



# *UNITED STATES GENERAL ACCOUNTING OFFICE*

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## **The Bureau Of Indian Affairs Should Do More To Help Educate Indian Students**

In providing grants to Indian students to attend colleges and universities, the Bureau knows little about the students' preparation for and performance in college or about the colleges they attend.

Indian academic performance at college generally lags behind the academic performance of others. Indian freshmen particularly need help.

Supportive services--counseling, remedial courses, and a management information system--are needed to give Indians a better chance to further their education.



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC  
DEVELOPMENT DIVISION

B-164031(1)

The Honorable  
The Secretary of the Interior

Dear Mr. Secretary:

This report is on the Bureau of Indian Affairs' grant program that provides Indian students financial assistance to further their education.

Our work was done at seven higher education institutions that enrolled approximately 2,000 Indian students. On the whole, Indian students had lower assessment test scores and cumulative grade point averages than the general student population. Indian freshmen particularly need help.

The rate that Indian freshman students did not continue their education at these schools was higher than the rate for the general student population. About 54 percent of the Indian freshmen did not return to the school where they initially enrolled. Some of these students may not have continued their education, while others may have transferred to different schools. Overall, their academic performance was low. On the average, Indian freshmen completed only 7 hours per semester and earned less than a C grade. Better supportive services, such as counseling and tutoring, are needed to help Indian students further their education.

A system for gathering information on the colleges Indian students attend and their academic achievements would enable the Bureau to suggest, where appropriate, remedial courses or educational programs besides the traditional 4-year degree programs.

Our recommendations are contained on page 20. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House

Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

Copies of this report are being sent to the Senate Committee on Governmental Affairs; the House Committee on Government Operations; the Senate Committee on Human Resources; the House Committee on Education and Labor; the House Committee on Appropriations; the Subcommittee on Interior, Senate Committee on Appropriations; and the House Committee on Interior and Insular Affairs. Copies are also being sent to the Director, Office of Management and Budget; the Assistant Secretary for Indian Affairs; and the Director, Office of Audit and Investigations, Department of the Interior.

We appreciate the cooperation and assistance given our staff during the work.

Sincerely yours,

A handwritten signature in black ink that reads "Henry Eschwege". The signature is written in a cursive, slightly slanted style.

Henry Eschwege  
Director

D I G E S T

The Bureau of Indian Affairs provides grants to eligible Indian students who attend colleges and universities. The Bureau's objective is to develop the students' leadership potential and increase their opportunities for professional and vocational employment.

The program has grown rapidly. In 1970 about 4,300 students received about \$4 million to attend higher education institutions; by 1976 about 16,000 students were receiving about \$33 million. However, the Bureau knows little about the institutions that Indian students attend or about the students' preparation for and performance in college. (See p. 16.)

GAO visited seven educational institutions that enrolled approximately 2,000 Indian students. Academic achievement data was obtained on 430 randomly selected students enrolled in the fall of 1975, 351 students who were freshmen in the fall of 1974 and received a Bureau higher education grant, and 230 graduates who received degrees between 1973 and 1976. (See pp. 2 and 3.)

Indian students were found to have lower assessment test scores and lower cumulative grade point averages than the general student population. Indian freshmen academic performance was below the minimum grade point average needed to graduate. The rate that Indian freshmen students did not continue their education was higher than the rate for the general student population.

About 54 percent of the Indian freshmen did not return to the school where they first enrolled. Some may not have continued their education; others may have transferred

to different schools. On the average, Indian freshmen completed only 7 credit hours per semester and earned less than a C grade for the school year. Credit for only a few of the courses could have been transferred. (See ch. 2.)

The average Indian undergraduate who completed the 1975 fall term had a cumulative 2.1 grade point average and completed 10 hours per semester. Indian graduates had a 2.7 grade point average and took about 12 semesters to earn their degrees. The Bureau estimates that only about 10 percent of Indian freshmen eventually graduate. (See ch. 2.)

Interviews with Indian students and counselors and Bureau and school officials indicate that weak academic backgrounds, culture shock, and inadequate supportive services, such as counseling and remedial and tutoring services, tend to limit Indian academic performance in college. (See p. 11.)

The Bureau has neither devoted enough staff to the program nor provided students with needed supportive services. (See p. 17.)

Although the higher education grant program has existed since 1934, the Bureau has not developed adequate regulations spelling out program criteria and services. The Bureau has developed guidelines on how the grant program is to be administered, but they are advisory, not mandatory. (See p. 18.)

The Bureau should provide more than financial assistance to Indian students. It should develop and implement a system for gathering information on (1) Indian students' academic preparation for and performance in college and (2) the support services that educational institutions offer to help Indian students continue their education, increase academic performance, develop leadership potential, and increase professional and vocational

employment opportunities. Counseling, pre-college orientation programs, and remedial and tutoring services are needed. An assessment of Indian students' elementary and secondary education achievements would enable the Bureau to suggest remedial courses or educational programs besides the traditional 4-year degree programs. (See p. 19.)

The Secretary of the Interior should direct the Bureau of Indian Affairs to:

- Develop and implement a system for gathering information on Indian students and the colleges they attend to help these students plan their education. Student information should include high school courses taken, achievement test scores, career goals, college grade point averages, the number of students not continuing their education, and the number of graduates. Information should be obtained on support services, such as counseling and tutoring and remedial programs at postsecondary educational institutions. (See p. 20.)
- Encourage Indian counselors to perform duties that enhance the Indians' opportunities to further their education. (See p. 14.)
- Encourage colleges and universities without Indian counselors to see that Indian students are receiving adequate supportive services. (See p. 20.)
- Develop regulations based on the higher education program manual and require Bureau personnel to follow them. (See p. 20.)
- Sufficiently staff the higher education program so that needed services can be provided to Indian students. (See p. 20.)

On August 19, 1977, GAO met with the Bureau's Director of Education and other Bureau

officials to discuss the contents of this report. The officials agreed with GAO's recommendations and described planned actions to implement them. The Bureau's major effort involves developing program regulations that should improve the overall operation of the higher education financial aid program.

