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Leigh D. Jeanotte

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A STUDY OF THE CONTRIBUTING FACTORS RELATING TO WHY AMERICAN
INDIAN STUDENTS DROP OUT OF OR GRADUATE FROM EDUCATIONAL
PROGRAMS AT THE UNIVERSITY OF NORTH DAKOTA

by
Leigh D. Jeanotte

Bachelor of Science, University of North Dakota, 1972
Master of Education, University of North Dakota, 1974

A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Doctor of Education

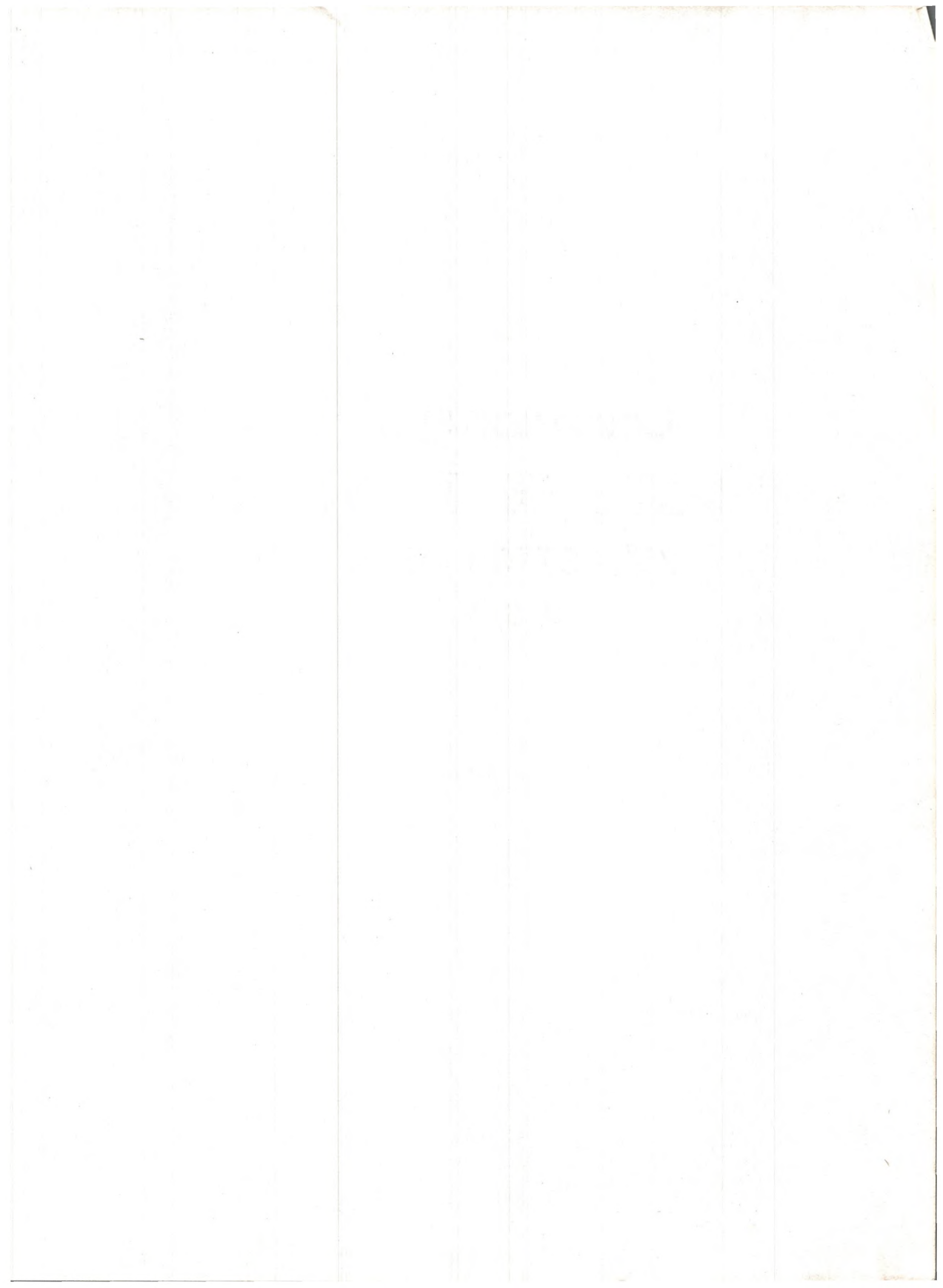
Grand Forks, North Dakota

May
1981

Don,

Thank you for the
concern, direction, and guidance
during my doctoral study. It
was much appreciated and will
never be forgotten.

