	12868
	1985	48	35	9	5	1333	11	5	44	36	12135
Juniors	1981	43	37	10	7	1040	7	5	43	41	6988
	1982	43	36	11	6	1137	7	5	43	41	6952
	1983	46	32	10	7	1254	7	5	44	40	7512
	1984	43	35	11	7	1245	7	4	43	41	7718
	1985	46	33	10	6	1215	7	4	42	41	7809
Seniors	1981	41	30	10	13	1516	8	4	40	44	8616
	1982	42	34	9	9	1521	8	5	41	43	8954
	1983	40	32	11	11	1658	7	5	41	42	9421
	1984	42	32	10	9	1764	7	4	41	42	9624
	1985	44	32	10	9	1648	7	4	42	42	10003
Non-degree under- graduates	1981	17	15	32	30	1363	8	5	48	34	2586
	1982	20	14	30	30	1495	11	6	43	36	2948
	1983	19	11	36	27	1304	10	5	47	34	3891
	1984	20	8	39	25	1217	10	5	48	33	2864
	1985	19	9	36	29	1102	14	5	48	29	3954
Non-degree graduates	1981	12	8	49	27	355	7	3	51	34	3013
	1982	11	7	46	31	452	7	3	51	34	2737
	1983	12	6	50	28	436	8	4	50	33	3045
	1984	13	8	50	24	350	8	3	50	33	2573
	1985	14	7	54	21	3737	8	3	54	30	2484
Masters	1981	26	14	27	29	702	6	2	49	36	4743
	1982	18	17	32	27	841	6	2	47	39	4245
	1983	20	13	39	24	1041	6	3	47	37	4515
	1984	22	16	32	25	716	7	3	46	37	4342
	1985	25	17	29	21	571	6	3	47	36	4345

Table 5  
Enrollments at Traditionally Black Colleges  
and Other Colleges for State G, 1983-86

		Traditionally Black Colleges					Other				
		Black	Black	White	White	Total	Black	Black	White	White	Total
		Females	Males	Females	Males		Females	Males	Females	Males	
%	%	%	%	N	%	%	%	%	N		
Remedial	1983	56	41			1850	17	9	36	34	9823
	1984	56	40			1822	17	9	35	34	9354
	1985	57	40		1	1756	17	9	35	34	9352
	1986	56	41			1637	17	8	37	34	11897
Freshmen	1983	54	37	2	4	2036	6	3	45	42	35119
	1984	53	36	3	5	1732	6	3	44	42	33692
	1985	54	35	2	4	1621	6	3	45	42	33932
	1986	49	39	3	5	1635	6	3	44	41	40813
Sophomores	1983	49	38	4	6	1538	6	3	44	42	27225
	1984	53	38	2	4	1312	6	3	45	41	26418
	1985	53	37	3	4	1339	7	3	44	41	26033
	1986	52	35	4	5	1278	7	3	45	40	28864
Juniors	1983	52	34	5	6	838	6	4	41	44	18310
	1984	50	37	3	7	830	6	4	41	44	18056
	1985	50	33	8	7	786	6	4	42	44	18438
	1986	52	29	10	5	804	6	3	43	42	18172
Seniors	1983	49	36	6	8	1049	6	3	40	46	22033
	1984	51	33	5	7	1204	6	3	40	46	22215
	1985	50	33	7	7	1312	6	3	41	45	22863
	1986	51	33	7	6	1137	6	3	42	44	22634
Non-degree under- graduates	1983	39	31	11	15	924	8	5	45	35	10286
	1984	43	31	10	12	892	9	5	45	34	9494
	1985	44	25	14	14	870	9	5	46	34	9819
	1986	46	23	13	14	842	9	5	47	33	11258
Non-degree graduates	1983	46	21	16	13	124	13	4	52	27	4113
	1984	47	16	21	13	138	12	4	53	25	3794
	1985	59	15	17	8	105	13	4	54	24	4293
	1986	47	15	21	14	90	12	3	56	23	4507
Graduates	1983	39	19	20	18	380	5	2	48	38	22483
	1984	40	16	20	19	425	5	2	48	36	21919
	1985	48	16	20	13	472	5	2	49	35	22380
	1986	46	15	22	12	415	5	2	48	35	23551

## References

- Angle, J. & Wissman, D.A. (1981). Greater college major and earnings. Sociology of Education, 54, 25-33.
- Astin, A.W. (1977). Equal access to post secondary education: myth or reality? UCLA Education, 19, 8-17.
- Brown, F. & Stent, M.D. (1977). Minorities in U.S. institutions of higher education. New York: Praeger.
- Herzog, R.A. (1982). High school seniors occupational plans and values: trends in sex differences 1976 through 1980. Sociology of Education, 55, 1-13.
- Lederer, D.A. (1983). Determinants of women's choice of undergraduate major. Newark, Del.: University of Delaware (unpublished paper).
- Mingle, J.R. (1978a). Black enrollment in higher education: trends in the nation and the south. Atlanta: Southern Regional Education Board.
- Mingle, J.R. (1978b). Degree output in the south, 1975-1976: distributions by race. Atlanta: Southern Regional Education Board.
- Rosenfeld, R.A. (1980). Race and sex differences in career dynamics. American Sociological Review, 45, 583-6-9.
- Thomas, G. (1980). Race and sex group equity in high education: institutional and major field enrollment statuses. American Educational Research Journal, 17, 171-181.
- Trent, W.T. (1983). Race and sex differences in degree attainment and major field distributions from 1975-76 to 1980-81. Baltimore: Center for Social Organizations of Schools. The Johns Hopkins University.