## C o n t e n t s

		<u>Page</u>
DIGEST		i
CHAPTER		
1	INTRODUCTION	1
	The program has grown rapidly	2
	Scope	2
2	INDIAN READINESS FOR AND PERFORMANCE IN COLLEGE LAG BEHIND THE GENERAL POPULATION	5
	Assessment test scores	5
	Cumulative grade point averages	7
	Credit hour completion rates	8
	Indian freshmen not returning to schools where they initially enrolled	9
	Indian graduates	10
3	SEVERAL FACTORS LIMIT INDIAN ACADEMIC PERFORMANCE IN COLLEGE	11
	Poor academic background	11
	Culture shock	12
	Inadequate counseling	13
	Need for remedial and tutoring services	14
4	PROGRAM IMPROVEMENTS ARE NEEDED TO HELP INDIANS FURTHER THEIR EDUCATION	16
	No higher education management information system	16
	Staff has not increased with the program	17
	Inadequate program regulations	18
5	CONCLUSIONS, RECOMMENDATIONS, AND BIA COMMENTS	19
	Conclusions	19
	Recommendations to the Secretary of the Interior	20
	BIA comments	20

APPENDIX		<u>Page</u>
I	ACT scores for Indian freshmen, under- graduates, and graduates	22
II	Grade point averages for Indian fresh- men, undergraduates, and graduates	28
III	Semester hours completed by Indian undergraduates and graduates	34
IV	Percentage of freshmen students not returning to original schools	38

#### ABBREVIATIONS

ACT	American College Testing Program
BIA	Bureau of Indian Affairs
GAO	General Accounting Office
GPA	grade point average

## CHAPTER 1

### INTRODUCTION

The Bureau of Indian Affairs (BIA) has authority under 25 U.S.C. 13 to spend money for the general support and civilization of Indians. In 1934 BIA established a higher education grant program to make higher education opportunities available to as many eligible Indians as possible. The program's objective is to develop leadership and increase professional and vocational employment opportunities. The grant program is administered by BIA area and agency offices and Indian tribal contractors. The Director of Education at BIA headquarters has overall program responsibility.

To receive a higher education grant, a student must be a member of a federally recognized tribe, have one-fourth or more Indian blood, and be accepted by an accredited institution. The institution's financial aid officer determines the amount of money needed for tuition, books, subsistence, and related fees. To meet each student's need, the aid officer will develop a financial aid package, which may consist of several types of assistance obtained through Federal and State programs, or private and institutional scholarships, loans, and grants. This information is forwarded to the BIA office or contractor serving the student's tribe. BIA awards generally supplement other forms of student assistance to cover students' unmet financial need. Once the Bureau's grant award has been determined, a letter of notification is sent to the student and the grant check is sent to the institution, which generally deducts tuition, subsistence, and related fees and turns the remainder over to the student.

The BIA higher education grant manual states that students receiving grants are expected to demonstrate satisfactory progress toward degree requirements. Students are expected to maintain a "C" average and complete a minimum number of credits (usually 12 or more) as specified by the college. However, the above criteria are merely for guidance purposes and, according to a BIA official, do not have to be followed. BIA regulations do not discuss "satisfactory progress." If the above conditions are not met, students can be placed on probationary grants if the institution recommends that they be allowed to continue. A BIA official said that if after one school year their performance is still unsatisfactory, students' grants can be terminated.

## THE PROGRAM HAS GROWN RAPIDLY

In 1934 the higher education grant program had 71 participants; by 1969 it had about 3,200. Between 1970 and 1976 both BIA funding and student participation in the program increased dramatically. In 1970 BIA grant expenditures were about \$3.8 million and 4,271 students participated in the program. The average grant per student was about \$900. By 1976 expenditures had increased to about \$33 million and about 16,000 students participated. The average grant per student had increased to about \$2,100. The following table shows the growth of the grant program since 1970.

<u>Fiscal year</u>	<u>Number of grantees</u>	<u>Average grant</u>	<u>Total amount granted</u>
1970	4,271	\$ 901	\$ 3,848,000
1971	6,623	921	6,098,000
1972	12,438	1,226	15,248,000
1973	13,558	1,546	20,956,000
1974	13,500	1,671	22,556,000
1975	15,500	2,003	31,045,000
1976	16,000	2,070	33,119,000

Although BIA higher education grant recipients attend nearly 600 colleges and universities, 25 institutions enroll over a third of all grant recipients.

## SCOPE

Academic profiles based on student achievement tests, grade point averages, and semester hour completion rates were developed for Indian students receiving BIA higher education grants. We also identified problems that contribute to Indian students' poor academic achievement and possible solutions to these problems.

Our survey was made at the Universities of Montana and New Mexico; Arizona State, Brigham Young, and Northeastern Oklahoma State Universities; and Ft. Lewis and Phoenix Colleges. We gathered information on Indian academic achievement and interviewed college officials and Indian students.

About 2,000 of the 16,000 BIA grant recipients attended these seven institutions in the fall of 1975. Of these 2,000 students, we obtained academic achievement data on 430 (about 21 percent) randomly selected students, who are referred to as Indian undergraduates in this report.

In addition, we gathered academic achievement information on all 351 students who first entered the seven institutions in the fall of 1974 and received a higher education scholarship grant. These students are referred to as Indian freshmen in this report.

We also gathered academic achievement data for 230 grant recipients who graduated from the seven institutions between 1973 and 1976. Generally, we selected the 1974 and 1975 graduates. To obtain a sufficient sample size, we selected graduates (1) over a 3-year period at one institution, (2) over a 2-year period at four institutions, and (3) from 1 year at two institutions. In this report, these students are referred to as Indian graduates.

Academic calendars varied at the seven educational institutions. Four schools operated on a semester system, two on a trimester system, and one on a quarter system. Generally, the schools on the semester and trimester systems had two 16-week sessions and summer sessions of varying lengths. The school on the quarter system had three 11-week sessions and a summer session offering a choice of two 4-1/2-week sessions or one 9-week session. Credit hour completion rates at this school were converted to a semester equivalency so that the data would be compatible.

We interviewed higher education specialists at BIA's Albuquerque, New Mexico, Phoenix, Arizona, Billings, Montana, and Muskogee, Oklahoma, area offices; BIA headquarters in Washington, D.C.; the BIA Indian Education Resources Center in Albuquerque; and higher education specialists associated with the All Indian Pueblo Council and the Laguna, Zuni, and Flathead tribal contractors.

We determined the percentage of Indian freshmen who did not return to the educational institutions where they initially enrolled. These percentages were determined by identifying those Indian freshmen who began college at one of the seven institutions in the fall of 1974 but did not return to the same school a year later. Some of these students may not have continued their education, while others may have enrolled in different schools. However, these students generally had low grades, and few of the courses completed during their freshman year could have been transferred to other schools.

Our survey was directed at Indian students' academic achievements beyond the secondary education level. Problems experienced at the elementary and secondary school levels and recommendations addressing these problems are described in our January 17, 1977, report "Concerted Effort Needed to Improve Indian Education" (CED-77-24) and our March 14, 1977, report "Indian Education in the Public School System Needs More Direction from the Congress" (HRD-76-172).

## CHAPTER 2

### INDIAN READINESS FOR AND PERFORMANCE IN COLLEGE

#### LAG BEHIND THE GENERAL POPULATION

Indian students do not perform as well in college as the general student population. Indians at the seven colleges we visited generally had low assessment test scores and low credit hour completion rates. Also, Indian freshmen generally did not continue their education at the institutions where they initially enrolled and had low cumulative grade point averages (GPAs).