Seigh



This Dissertation submitted by Leigh D. Jeanotte in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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This Dissertation meets the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

A. William Johnson
Dean of the Graduate School

Permission

A Study of the Contributing Factors Relating to Why American
Indian Students Drop Out of or Graduate from Educational
Title Programs at the University of North Dakota
Department Center for Teaching and Learning
Degree Doctor of Education

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Signature Leigh D. Jeslotte
Date April 23, 1981

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ABSTRACT

Purpose

Because the numbers of American Indians attending higher education institutions are increasing every year, there is an apparent need to better understand some of the factors which have an impact on continuing or discontinuing their college educations. As a result, this study was undertaken for the purpose of examining the contributing factors relating to why American Indian students drop out of or graduate from educational programs at the University of North Dakota, Grand Forks, North Dakota.

Procedure

A questionnaire was constructed and administered to undergraduate American Indian students enrolled at the University of North Dakota between 1970 and 1979 who received Bureau of Indian Affairs financial assistance. The final total sample consisted of 116 students, 71 dropouts and 45 graduates, from the four North Dakota Indian reservations. Two other forms were developed and used to gather data from the University of North Dakota Registrar's office and the Bureau of Indian Affairs Agency Higher Education offices. The data obtained from the three instruments were treated using the chi square and *t* test techniques to determine significance between dropouts and graduates based on biographical, pre-college, and college factors. The .05 level of significance, or less, was considered sufficient to reject hypothesis of no difference.

Results

Those biographical factors which were found to be significant included age, marital status, and number of dependents.

Those pre-college factors identified as being significant included high school grade point average and American College Testing scores.

Those college factors identified as having significance included college cumulative grade point average, semester hour completion rate, number of semesters enrolled, relevancy of college coursework, career goals, study methods, portions of location of study, time spent studying in various locations, management of financial aids, change in financial aids disbursement, recommendations for financial aids disbursement, type of assistance given to family members, cultural involvement, perceptions of being Indian, students' perceptions of instructor's feelings about ethnic heritage, social activities involvement, perceptions of how social activity affected their educational experience, instructor assistance, and campus and off-campus supportive services.

Conclusions

The major conclusions are based on the statistical treatment of the data gathered for this study:

1. Age at which American Indian students enter college is a factor in their persistence. Older students who were probably more mature were more likely to graduate.

2. High school grade point average and ACT scores were relatively stable predictors of college persistence.

3. Clearly identified career goals which apparently led to the choice of more relevant coursework were factors in American Indian students' persistence in college.

4. The ability to select appropriate methods and locations for study as well as percentage of time spent in studying were factors leading to the success of American Indian students in college.

5. The effective management of financial aids was a skill which contributed to college persistence.

6. A positive self-concept of one's American Indian heritage influenced college success.

7. The use of and satisfaction with campus supportive services were factors which contributed to success in college.

CHAPTER I

INTRODUCTION

Background of the Study

History reveals that American Indian students began to attend college as early as the colonial period. Adams (1971) pointed out that at the end of the seventeenth century American Indian students were admitted to the College of William and Mary, and an American Indian College was developed in connection with Harvard College in 1654. In 1769, Dartmouth College was established for the sole purpose of providing higher education for American Indians.

An early effort to provide higher education for American Indians was provided by clergy. The objective was to systematically provide American Indians with an education based upon "christianizing" and "civilizing." The colleges' of this time avowed intentions were to cause the American Indian to become assimilated into the mainstream society and to abandon cultural differences. The adopted plan was to remold the American Indian's conception of life and make them like the white people. This plan, along with many others like it, overlooked the importance of culture and as a result failed miserably. It was best said in Touch The Earth by McLuhan (1972) in the response of the American Indians of the Six Nations at a treaty negotiation when invited to send American Indian boys to William and Mary College:

WE KNOW THAT YOU HIGHLY ESTEEM THE KIND OF LEARNING taught in those Colleges, and that the Maintenance of our Young Men, while with you, would be very expensive to you. We are convinced, that you mean to do us Good by your Proposal; and we thank you heartily. But you, who are wise must know that different Nations have different Conceptions of things and you will therefore not take it amiss, if our Ideas of this kind of Education happen not to be the same as yours. We have had some Experience of it. Several of our young People were formerly brought up at the Colleges of the Northern Provinces: they were instructed in all your Sciences; but, when they came back to us, they were bad Runners, ignorant of every means of living in the woods, . . . neither fit for Hunters, Warriors, nor Counselors, they were totally good for nothing.

We are, however, not the less oblig'd by your kind Offer, tho' we decline accepting it; and, to show our grateful Sense of it, if the Gentlemen of Virginia will send us a Dozen of their Sons, we will take Care of their Education, instruct them in all we know, and make Men of them (p. 57).

As colonial settlers began their westward movement, American Indian tribes were forced from their lands. What eventually followed was the confinement to reservations. Often, treaties setting aside land to be used as reservations included provisions for education. The educational process in the early years of reservation life remained in the hands of the clergy. This forced the American Indian to adapt to a new way of life, and with it came numerous adjustment problems.

In the late nineteenth century, the Bureau of Indian Affairs became involved in American Indian education. This occurred when the United States government first acknowledged its responsibility for educating the American Indian. Thus, the education of American Indian children, unlike other groups, was the legal responsibility of the federal government and, as such, reflected federal attitudes and policies.

Szasz (1977) mentioned that studies which took place in 1930 suggested that American Indian education was experiencing success. Approximately 90 percent of all American Indian children were enrolled in public schools, Bureau of Indian Affairs operated schools, mission

schools, and private schools. However, these data were very misleading. Even though many children started school, a significant number dropped out.

The concern for this dropout problem, among others, brought about the 1928 Meriam Report. The report investigated and provided documentation of the poor living conditions of American Indians and investigated the Bureau of Indian Affairs. It revealed poor education and other serious problem areas. The report was instrumental in influencing the Congress to pass the Indian Reorganization Act of 1934, which called for more involvement of American Indians in decision making about their destiny. As a result of this act, Bureau of Indian Affairs educators were excited, pleased, and optimistic about the movement toward reform. Congress appeared to have a positive disposition toward solving the many problems American Indians faced. Many people believed the future looked good for American Indian people.

The 1950s proved devastating for the American Indians. As reported by Brown and Stent (1977), during this period the positive attitude of Congress changed, resulting in a curtailment of Bureau of Indian Affairs activities. The policy of "termination" began which stressed the withdrawal and end of government support and assistance to Indian people and tribes. This attitudinal change severely retarded educational developments.

In the 1960s, American Indian people again witnessed the return of Bureau of Indian Affairs support for education. It appears that the major reason for the return of support during this period was due to citizen awareness of civil and human rights. As a result, the situation of the American Indian was again reviewed. It became quite apparent

that if American Indian educational programs were to succeed, American Indian people had to have a voice in the decision making and management of these programs. The Bureau of Indian Affairs changed its focus to providing funds rather than directing programs. Thus, the concept of Indian self-determination began to become a reality.

From 1970 to the present, American Indians have witnessed the passage of legislation which positively affects American Indian education. Some of the legislation passed included the Indian Education Act, the Indian Self-Determination and Education Assistance Act, the American Indian Policy Review Commission, and the Community College Bill. It appears that current federal policy toward American Indian people is headed in a promising direction. Some of the crucial educational concerns identified in 1928 are finally being addressed.

A continuing concern, however, is whether increased funds, cultural awareness, and various programs can improve American Indian education. If American Indian students are having difficulty completing their educational programs and, particularly, if American Indian students are not completing advanced educational programs in vocational and professional schools, then the situation has not improved significantly. The dropout rates for American Indians in high schools, vocational schools, and colleges and universities are still quite high. Szasz (1977) identified high dropout rates as one of the most persistent problems in American Indian education. The problem of American Indian students dropping out of school is an enormous concern today. A United States General Accounting Office (1977) report titled The Bureau of Indian Affairs Should Do More to Help Educate Indian Students indicated the dropout rate for American Indian students, grades

eight to twelve, as shown in two separate studies of public, federal, and private schools in the southwest and northwest, was about 48 percent and 39 percent, respectively.

Another Bureau of Indian Affairs-sponsored program which experienced a high dropout rate was the Adult Vocational Training Program, developed in conjunction with the Indian Relocation Program, to provide training for employment off the reservations. The policy of relocation was once strongly endorsed by the Bureau of Indian Affairs but is no longer a direction of the Bureau of Indian Affairs because it failed to succeed. However, adult vocational training is still in operation to train and support American Indians for work on and off reservations. In 1973, 7,609 individuals enrolled in various Bureau of Indian Affairs-sponsored vocational training activities and 2,512 completed this training (Task Force Five 1976). A dropout rate of nearly 67 percent was reported for this year.

In higher education, the number of American Indian students has grown rapidly. The major reason for this growth was the result of the 1934 Indian Reorganization Act which established a Higher Education Grant Aid Program under the direction of the Bureau of Indian Affairs. The program's major objectives were to allow as many eligible American Indians as possible the opportunity to pursue higher education, to develop leadership, and to increase the numbers in professional positions. Based on a report by the United States General Accounting Office (1977), seventy-one American Indian students participated during the first year of the program in 1934; by 1969 it had grown to serve approximately thirty-two hundred students; in 1970, 4,271 students were served; and in 1976, the report showed that student participation had

risen to sixteen thousand students. According to Chavers (1980), the Bureau of Indian Affairs, in 1980, is serving 20,400 students.

Another reason for the increase in college or higher education enrollment was the new funding made available to all students, which American Indian students were also eligible to receive. Financial aid came from many areas: private groups, colleges and universities, tribes, and the state and federal governments. Some illustrative funding sources include College Work Study Program, Basic Educational Opportunity Grants, State Educational Opportunity Grants, scholarships, various loan programs, and other training programs.

However, even though there has been a large increase in the number of American Indian students attending institutions of higher education, few successfully have completed four-year programs. Chavers (1980) reported the national dropout rate at 85 percent for American Indian college students. Based on this high attrition rate, he believes there is a need for an investigation to determine what constitutes a successful college program.