The average Indian freshman began college with an American College Testing Program (ACT) composite score of 13, completed 7 credit hours per semester, and earned a 1.7 out of a possible 4.0 GPA for the school year. About 54 percent of the Indian freshmen did not return to the same school where they initially enrolled. The average Indian undergraduate, freshman through senior, who completed the 1975 fall term had an ACT composite score of 14, a cumulative 2.1 GPA, and completed 10 credit hours per semester.

Indian students who graduated had an ACT composite score of 14, a 2.7 GPA, and completed 11 hours per semester. It generally took Indian students about 12 semesters to earn their degrees. Factors limiting the academic performance of the Indian freshmen and undergraduates are discussed in chapter 3.

#### ASSESSMENT TEST SCORES

The American College Testing Program assesses a student's general educational development and ability to complete college-level work. A comprehensive testing program for use by students planning to enter a postsecondary institution, it is administered annually on five national testing dates at more than 2,800 test centers for high school juniors and seniors. Higher education institutions may also administer the test to students who missed the five national testing dates. The ACT handbook, which outlines the general requirements for taking the test, notes that research studies indicate that the ACT test is as reliable a predictor of college grades for minority or disadvantaged students as it is for middle-class white students. According to the handbook, students with poor educational preparation often experience difficulty in the first year of college, as predicted by the

test scores, and therefore colleges need to identify poorly prepared students so they can be given special educational support.

The test covers four areas: English, mathematics, social studies, and natural sciences. The combined subtest scores result in a composite score and a percentile rank for each student. A percentile rank tells what percentage of students in a given group scored lower than the student in question. The ACT handbook notes that composite scores between 15 and 20 should be considered low average and that scores below 15 indicate a restricted educational development background.

The following table shows the average ACT composite scores and percentile ranks for Indian students included in our survey and for all students nationwide:

	<u>Average ACT composite scores</u>	<u>Percentile rank</u>
All college-bound students	19	51
Indian freshmen	13	18
Indian undergraduates	14	23
Indian graduates	14	23

These scores indicate that, on the whole, Indian students had restricted educational development and scored much lower than non-Indians. They had average rankings of 18 and 23 percentiles, which means that 82 and 77 percent of all students who took the test received higher scores.

The ACT handbook also gives the approximate national average ACT scores for the four subtests. These subtest scores are presented in the following table for all college-bound students and the Indian students included in our sample.

	<u>Average ACT subtest scores</u>			
	<u>English</u>	<u>Math</u>	<u>Social studies</u>	<u>Natural sciences</u>
All college-bound students (nationwide)	18	19	18	21
Indian freshmen	13	12	12	15
Indian undergraduates	13	13	13	16
Indian graduates	13	14	14	16

These scores indicate that the Indian students in our sample had below average scores in all the tested skills and had

restricted educational development--scores lower than 15-- in all areas except natural sciences.

At the seven schools visited, we obtained ACT scores for 313 Indian freshmen who began their education in the fall of 1974 and 300 undergraduates attending these schools in the fall of 1975. Of the 613 Indian students, 126 had average ACT scores of 9 or less, 270 averaged from 10 to 14, 166 averaged from 15 to 20, and 51 averaged 21 or more. An average ACT score of 14 was achieved by 105 Indian graduates. (See app. I for ACT scores.)

#### CUMULATIVE GRADE POINT AVERAGES

The visited schools awarded letter grades and grade points after evaluating students' course work. A "C" grade earns 2.0 grade points per credit hour and signifies that course requirements were completed with satisfactory or average work performance. These colleges require a minimum 2.0 GPA for graduation.

The following table shows the cumulative GPAs for 334 fall 1974 Indian freshmen, 430 Indian undergraduates, and all undergraduates at the visited schools:

	<u>Average GPAs</u>
All undergraduates	2.7
Indian freshmen	1.7
Indian undergraduates	2.1

As noted above the Indian freshmen's overall average GPA was 1.7, ranging from an average of 1.4 at one school visited to an average of 1.8 at another. Female Indian freshmen had an average GPA of 1.8 compared to the male average of 1.5, even though they had lower ACTs.

For the Indian undergraduate sample, GPAs increased from a 1.7 for freshmen to a 2.6 for seniors. Of the 430 Indian undergraduates, 255 had an average GPA of 2.2 or higher. Sophomores, juniors, and seniors in this sample had average GPAs exceeding the 2.0 average needed to graduate. Also, Indians who transferred to the seven schools were performing satisfactorily. The 132 transfer students included in our sample had a 2.2 GPA--39 of these students transferred from junior colleges with an average 2.3 GPA.

A comparison of Indian students' GPAs to their ACT composite scores shows the following:

	ACT composite scores			
	<u>9 or less</u>	<u>10 to 14</u>	<u>15 to 20</u>	<u>21 or more</u>
Indian freshmen average GPAs	1.4	1.7	1.8	1.9
Indian undergraduates average GPAs	1.9	1.9	2.2	2.3

As shown above students with higher ACTs tend to have higher GPAs. Indian undergraduates with ACTs of 15 or more were achieving GPAs that would enable them to meet the minimum requirements for graduation. We believe that the ACT composite test scores could be used as indicators of the expected college success of Indian students. However, other factors also influence freshmen Indian students' academic achievements. Some of these are discussed in chapter 3. (App. II contains data on Indian students' GPAs.)

#### CREDIT HOUR COMPLETION RATES

Most of the schools we visited require 124 to 128 semester credit hours for a 4-year bachelor's degree. When converted to 8 or 9 semesters, this would mean a student would take about 14 to 16 credit hours per semester. Generally, the schools expect a full-time student to carry at least 12 credit hours. This is also what BIA expects of Indian students. Students completing 12 credit hours per semester would need about 10 semesters to earn their degrees.

The sampled Indian undergraduate records show that 327 of the 430 students were not meeting the BIA manual criteria of completing 12 credit hours per semester and earning a 2.0 GPA. The following table shows the Indian students' average credit hour completion rates by class and the number of semesters that would be needed to obtain a degree at those rates.

<u>Class</u>	<u>Average completed semester hours per term</u>	<u>Minimum terms required to graduate</u>
Freshmen	7	18
Sophomores	9	14
Juniors	10	13
Seniors	11	12

At the schools visited, students were classified as freshmen until they had completed 30 semester hours, as sophomores if 31 to 60 hours were completed, as juniors if 61 to 90 hours were completed, and as seniors if 91 or more hours were completed. Based on the above averages, an Indian student would need a little over 4 semesters to move from the freshman to sophomore class and another 9 semesters to earn a degree.

At six of the seven schools, 395 Indian undergraduates were completing an average of 10 hours per semester. At the other school, a 2-year school, 35 Indian undergraduates completed 9 hours per semester. At only one school were Indian undergraduates--52 juniors and seniors--completing an average of 12 hours per semester.

A total of 103 Indian undergraduates had completed 12 hours per semester and earned at least a 2.0 GPA. Of these, 35 were freshmen, 13 were sophomores, 24 were juniors, and 31 were seniors. Also, 72 were females and 45 were transfer students. ACTs available for 75 of the 103 undergraduate students showed that 42 had scores of 15 or more.