With these statistical data in mind, there seems more than adequate justification to question the reason or reasons for the high attrition rate among American Indian students. While much attention has focused on attrition statistics, little has been done to investigate why students drop out or persist in pursuing a college education. At the same time, there appears to be much speculation regarding the reasons why American Indian students have difficulty in college. Some of the speculation includes poor academic preparation, culture shock, limited college or university services, lack of tutorial or remedial assistance, language barriers, lack of role models, lack of American

Indian professional personnel, inadequate financial aids, poor budgeting and managing of financial aids, absence of American Indian-related materials in the curriculum, limited parental motivation, lack of career goals, and lack of Indian Studies programs.

During the past few years, the American Indian population at the University of North Dakota has grown considerably. As a result of this growth, the University of North Dakota has tried to recognize and respond to some of the problems mentioned in the preceding paragraph. Some of the accomplishments include furnishing the American Indian students with a cultural center; developing an Indian Studies program; hiring American Indian professional personnel; promoting and obtaining several federal grants dealing with American Indian students (Teacher Corps, Future Indian Teachers, Indians Developing as Educational Administration Leaders, Library Training Institute, Student Opportunity Programs, Upward Bound, Indians into Medicine, and others); organizing the University of North Dakota Indian Association; providing counseling, advisory, and learning services; and several others. Even so, the University of North Dakota has experienced the problem of having significant numbers of American Indian students drop out. Because the problem is so enduring, there is a need to investigate some of the factors related to attrition and persistence of American Indian students at the University of North Dakota.

Need for the Study

Even though the number of American Indians attending higher education institutions is increasing every year and may continue to do so for some time, colleges and universities, with few exceptions, seem to know little about how to respond effectively to their educational

problems. There is an apparent need to better understand the factors which cause American Indian students to continue or discontinue their college education. Because the University of North Dakota has a sizable American Indian enrollment, it would be beneficial to explore retention and attrition thoroughly. This information should be helpful to college and university personnel, minority educators, elementary and secondary school personnel, state and federal agencies, and tribal groups involved with the education of American Indian students.

Other auxiliary needs which form the basis for this study include: (1) the perceived need for the development of more American Indian professionals and scholars in all areas of academic study, (2) the perceived need for the state of North Dakota to better serve its largest racial minority, (3) the perceived need to attract and maintain a culturally diverse student population as an enhancement to learning among all University of North Dakota students, and (4) the perceived need for better cultural understanding.

Purpose of the Study

The purpose of this study was to examine attrition and retention as it relates to American Indian students in educational programs at the University of North Dakota, Grand Forks, North Dakota. Data were gathered from the Registrar records at the University of North Dakota, the Bureau of Indian Affairs Higher Education records, and from a self-supporting instrument on dropouts and graduates. A comparison of the descriptive data from two groups, those who drop out and those who graduate, was conducted. After the data analysis, recommendations affecting the education of American Indian students at the University of North Dakota were developed for consideration by appropriate

policymakers.

Delimitations

The study was delimited to:

1. American Indian students who were enrolled in educational programs at the University of North Dakota
2. American Indian students from North Dakota
3. American Indian students who received Bureau of Indian Affairs Higher Education grant aid
4. American Indian students who were not funded by special programs
5. American Indian students who enrolled in educational programs at the undergraduate level
6. American Indian students who were currently living in North Dakota
7. American Indian students who had dropped out or graduated from the University of North Dakota (1970-1979) constituting the sample population. A maximum of twenty in each category was to be selected from each of the four reservations in North Dakota if there was that number available. If fewer than twenty for any category were identifiable on any reservation, the total number in the group would constitute the sample
8. The following sources of information: University of North Dakota Chester Fritz Library, University of North Dakota Teacher Corps Library, Educational Research Information Center, writer's personal library, government documents, Bureau of Indian Affairs records and publications, and University of North Dakota records

9. The following biographical factors were studied: sex, age, marital status, number of dependents, reservation where enrolled, American Indian blood quantum, family structure, parental income, parental occupations, and parental educational levels

10. The following pre-college factors were studied: high school location, type of high school attended, size of high school graduating class, pre-college educational graduation status, high school grade point average, American College Testing (ACT) scores, high school preparation, high school career pathway, and use of high school guidance services

11. The following college factors were studied: class level, college major, college cumulative grade point average, college semester hour completion rate, number of semesters enrolled at the University of North Dakota, relevance of college coursework, career goals, study habits, student financial aids, adjustment to life at the University of North Dakota, cultural conflict, encouragement for college continuation, family responsibilities, American Indian cultural involvement, perceptions about being American Indian, participation in social activities, use of American Indian counselors and staff, University of North Dakota instructor assistance, enrollment in Indian Studies courses, use of campus supportive services, and use of off-campus supportive services

Assumptions

The following major assumptions assist the reader in interpreting the direction of the study:

1. The data obtained from the University of North Dakota, Bureau of Indian Affairs, and other offices were accurate

2. The instrument(s) used to assess the contributing factors relating to why American Indian students drop out of or graduate from educational programs at the University of North Dakota did yield valid, reliable, and appropriate data

3. The instrument(s) used to assess the contributing factors relating to why American Indian students drop out of or graduate from educational programs at the University of North Dakota were appropriately administered

4. The respondents to the instrument(s) did provide accurate, honest, and forthright responses

5. An assessment of the contributing factors relating to why American Indian students drop out of or graduate from educational programs at the University of North Dakota was necessary before recommendations could be made to better meet their needs

Definition of Terms

The following terms and definitions were pertinent in assisting the reader to better understand this study:

American Indian. Individuals who were of full or of mixed American Indian blood. Mixed blood American Indians were those who were enrolled members of a tribe recognized by the federal government and/or those who have one-eighth degree of American Indian blood. This also includes Eskimo or Aleut or other Alaskan natives. Other acceptable terms for American Indian were Indian and Native American.

American Indian reservation. Designated land areas where American Indians reside as determined by treaty or executive action of the United States government. The four American Indian reservations in North Dakota were Fort Berthold, Fort Totten, Standing Rock, and

Turtle Mountain.

Attrition. The act of leaving or dropping out of college.

Bureau of Indian Affairs (BIA). A branch of the United States Department of the Interior responsible for providing services to American Indian people.

Dropout. A person who leaves or drops out of college before graduation.

Drop out. The act of leaving college before graduation.

Graduate. A person who completed college and holds an academic four-year degree or diploma.

Graduate. The act or process of graduating.

Persistence. The act of continuing in college.

Persister. A person who persists or continues in college.

Retention. The state of being retained in college.

Tribal affiliation. The tribe in which an American Indian was an enrolled member. Some common North Dakota tribal affiliations were Chippewa, Sioux, Mandan, Arikara, and Hidatsa.

Research Questions

The proposed study attempted to answer the following questions:

1. What were the contributing factors relating to why American Indian students drop out of educational programs at the University of North Dakota?
2. What were the contributing factors relating to why American Indian students graduate from educational programs at the University of North Dakota?

Null Hypotheses

The following null hypotheses were identified for this study:

Biographical Factors

Null hypothesis 1. There will be no significant difference on the basis of sex between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 2. There will be no significant difference on the basis of age between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 3. There will be no significant difference on the basis of marital status between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 4. There will be no significant difference on the basis of number of dependents between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 5. There will be no significant difference on the basis of reservation where enrolled between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 6. There will be no significant difference on the basis of American Indian blood quantum between American Indian students who drop out of and American Indian students who graduate

from educational programs at the University of North Dakota.

Null hypothesis 7. There will be no significant difference on the basis of family structure between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 8. There will be no significant difference on the basis of parental income between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 9. There will be no significant difference on the basis of parental occupations between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 10. There will be no significant difference on the basis of parental educational levels between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Pre-College Factors

Null hypothesis 1. There will be no significant difference on the basis of high school location between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 2. There will be no significant difference on the basis of type of high school attended between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 3. There will be no significant difference on the basis of size of high school graduating class between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 4. There will be no significant difference on the basis of pre-college educational graduation status between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 5. There will be no significant difference on the basis of high school grade point average between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 6. There will be no significant difference on the basis of American College Testing (ACT) scores between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 7. There will be no significant difference on the basis of high school preparation between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 8. There will be no significant difference on the basis of high school career pathway between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 9. There will be no significant difference on the basis of use of high school guidance services between American

Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

College Factors

Null hypothesis 1. There will be no significant difference on the basis of class level between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 2. There will be no significant difference on the basis of college major between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 3. There will be no significant difference on the basis of college cumulative grade point average between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 4. There will be no significant difference on the basis of college semester hour completion rate between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 5. There will be no significant difference on the basis of number of semesters enrolled at the University of North Dakota between American Indian students who drop out of and American Indian students who graduate from educational programs.

Null hypothesis 6. There will be no significant difference on the basis of relevance of college coursework between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 7. There will be no significant difference on the basis of career goals between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 8. There will be no significant difference on the basis of study habits between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 9. There will be no significant difference on the basis of student financial aids between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 10. There will be no significant difference on the basis of adjustment to life at the University of North Dakota between American Indian students who drop out of and American Indian students who graduate from educational programs.

Null hypothesis 11. There will be no significant difference on the basis of cultural conflict between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 12. There will be no significant difference on the basis of encouragement for college continuation between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 13. There will be no significant difference on the basis of family responsibilities between American Indian

students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 14. There will be no significant difference on the basis of American Indian cultural involvement between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 15. There will be no significant difference on the basis of being American Indian between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 16. There will be no significant difference on the basis of participation in social activities between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 17. There will be no significant difference on the basis of use of American Indian counselors and staff between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 18. There will be no significant difference on the basis of University of North Dakota instructor assistance between American Indian students who drop out of and American Indian students who graduate from educational programs.