Overall, the average Indian undergraduate was not meeting the expected BIA course load standard of 12 credit hours and would probably require about 13 semesters to earn a degree. (See app. III for completion rates.)

#### INDIAN FRESHMEN NOT RETURNING TO THE SCHOOLS WHERE THEY INITIALLY ENROLLED

At the schools visited, 54 percent of the Indian freshmen did not return to the school where they initially enrolled, while 39 percent of the non-Indian freshmen students did not return. The rate at which Indian freshmen students did not return ranged from 44 percent at one school to 73 percent at another. (See app. IV.)

Of the 351 Indian students who entered school in the fall of 1974, 191 did not return to the same school that they had attended during the preceding year. Some of these Indian students may have transferred to another school. However, those who did not return averaged only a 1.4 GPA. Since most colleges will not accept courses for transfer credit if less than a C grade is earned, the Indian freshmen transfer student would receive no credit for those courses for which a grade below C was earned. Also, of 165 Indian students who did not return 119 had an ACT below 15.

## INDIAN GRADUATES

We collected academic profiles at the seven colleges for 230 Indian students who earned undergraduate degrees between 1973 and 1976. Four-year degrees were obtained by 212 of these students. The average Indian graduate began college with an ACT composite score of 14, graduated with a 2.7 GPA, and completed an average of 11 credit hours per semester. More than half of the Indian graduates were transfer students, and it took the graduates about 12 semesters to earn their undergraduate degrees. The following table shows the major area of study of 189 Indian graduates for whom information was available.

<u>Major area of study</u>	<u>Number of graduates</u>
Business	22
Education	106
Liberal arts	17
Medical	4
Psychology	10
Science	5
Sociology	<u>25</u>
Total	<u>189</u>

We could not obtain statistics on non-Indian graduates to make comparisons with Indian graduates because the colleges visited did not maintain non-Indian graduate profiles. BIA maintains no statistics on the percentage of entering Indian freshmen who eventually graduate from college, but it estimates that only 10 percent do. The Department of Health, Education, and Welfare estimates that about 54 percent of all entering freshmen eventually graduate. Thus, while some Indian students are performing satisfactorily and will eventually earn their degrees, the available evidence suggests that many are performing well below their non-Indian peers and will never earn their degrees. For these students, the higher education grant program objective of developing leadership and increasing employment opportunities may never be realized.

## CHAPTER 3

### SEVERAL FACTORS LIMIT INDIAN ACADEMIC

#### PERFORMANCE IN COLLEGE

Poor academic preparation, culture shock, inadequate counseling, and inadequate remedial and tutoring services were cited as factors that can limit Indian academic performance in college.

#### POOR ACADEMIC BACKGROUND

Indian students have been among the most educationally disadvantaged in the Nation. Department of the Interior 1976 appropriation hearings disclosed that:

- The average educational level for all Indians is 8.4 years. Dropout rates for Indian students, grades 8 to 12, as shown in two separate studies of public, Federal, and private schools in the Southwest and Northwest, are about 48 percent and 39 percent, respectively.
- The 1966 Coleman Report (Equality of Educational Opportunity) studied such achievement measures as reading comprehension, mathematics, verbal ability, nonverbal ability, and general information in a large national sample of 6th, 9th, and 12th grades. The results established that the American Indian (like other minority groups studied) scores significantly lower at every grade level than does the average white pupil. Further, the lag was greater at the 12th grade than at the 1st, indicating that Indian children lose ground the longer they stay in school.
- Reading and mathematical development are serious problems. One study sample showed that 38 percent of second and fourth graders and 34 percent of sixth graders read below grade level. The proportion of Indian children with special needs in mathematics rises from 32 percent in the second grade to 41 percent in the fourth grade to 46 in the sixth grade.
- Thirty-six percent of the parents of Indian children surveyed in a 1970 study had not continued beyond

grade school. Participation of these parents in their children's education programs was minimal.

As shown in chapter 2, Indian students included in our survey had much lower ACT scores than the non-Indian college students. For example, 82 percent of all students who took the test scored higher than the average Indian freshman in our survey. Also, ACT scores indicate that the Indian students sampled had restricted educational development in English, mathematics, and social studies. (See p. 5.)

Twenty of 24 Indian students we interviewed said Indians usually attend schools that do not adequately prepare them for higher education. BIA officials and officials at the visited schools added that the lack of study skills, poorly equipped and staffed secondary schools, lack of a competitive spirit, and a negative self-image contribute to the Indian students' poor preparation for college. Also, secondary schools often do not emphasize the basic skills of English, mathematics, and science and generally do not provide adequate career guidance and education.

BIA and college officials that we interviewed said inadequate preparation for college has contributed to the small number of college graduates to serve as models for younger Indian students. According to BIA officials, many parents and tribal officials have not attended college and have only recently begun to stress the value of a college education. Peer pressure has been against going to college, and students who overcome this pressure usually decide to pursue a college education late in their senior year in high school or after graduation.

#### CULTURE SHOCK

Soon after deciding on a college education, Indian students are thrust into a campus setting and often experience culture shock in adjusting to college life. Indian counselors and BIA officials said these students have great difficulty in making the transition from a largely noncompetitive rural environment to an intensely competitive urban campus setting. Several Indian students commented that reservation Indians have a lot of trouble adjusting to large cities. Others said their value systems are very different from white, middle class Americans in that they are taught to cooperate and not compete. They are not expected to be leaders until they have matured sufficiently.

Results of two studies at a school we visited suggest that precollege orientation programs can bolster the Indian student's self-image and ease his or her adjustment to college. One study analyzed the results of a 5-week precollege orientation program for Indian freshmen. Included in the program were weekly field trips to local industries and help with study skills, problem solving, choosing a college major, positive thinking, and experiences in English and mathematics. The study concluded that the orientation program helped prepare Indian students for college. A followup on college grades a year later showed that Indian students in the orientation program had greater increases in their GPAs than those not enrolled in the program.

Another study at the same school solicited responses from Indian graduates and undergraduates and faculty members. Indian students indicated that adapting to a new environment, making new friends, and acquiring good study habits are difficult adjustments. The study concluded that precollege orientation programs help Indian students make these adjustments.

BIA officials stated that precollege orientation programs, in which students live on campus for 1 to 5 weeks and attend miniclasses, could help Indian students overcome culture shock and better adjust to college life, but that the BIA area offices lack sufficient funds for these programs. Six of the seven colleges visited did not provide precollege orientation programs for Indian students in 1976. The college providing orientation had not completed its analysis of the program at the time of our survey.

#### INADEQUATE COUNSELING

Studies at higher education institutions suggest that students who receive counseling have lower attrition rates and higher GPAs than students who do not. A university that we visited had a special services program that included counseling for Indian students. Indian freshmen participating in the program had a drop-out rate of 25 percent, whereas the overall Indian freshman class had a 46-percent drop-out rate.

All seven colleges had counseling services with at least one Indian in a counseling position. BIA funded some of the counseling positions. However, BIA did not provide some of the counselors with the names of Indian students. Seven counselors that we interviewed said the following services would benefit Indian students.

- Coordinate the gathering of Indian student academic statistics, the development of a survival skills course (how to register, drop or add courses, etc.), the development of "big brother" type programs, and the development of precollege orientation programs for grant recipients.
- Develop Native American studies curriculums, faculty advisors for grant recipients, effective Indian tutors, and workshops to familiarize college faculties with Indian culture.
- Arrange for (1) field trips to college so that Indian high school students can see what college life is like, (2) social activities, and (3) money management training.
- Encourage Indian students to use the university testing service and encourage college officials to develop needed remedial courses for Indian students and to hire qualified Indians for faculty and staff positions.
- Determine why Indian students do not return to school and provide this information to BIA and appropriate college officials.
- Advise Indian students how to get into tutoring and counseling programs.
- Obtain a list of all BIA-funded Indian students.
- Monitor Indian students who drop two or more courses and find out why.
- Discuss Indian students' needs with college officials.
- Help arrange for "close-in" housing for grant recipients.
- Identify careers in demand for Indians, both on and off the reservation, and encourage grant recipients to enter such careers.

None of the counselors interviewed were performing all these duties and most were performing less than half of them. Only one counselor was arranging for precollege orientation programs and developing workshops to familiarize faculties with Indian culture.

## NEED FOR REMEDIAL AND TUTORING SERVICES

BIA officials said that because many Indian students enter college with inadequate academic skills, as reflected by their ACT scores, these students could probably benefit from remedial work. Although six of the seven colleges visited offer remedial courses, only two require such coursework of students with low ACT scores before they begin their freshman-level studies. Indian counselors and BIA officials interviewed noted that Indian students with inadequate academic skills generally do not enroll in remedial courses.

BIA officials stated that, because Indian students often enroll directly in freshman-level courses, many quickly experience academic difficulty and may need tutoring to successfully complete their freshman year. University studies suggest that effective tutoring can result in lower withdrawal rates and higher grades. One study at a university we visited showed that tutoring was responsible for a 0.51 increase in Indian student grade point averages; another study showed that tutoring can reduce dropout rates by as much as 25 percent.

Although six of the colleges visited have free tutoring for all students, counselors said that only three have made significant efforts to recruit Indian students as tutors, and only one had successfully recruited such students. BIA officials said that many Indians needing tutoring might not accept it from non-Indians because such tutors often do not understand the Indian's problems. BIA has generally done little to encourage the development of effective tutoring for Indian students. As a result, many Indian students are not receiving tutoring services that might improve their academic performance.

BIA officials responsible for administering the higher education grant program agree that the Indian freshmen students' relatively poor academic background, combined with culture shock and inadequate college counseling, remedial, and tutoring services, contributes significantly to the relatively low grade point averages and could result in Indian freshmen not returning to the schools at which they initially enrolled.

## CHAPTER 4

### PROGRAM IMPROVEMENTS ARE NEEDED TO HELP INDIANS

#### FURTHER THEIR EDUCATION

BIA does not have a higher education information system for matching Indian students with institutions where they would have the best chance of furthering their education. In addition, BIA has neither devoted enough staff to the higher education grant program nor developed regulations addressing program criteria and services to be provided.

#### NO HIGHER EDUCATION MANAGEMENT INFORMATION SYSTEM

According to BIA officials, they do not have a management information system enabling them (1) to determine freshmen Indian student academic backgrounds, ACT scores, and career goals, (2) to help Indian students choose schools where they would have the best chance of furthering their education, and (3) to determine the number of Indian students not returning to school and their performance at the college level. BIA officials acknowledged that they did not maintain data similar to that developed during our visits to the seven educational institutions. Such information shows

- that 82 percent of all students who took the ACT test scored higher than the average Indian freshman in our survey;
- that the average Indian freshman had a composite ACT score of 13 and did not meet the BIA satisfactory performance guideline of maintaining a 2.0 GPA;
- overall GPAs, average credit hours completed per semester, the number of Indian freshmen not returning to school, and the number of Indian graduates;
- that 73 percent of the entering fall 1974 Indian students at one educational institution did not return the following year; and
- that only 1 of 22 recent Indian graduates from another educational institution started at that institution.

BIA officials said that, had they been aware of this information, programs could have been developed to help Indian students prepare academically for college. We believe BIA could counsel students with weak academic backgrounds to take remedial courses or educational programs besides the traditional 4-year programs that would give them the best chance to further their education. These services could help Indian students to develop leadership potential and increase their professional and vocational employment opportunities.

**STAFF HAS NOT INCREASED  
WITH THE PROGRAM**

In 1970, when about 4,300 students participated in the higher education grant program, the typical BIA area office had one higher education specialist and one higher education clerk-typist, both of whom had other responsibilities. A BIA official said that in 1976, when about 16,000 students participated in the program, the area offices had essentially the same size higher education staff. Although part of the program is now administered by BIA agency offices and tribal contractors, BIA officials stated that they do not have enough personnel to effectively monitor agency performance and tribal contract compliance.

Area office higher education specialists we interviewed appeared to be hard-working people dedicated to administering a successful program. However, so much of their time was taken up processing grant applications, compiling reports, and preparing budget estimates that little time was left to develop and deliver needed supportive services to grant recipients.

Higher education specialists that we visited process, on the average, about 1,000 grant applications per year. With such an administrative burden, it is difficult to provide adequate guidance and counseling services, as stated in the BIA higher education grant manual, and to develop and maintain a successful information system. Although higher education specialists would occasionally visit colleges attended by large numbers of grant recipients, they generally had only enough time to meet with financial aid officers. They were seldom able to visit with college counselors, tutors, instructors, or grant recipients.

## INADEQUATE PROGRAM REGULATIONS

Although the higher education grant program has existed since 1934, BIA has not developed adequate regulations spelling out program criteria and services. BIA has developed guidelines on how the grant program is to be administered, but they are advisory, not mandatory.

A regulation in effect since 1968 states that grant recipients must have one-fourth or more Indian blood and must attend accredited institutions of higher education. However, the regulation does not state (as the BIA higher education grant manual does) that recipients must show financial need and earn at least a 2.0 GPA and complete 12 credits each semester to continue receiving their grants.

One area office higher education specialist stated that he follows the 2.0-GPA, 12-credit hour guideline for grant continuation. Another specialist said that as long as the college or university allows students to enroll for the following term, their grants will be continued. None of the specialists we interviewed insisted that students submit grant applications by the April 1 deadline, as stated in the BIA manual. The lack of adequate regulations can lead to inconsistencies in the administration of the higher education grant program.