Null hypothesis 19. There will be no significant difference on the basis of enrollment in Indian Studies courses between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 20. There will be no significant difference on the basis of use of campus supportive services between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

Null hypothesis 21. There will be no significant difference on the basis of use of off-campus supportive services between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter provides a brief historical overview of Indian education, a history of the involvement of the American Indian in higher education, and a review of related literature on attrition and retention of American Indians at the college level. Special attention was given to the factors that affect students and cause them to continue or discontinue their college involvement.

History of Indian Education

In order that the reader may obtain a broader conceptual understanding of the problems faced by American Indian students in higher education, it seemed necessary to provide a historic perspective, i.e., what were the antecedents to the current situation. In brief, the history of American Indian education falls into several general periods: the Indian Period, the Mission Period, the Treaty and Reservation Period, the Meriam Report and New Deal Period, the Termination Period, and the Self-Determination Period. The Indian Period was the era before the coming of the white men; the Mission Period was the time when various religious groups attempted to civilize and christianize the American Indian; the Treaty and Reservation Period was a time of trying to change American Indians from

hunters to farmers and the obtaining of their land based on treaties; the Allotment Period was a time of dissolving American Indian treaty lands and placing Indian children in boarding schools; the Meriam Report and New Deal Period was viewed as being a creative, innovative, and productive period in Indian affairs; the Termination Period called for the end of federal services and assistance to Indian people; and the Self-Determination Period allowed Indian people to play a decisive role in planning their own destiny.

The Indian Period - Before the Coming of
White Men Until 1492

The Indian Period occurred prior to the arrival of white men on the North American continent. During this time, American Indians evolved ways of educating their children that were suitable for their needs. The Task Force Five (1976) described this educational process:

The educational process was active and not passive. The boys and girls learned by doing. The process was not highly structured and was dependent upon parents, relatives, and tribal elders for implementation. The curriculum could be described as informal but relevant. The life style of Indians was tuned to the natural forces surrounding them and the overall goal of education was to preserve and maintain their way of life. Indian children were expected to grow up as their parents were, to perpetuate tribal customs, values, traditions, and ethics (p. 5).

Thus, it seems clear that children were inducted into the tribe through informal educational practices. The process was carried out by word-of-mouth transmission because American Indians did not have a written language (Pettitt 1946, Driver 1961).

There were many tribal groups on the North American continent when the white men arrived. These tribal groups all generally followed this same informal pattern of educating the young even though

there were other striking differences among the various cultures. This similarity in the educational processes used may have been a result of several forces which seemed to be commonplace among the tribes.

The Mission Period - 1500 to 1775

Formal education for the American Indian began with the coming of the white men. The major European powers set out to the New World in their quest to colonize, spread christianity, and locate material wealth. Several religious orders received government support to assist them in their missionary work of converting the American Indian. The National Advisory Council on Indian Education (1974) explained the missionary involvement:

With the Jesuits, it was to acquaint the Indian with the French manner, French customs, the French language. With the Protestants, it was to Anglicize the natives and, in the process, prepare them for a "civilized" life. The Franciscans, working in the Southwest, also sought to bring Indians into the mainstream, but they were less interested in making Europeans of the Indians than were other missionaries. Regardless of the religious group, they all had the same goals: civilize and Christianize the Indian (p. 106).

Bailyn (1960) discussed this missionary fervor toward American Indians in this manner:

. . . but it had left an eradicable mark on American life. It had introduced the problem of group relations in a society of divergent cultures, and with it a form of action that gave a new dimension to the social role of education. For self-conscious, deliberate, aggressive use of education, first seen in an improvised but confident missionary campaign, spread throughout an increasingly heterogeneous society and came to be accepted as normal form of education effort (p. 39).

The missionaries were not only scholars; they were able organizers taking great care to win the Indian confidence (Adams 1971). Their first step was to learn the native dialect to set up channels

communication. The actual mission or church was built only when a number of the Indians approved. Plans regarding how to best educate and christianize the American Indian were then formulated. This educational process was usually accomplished by peaceful means; however, the missionaries were willing to use military force to influence their teachings when necessary. Some of the teachings were mentioned in Indian Education: Involvement of Federal, State, and Tribal Governments by Education Commission of the States (1980):

During the colonial period, various approaches were used by the Europeans to educate the natives on this continent. The earliest missionaries were Roman Catholic priests, most of them Jesuits. They taught Christianity and the French culture, in particular. Traditional academic subjects as well as singing, agriculture, carpentry and handicrafts were emphasized. The Franciscans, mostly Spanish in origin, came into the South with Coronado and influenced the people of Arizona, California, New Mexico, and Texas. They taught Spanish, agriculture, blacksmithing, carpentry, masonry, spinning and weaving, but not the academic subjects (p. 6).

Even though American Indians were subjected to approximately two and a half centuries of missionary involvement, very little was changed. American Indian political and religious concepts continued without major alteration. The lack of success in achieving this goal of "civilizing" the American Indian was described by the National Advisory Council on Indian Education (1974):

For though the Indian students often left school with an understanding of the principles of Christianity and a solid grasp of reading and writing skills, they still shied away from the white man's way of life. One observer of the times noted, with obvious frustration, that after the Indians returned home, "instead of civilizing and converting the rest, they have immediately relapt [sic] into infidelity and barbarism themselves" (pp. 106-107).

Layman (1942) also contended that few American Indians were converted. He described the Jesuit movement as nearly a complete failure. Nash (1964) concluded that in spite of claims that the

Powhatan tribes were christianized, the record is plain that little was attempted and virtually nothing was achieved in the early years.

The Treaty and Reservation Period -
1775 to 1892

As large numbers of Europeans immigrated to North America, the colonies grew into a nation and the balance of power shifted from the Indians to the settlers. The Continental Congress on 12 July 1775 took action to declare total jurisdiction over American Indian tribes as explained by the United States Bureau of Indian Affairs (1952) in the document titled "The American Indian: A History of the Administration of Indian Affairs":

. . . Congress assembled shall also have the sole and exclusive right and power of . . . regulating the trade and managing all affairs with the Indians not members of any of the states (p. 4).

According to the United States Bureau of Indian Affairs (1960) document titled American Indians and the Federal Government, the first treaty between the United States and the Delaware Tribe was signed at Fort Pitt in 1778. By the time the last treaty was signed, more than four hundred treaties had been negotiated and nearly a billion acres of land had been ceded to the United States. In return, the government had, in most cases, agreed to provide various public services such as education, medical care, and technical and agricultural training.

In the 1800s, the Trade and Intercourse Act of 1802 allocated \$15,000 for the purpose of civilizing the Indians and the Civilization Fund Act, passed in 1819, provided an annual fund to convert American Indians from hunters to farmers (Jackson and Galli 1977). When the Indian Service was transferred to the Department of the Interior in 1849, it was charged with the responsibility for administering Indian

education.

As settlers moved farther and farther westward, several tribes resisted the movement onto their homeland and numerous battles and clashes ensued. Eventually, however, the United States government succeeded in its conquest and gained total control of American Indians. Fuchs and Havighurst (1973) offered the following observations:

By 1871 the Cherokee and other eastern tribes had been relocated across the Mississippi, countless battles had been fought, the Indian population severely depleted. Indians increasingly became easy targets for hostility and abuse as their territories gradually were touched by westward expansion of settlers, mining prospectors, and ranchers (p. 4).

Fuchs and Havighurst (1973) went on to explain:

In 1871, congressional action prohibited further treaties with Indian tribes. Indians were now confined to reservations. They were to be fed, housed, clothed, and protected until such time as Congress considered they were able to care for themselves; and a state of enforced welfare dependency ensued. The government reports in the years following called for humanizing, Christianizing, and educating the Indians (p. 5).

The relocation and confinement to reservations caused Indian tribes to become increasingly dependent on the federal government. Because of the many concerns by the Indian agents and churches, schools were geared to change the religious and cultural beliefs of Indian people. Indian children were again targeted for the process of civilization and settlement.

A United States Bureau of Indian Affairs (1960) document titled American Indians and the Federal Government reported that the Indian Service was developed in 1824. It was assigned to the War Department because of its military involvement in controlling, removing, and relocating American Indians. In 1849, the Indian Service was transferred to the Department of the Interior, a newly formed branch of government. The transfer was necessary primarily because of the

involvement of the Indian Service with Indian lands. As a result of the transfer, the Department of the Interior was charged with the responsibility for Indian education. The title "Indian Service" was later changed to "Bureau of Indian Affairs."

The activities of the Bureau of Indian Affairs increasingly expanded as Congress passed various laws for the economic, social, cultural, political, and educational development of American Indian tribes. From this time on, Congress was a dominant force and increased its involvement in Indian affairs. This involvement was based upon the guardian and ward relationship.

The General Allotment Act of 1887 was also referred to as the Dawes Severalty Act, or simply as the Dawes Act, after the congressman who sponsored it. Jackson and Galli (1977) mentioned that the Dawes Act came about from

. . . the outcome of serious thinking about how to get Indians to apply their wisdom, individual initiative and self-responsibility to education, farming, stockraising, homemaking and other endeavors that characterized the settlers. Up to that time, efforts to civilize, or Americanize, them had pretty much failed, so they were not attaining the fullness and abundance offered by their new way of life (p. 88).

The Dawes Act allowed Indian reservations to be surveyed for division into small tracts and assigned ownership by individual tribal members.

Allen (1968) stated:

This act provided that each Indian be permitted to select a tract of land to which he would receive trust title. Lands which were unallotted were declared surplus and opened to non-Indian occupancy.

The stated purpose of the Allotment Act was to encourage Indians to use the land, but in most cases, the allotments were too small to serve as an adequate base for an economic unit. The abortive attempt at "individualization" for the Indian fell far short of achieving the purpose for which it was conceived (pp. 22-23).