## CHAPTER 5

### CONCLUSIONS, RECOMMENDATIONS,

#### AND BIA COMMENTS

#### CONCLUSIONS

The Bureau of Indian Affairs spends about \$33 million yearly to provide higher education opportunities for Indian students, yet it knows little about the educational institutions that Indian students attend or about the students' preparation for or performance in college. Because BIA has not developed a higher education information system, it is unable to suggest supportive services or postsecondary education programs that would give Indian students a better chance of furthering their education.

Our work at seven schools showed that Indian students' academic performance generally is not satisfactory and lags behind the performance of their non-Indian counterparts. Help is needed particularly for Indian freshmen students. The average Indian freshman was receiving credit for only 7 hours per semester and achieving a 1.7 GPA. About 54 percent of the Indian freshmen did not return to the same school where they initially enrolled. These students had a 1.4 GPA. They were also poorly prepared for college, in that they scored well below the non-Indian student on nationally administered tests that assess general education development and ability to complete school. BIA estimates that only about 10 percent of the Indian freshmen eventually graduate.

BIA should provide more than just financial assistance to Indian students. It should develop and implement a system for gathering information on Indian students and the schools they attend to help students further their education, develop leadership potential, and increase professional and vocational employment opportunities. Counseling, precollege orientation programs, and remedial and tutoring services are needed. Also, BIA should assess the elementary and secondary education achievements of Indian students so that it can suggest to freshmen students remedial courses or other educational programs besides the traditional 4-year degrees.

BIA also needs regulations spelling out how the program is to be administered and the services that should be provided to Indian students. In addition, BIA should sufficiently staff the higher education grant program.

RECOMMENDATIONS TO THE  
SECRETARY OF THE INTERIOR

We recommend that the Secretary direct the Bureau of Indian Affairs to:

- Develop and implement a system for gathering information on prospective Indian students and the colleges they attend. Student information should include high school courses taken, scholastic achievements, ACT scores, and career goals. College information should include Indian students' grade point averages, rates at which such students are not returning to school and reasons why, graduation rates, average hours completed per term, average number of terms needed to graduate, and availability of counseling, tutoring, and remedial services. This information could be used to suggest remedial courses or educational programs besides the traditional 4-year programs that would give Indian students the best chances of success.
- Encourage Indian counselors to perform the duties listed on page 14.
- Encourage colleges and universities without Indian counselors to see that Indian students are receiving adequate supportive services.
- Develop regulations based on the higher education grants manual and require BIA personnel to follow them.
- Sufficiently staff the higher education program so that needed services can be provided to Indian students.

BIA COMMENTS

We did not obtain written comments from the Department of the Interior but did provide a copy of our report to BIA's Director of Education. On August 19, 1977, we met with the Director and other Bureau officials to discuss it. They agreed with our recommendations and described planned actions. Their comments were considered in our final report.

BIA's major effort involves developing program regulations that should help to improve overall program operations. Although the higher education grant program has existed since

1934, the Bureau has not developed adequate regulations spelling out program criteria and services. The Bureau has developed guidelines on how the grant program is to be administered, but they are advisory, not mandatory.

The proposed regulations should result in consistent standards being applied to Indian students seeking funds to further their education. These regulations spell out (1) eligibility requirements, (2) beginning and closing dates for submitting financial aid applications, (3) procedures for establishing financial need and determining the grant amount, and (4) refund procedures for students who do not enroll or who withdraw. These regulations will also require students enrolled full time to carry the number of hours required by the educational institution for its full-time students. Also, to be considered for continuing assistance, students will be required to maintain the academic and social standards established by their schools.

## APPENDIX I

ACT COMPOSITE SCORESINDIAN FRESHMENFALL 1974

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>ACT</u> <u>avg.</u>	<u>No.</u> <u>(note b)</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>
Indian freshmen	14	21	12	66	11	38	15	73
Male	15	9	12	13	12	15	15	38
Female	13	12	12	53	11	23	14	35
ACT 9 or less	8	3	8	19	8	13	8	10
10 to 14	13	11	12	37	11	19	12	29
15 to 20	17	6	17	9	16	5	17	24
21 or More	23	1	26	1	21	1	23	10

a/Complete information was not available for every student in our sample because some records were incomplete.

b/No. is number of students included in our average.

<u>Coll. E</u>		<u>Coll. F</u>		<u>Coll. G</u>		<u>Total (note a)</u>	
<u>ACT</u>		<u>ACT</u>		<u>ACT</u>		<u>ACT</u>	
<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>
10	5	14	65	13	45	13	313
9	1	15	25	14	23	14	124
11	4	13	40	13	22	13	189
8	3	8	10	8	11	8	69
10	1	12	30	12	19	12	146
18	1	17	18	17	12	17	75
0	0	23	7	25	3	23	23

## APPENDIX I

ACT COMPOSITE SCORESINDIAN UNDERGRADUATE STUDENTS

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>ACT</u> <u>avg.</u>	<u>No.</u> <u>(note c)</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>
Indian under- graduates	15	15	13	58	12	26	14	85
Freshmen	14	9	12	20	11	14	13	48
Sophomores	17	2	13	16	13	2	14	14
Juniors	16	2	15	14	12	7	15	13
Seniors	20	2	12	8	15	3	17	10
Males	16	7	14	20	14	8	14	35
Females	15	8	13	38	11	18	14	50
Transfer stu- dents	14	2	15	5	13	4	12	8
Jr. coll. transfers	0	0	17	4	11	3	10	5
Age 21 or less	14	10	13	37	12	16	15	39
22 or 23	17	1	13	11	13	7	14	19
24 or 25	24	1	14	5	13	1	13	7
26 or over	16	3	12	5	11	2	12	20
ACT 9 or less	8	1	8	14	7	9	8	13
10 to 14	13	6	12	24	12	10	12	39
15 to 20	17	7	17	17	17	5	17	27
21 or more	24	1	25	3	24	2	24	6

a/College E not included in age total since it was a 2-year college.

b/Complete information was not available for every student in our sample because some records were incomplete.

c/No. is number of students included in our average.

APPENDIX I

<u>Coll. E</u> <u>(note a)</u>		<u>Coll. F</u>		<u>Coll. G</u>		<u>Total</u> <u>(note b)</u>	
<u>ACT</u>	<u>No.</u>	<u>ACT</u>	<u>No.</u>	<u>ACT</u>	<u>No.</u>	<u>ACT</u>	<u>No.</u>
<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>
11	20	14	68	16	28	14	300
11	12	14	36	15	14	13	153
12	7	15	16	18	6	14	63
7	1	14	8	20	4	15	49
0	0	16	8	15	4	15	35
12	6	16	30	16	17	15	123
11	14	13	38	17	11	13	177
11	3	14	18	17	5	14	45
12	2	0	0	17	2	13	16
12	11	15	46	17	12	14	160
8	4	15	9	15	4	14	51
12	3	13	4	18	4	15	22
13	2	11	9	16	8	13	47
8	8	7	12	0	0	8	57
11	7	13	26	12	12	12	124
17	5	17	21	17	9	17	91
0	0	23	9	23	7	23	28

## APPENDIX I

ACT COMPOSITE SCORESINDIAN GRADUATES

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>ACT</u> <u>Avg.</u>	<u>No.</u> <u>(note c)</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>	<u>ACT</u> <u>avg.</u>	<u>No.</u>
Indian graduates	13	11	14	26	14	26	13	14
Males	12	7	16	9	13	12	17	4
Females	15	4	14	17	14	14	12	10
Transfer students	13	10	17	2	11	5	16	3
Jr. coll. transfers	12	8	0	0	6	1	0	0
Age 22 or less	16	2	18	3	16	3	20	2
23 to 26	14	5	14	17	14	18	12	4
27 to 30	12	4	13	6	14	2	11	3
31 or over	0	0	0	0	8	2	13	5
ACT 9 or less	7	1	8	2	7	4	8	2
10 to 14	11	6	12	12	12	9	12	7
15 to 20	17	3	17	11	16	12	16	4
21 or more	21	1	25	1	22	1	27	1

a/College E not included in age total since it was a 2-year college.

b/Complete information was not available for every student in our sample because some records were incomplete.

c/No. is number of students included in our average.

APPENDIX I

<u>Coll. E</u> <u>(note a)</u>		<u>Coll. F</u>		<u>Coll. G</u>		<u>Total</u> <u>(note b)</u>	
<u>ACT</u>		<u>ACT</u>		<u>ACT</u>		<u>ACT</u>	
<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>	<u>avg.</u>	<u>No.</u>
10	6	18	15	17	7	14	105
11	3	17	8	16	3	15	46
8	3	18	7	18	4	14	59
9	1	17	6	12	1	14	28
9	1	0	0	0	0	11	10
11	2	21	2	19	2	18	14
9	2	18	5	17	2	14	51
11	1	16	3	12	1	13	19
7	1	17	5	20	2	15	14
8	3	0	0	0	0	7	12
11	3	14	3	12	1	12	41
0	0	17	10	17	5	17	45
0	0	23	2	23	1	24	7

## APPENDIX II

GRADE POINT AVERAGESINDIAN FRESHMEN

<u>Category</u>	<u>Coll.: A</u>		<u>Coll.: B</u>		<u>Coll.: C</u>		<u>Coll.: D</u>	
	<u>GPA</u>	<u>No. (note b)</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>
Indian freshmen	1.8	27	1.8	69	1.7	40	1.8	74
Male	1.8	15	1.4	15	1.5	14	1.6	38
Female	1.8	12	1.9	54	1.8	26	2.0	36
ACT 9 or less	2.1	3	1.6	16	1.5	13	1.1	8
10 to 14	1.7	11	1.9	35	1.8	16	1.8	28
15 to 20	2.0	6	2.3	9	1.6	5	1.8	23
21 or more	2.2	1	.1	1	1.9	1	2.3	10

a/Complete information was not available for every student in our sample because some records were incomplete.

b/No. is number of students included in our average.

APPENDIX II

<u>Coll: E</u>		<u>Coll: F</u>		<u>Coll: G</u>		<u>Total</u> <u>(note a)</u>	
<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>
1.8	10	1.6	70	1.4	44	1.7	334
2.2	1	1.6	29	1.2	22	1.5	134
1.7	9	1.7	41	1.7	22	1.8	200
2.1	3	1.2	10	1.2	10	1.4	63
2.0	1	1.6	30	1.4	19	1.7	140
2.3	1	1.9	17	1.5	11	1.8	72
.0	0	1.6	7	1.9	3	1.9	23

APPENDIX II

GRADE POINT AVERAGES

INDIAN UNDERGRADUATE STUDENTS

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>GPA</u>	<u>No. (note c)</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>
Indian under-graduates	1.7	29	2.1	68	2.3	40	2.1	127
Freshmen	1.3	10	1.5	20	2.3	16	1.7	52
Sophomores	1.3	6	2.3	17	2.4	5	2.1	23
Juniors	2.0	7	2.4	18	2.2	11	2.3	23
Seniors	2.3	6	2.3	13	2.6	8	2.7	29
Males	1.8	14	2.0	25	2.3	15	2.0	49
Females	1.6	15	2.1	43	2.4	25	2.2	78
Transfer students	1.7	16	2.4	11	2.4	12	2.2	35
Jr. coll. transfers	.0	1	2.6	6	2.3	7	2.3	19
Age 21 or less	1.5	14	1.9	38	2.3	18	1.9	45
22 or 23	2.0	3	2.3	12	2.4	13	2.3	30
24 or 25	1.1	4	2.3	8	2.4	5	2.2	12
26 or over	2.1	8	2.3	10	2.2	4	2.1	40
ACT 9 or less	.9	1	1.8	14	2.0	9	1.8	13
10 to 14	1.6	6	2.0	24	2.4	10	1.8	39
15 to 20	1.8	7	2.3	17	2.5	5	2.4	27
21 or more	2.1	1	2.1	3	3.5	2	2.9	6

a/College E not included in age total since it was a 2-year college.

b/Complete information was not available for every student in our sample because some records were incomplete.

c/No. is number of students included in our average.

APPENDIX II

Coll. E (note a)		Coll. F		Coll. G		Total (note b)	
<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>
2.4	35	1.9	95	2.0	36	2.1	430
2.3	21	1.4	41	1.3	15	1.7	175
2.5	11	2.0	21	2.5	9	2.2	92
2.8	3	2.2	18	2.5	8	2.3	88
.0	0	2.5	15	2.8	4	2.6	75
2.3	9	1.8	39	1.6	20	1.9	171
2.4	26	2.0	56	2.5	16	2.2	259
2.5	9	2.1	38	2.4	11	2.2	132
2.4	4	.0	0	2.8	2	2.3	39
2.5	19	1.6	48	1.9	14	1.9	177
2.2	8	2.2	17	2.3	5	2.3	80
2.4	3	1.9	7	2.0	5	2.1	41
2.4	5	2.2	23	2.0	12	2.2	97
2.7	8	1.7	12	.0	0	1.9	57
2.3	7	1.7	26	1.6	12	1.9	124
2.5	5	1.9	21	2.3	9	2.2	91
.0	0	2.0	9	2.1	7	2.3	28

APPENDIX II

GRADE POINT AVERAGES

INDIAN GRADUATES

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>GPA</u>	<u>No.</u> <u>(note c)</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>
Indian graduates	2.8	22	2.5	36	2.6	42	2.8	39
Males	2.8	11	2.4	15	2.5	18	2.6	16
Females	2.9	11	2.6	21	2.6	24	2.9	23
Transfer stu- dents	2.9	21	2.5	9	2.6	15	2.7	16
Jr. coll. transfers:	3.0	17	2.3	1	2.6	3	2.7	5
Age 22 or less	3.1	2	2.8	3	3.1	4	3.3	7
23 to 26	2.6	8	2.5	21	2.6	22	2.8	14
27 to 30	2.9	8	2.4	11	2.3	9	2.4	9
31 or over	3.1	4	2.8	1	2.4	6	2.7	9
ACT 9 or less	3.1	1	2.1	2	2.7	4	2.8	2
10 to 14	2.9	6	2.4	12	2.5	9	2.9	7
15 to 20	2.3	3	2.6	11	2.6	12	2.9	4
21 or more	2.7	1	2.2	1	3.0	1	3.6	1

a/College E not included in age total since it was a 2-year college.

b/Complete information was not available for every student in our sample because some records were incomplete.

c/No. is number of students included in our average.

APPENDIX II

Coll. E (note a)		Coll. F		Coll. G		Total (note b)	
<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>	<u>GPA</u>	<u>No.</u>
2.7	18	3.0	55	2.7	18	2.7	230
2.6	8	2.9	21	2.6	11	2.6	100
2.7	10	3.0	34	2.8	7	2.8	130
2.8	8	3.0	40	2.6	10	2.8	119
2.7	3	2.9	7	2.6	1	2.8	37
2.7	6	3.2	3	2.8	3	3.1	22
2.8	4	3.0	8	2.6	11	2.6	84
2.6	5	2.9	17	2.8	2	2.6	56
2.6	3	2.9	27	3.0	2	2.8	49
2.7	3	.0	0	.0	0	2.7	12
2.5	3	2.8	3	2.5	1	2.6	41
.0	0	3.0	10	2.8	5	2.7	45
.0	0	2.8	2	3.2	1	2.9	7

APPENDIX III

HOURS COMPLETED PER SEMESTER

INDIAN UNDERGRADUATES

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>Hrs.</u>	<u>No. (note c)</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>
Indian under-graduates	10	29	10	68	10	40	11	127
Freshmen	7	10	7	20	9	16	8	52
Sophomores	10	6	10	17	10	5	9	23
Juniors	11	7	11	18	10	11	12	23
Seniors	11	6	10	13	11	8	12	29
Males	11	14	10	25	10	15	10	49
Females	10	15	10	43	10	25	11	78
Transfer students	11	16	11	11	11	12	11	35
Jr. coll. transfers	7	1	11	6	11	7	11	19
Age 21 or less	11	14	10	38	11	18	11	45
22 or 23	8	3	11	12	9	13	11	30
24 or 25	9	4	10	8	11	5	10	12
26 or over	12	8	9	10	12	4	10	40
ACT 9 or less	6	1	10	14	9	9	9	13
10 to 14	11	6	10	24	10	10	11	39
15 to 20	11	7	10	17	11	5	11	27
21 or more	10	1	9	3	13	2	13	6

a/College E not included in age total since it was a 2-year college.

b/Complete information was not available for every student in our sample because some records were incomplete.

c/No. is number of students included in our average.

Coll. E (note a)		Coll. F		Coll. G		Total (note b)	
<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>
9	35	8	95	10	36	10	395
7	21	5	41	6	15	7	154
9	11	9	21	10	9	9	81
11	3	9	18	10	8	10	85
0	0	9	15	11	4	11	75
8	9	8	39	9	20	9	162
9	26	9	56	10	16	10	233
8	9	8	38	10	11	10	123
9	4	0	0	11	2	11	35
10	19	9	48	11	14	10	177
7	8	10	17	10	5	10	80
10	3	9	7	8	5	10	41
7	5	7	23	9	12	9	97
10	8	8	12	0	0	9	49
8	7	9	26	8	12	10	117
12	5	11	21	11	9	11	86
0	0	11	9	10	7	11	28

## APPENDIX III

HOURS COMPLETED PER SEMESTERINDIAN GRADUATES (note a)

<u>Category</u>	<u>Coll. A</u>		<u>Coll. B</u>		<u>Coll. C</u>		<u>Coll. D</u>	
	<u>Hrs.</u>	<u>No.</u> <u>(note c)</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>
Indian graduates	12	22	11	36	12	42	12	39
Males	12	11	12	15	12	18	11	16
Females	12	11	11	21	12	24	12	23
Transfer stu- dents	12	21	12	9	12	15	11	16
Jr. coll. transfers	12	17	11	1	10	3	10	5
Age 22 or less	13	2	13	3	14	4	13	7
23 to 26	12	8	11	21	12	22	12	14
27 to 30	13	8	11	11	12	9	11	9
31 or over	12	4	14	1	11	6	11	9
ACT 9 or less	14	1	11	2	12	4	12	2
10 to 14	13	6	10	12	13	9	13	7
15 to 20	13	3	12	11	12	12	12	4
21 or more	12	1	11	1	13	1	12	1

a/College E not included in this table since it is a 2-year college.

b/Complete information was not available for every student in our sample because some records were incomplete.

c/No. is number students included in our average.

APPENDIX III

<u>Coll. F</u>		<u>Coll. G</u>		<u>Total</u> <u>(note b)</u>	
<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>	<u>Hrs.</u>	<u>No.</u>
11	55	12	18	11	212
10	21	12	11	11	92
11	34	12	7	12	120
10	40	12	10	11	111
11	7	15	1	11	34
13	3	14	3	13	22
14	8	12	11	12	34
11	17	13	2	11	56
9	27	13	2	10	49
0	0	0	0	12	9
10	3	12	1	12	38
12	10	12	5	12	45
12	2	15	1	12	7

## APPENDIX IV

PERCENTAGE OF FRESHMEN STUDENTSNOT RETURNING TO ORIGINAL SCHOOLS (note a)

<u>Category</u>	<u>Coll. A</u>	<u>Coll. B</u>	<u>Coll. C</u>	<u>Coll. D</u>
Non-Indian students not returning	23	57	49	30
Indian students:				
No. not returning (note c)	17	39	32	34
Per. not returning	63	52	73	44
Indian student characteristics:				
Males	<u>c/11</u>	8	14	18
Females	6	31	18	16
ACT 9 or less	1	11	9	8
10 to 14	8	17	14	9
15 to 20	3	4	3	13
21 or more	0	0	1	2

a/ Percentages were determined by identifying those Indian freshman who began college at one of the seven institutions in the fall of 1974 but did not return to the same school in the fall 1975. Some students could have enrolled in other schools. Non-Indian percentages were obtained from school officials.

b/ Complete information was not available for every student in our sample because some records were incomplete.

c/ This is the number (not percentage) of students included in our average.

APPENDIX IV

<u>Coll. E</u>	<u>Coll. F</u>	<u>Coll. G</u>	<u>Total</u> <u>(note b)</u>
43	44	50	39
6	31	32	191
60	44	70	54
1	11	18	81
5	20	14	110
2	5	8	44
0	12	15	75
0	9	8	40
0	2	1	6

(104030)