The General Allotment Act was significant to Indian education because the proceeds obtained from the sale of unallotted lands were used to finance the education of Indian children. This education entailed the placing of Indian children in federal boarding schools, a new concept designed to change the Indian social structure by segregating the children from their tribal environment and training them to function in the dominant society. Tribal history, customs and native language were not included in the curricula. This system of education had little impact on the reservations as most Indian tribes did not accept this form of "forced education." The Indian children who were educated by this system usually did so at the cost of dissolving all ties with their tribe.

In 1890, Congress agreed to pay tuition in order to allow Indian children to attend public schools (Fey and McNickle 1959). This put more responsibility for Indian education in the hands of the states. As a result, all funding to religious groups for educating Indian people stopped.

The Meriam Report-New Deal Period -
1924 to 1944

The Meriam Report-New Deal Period began with an increase in national interest in the American Indian. The Citizenship Act of 1924 was passed by Congress granting citizenship to all Indians in the United States (Forbes 1964). Waddell and Watson (1971) explained:

. . . the commissioning in 1926 of a national study of Indian Affairs; this responsibility was assumed under contract by the Institute for Government Research which in turn, assigned this task to Lewis Meriam and a group of his associates. Two years later, Meriam and his colleagues completed the study called The Problem of Indian Administration, without question the most comprehensive and objective survey of the American Indian situation

ever made, covering a whole range of subjects related to federal Indian policies and recommending significant changes (pp. 41-42).

The Meriam (1928) report included several major findings relating to a variety of areas. The poor quality of education was recognized, as was the fact that Indians had little involvement in managing their own affairs. Meriam (1928) reported several conclusions:

1. The boarding school system was deemed a failure because of inadequate facilities and methods of operation
2. The taking and forcing Indian children from their homes and putting them in off-reservation boarding schools was condemned
3. The need for a revised curriculum which would consider the cultural background of the student was expressed
4. The schools' failure to adapt to the language of the children was pointed out
5. The need for greater Indian participation in determining the focus and direction of the schools was pointed out
6. The public school curriculum needed to be changed to meet the student needs
7. The need to strengthen the Indian family and social structure was suggested
8. The cruelties toward Indian students by staff members in schools was condemned
9. The need for raising the school personnel standards through inservice training was also indicated

These disclosures had a substantial impact and led to one of the most innovative periods in Indian affairs.

The Johnson-O'Malley Act, passed in 1934, authorized federal assistance to public schools educating American Indian students (Sorkin 1971). It provided for federal contracts with states to improve Indian education and welfare. Specified amounts of money were paid to states, which were held responsible for educating American Indian students. In this contract, the government voiced acceptable standards.

The Indian Reorganization Act of 1934 gave new direction to Indian affairs. Brightman (1971) stated:

The improvement came under the New Deal with John Collier as Commissioner of Indian Affairs, and the passage of the Wheeler-Howard Act, the Indian Reorganization Act of 1934. This Act has been called the Indian Bill of Rights, and for good reason. It stopped, and to some extent reserved, the operation of the Allotment Act. It authorized purchase of new holdings, confirmed Indian self-government, and provided for establishment of tribal businesses as federal corporations. It encouraged the hiring of Indians for the Bureau of Indian Affairs by exempting them from the civil service laws. When the Act was passed, 75 per cent [sic] of the Indian children attending school were in boarding schools; within ten years 67 per cent [sic] were attending day schools on the reservations. Sixteen boarding schools, including Carlisle, had been closed, and 84 day schools had been opened (p. 17).

Collier also began arranging for any necessary use of native dialects, developing and conserving arts and crafts, conserving authentic Indian music, teaching adult basic education, training Indian teachers, teaching Indian history and culture, and developing inservice training programs for school staffs.

When the United States entered World War II, Indian programs were cut in favor of the huge military budget. The positive attitude of Congress toward Indians also changed drastically to a negative one. As a result, Collier's innovations in Indian education came to an end. Waddell and Watson (1971) stated:

Between 1934 and 1941, the Collier Administration introduced many changes into the pattern of federal-Indian relationships. Yet, with the limitations in funds resulting from the Depression, these changes were not fully implemented, and before some of the most important changes could achieve permanent effect, the outbreak of World War II interfered (p. 44).

The Termination Period - 1944 to 1960

After World War II, Congress began criticizing Indian policy and focused on termination. Legislators believed that too much emphasis was being placed on the day schools and felt that more benefit would come from educating Indian children in off-reservation boarding schools. The National Advisory Council on Indian Education (1974) mentioned:

In 1944 a House Select Committee on Indian Affairs offered recommendations on achieving "the final solution of the Indian problem." In almost every instance, the committee called for a return of the pre-Meriam policies. It criticized reservation day schools for adapting education to the Indian and to his reservation way of life. It said "real progress" would be made only when Indian children of elementary school age were once again taken from their homes and placed in off-reservation boarding schools. "The goal of Indian education," according to the committee, "should be to make the Indian child a better American rather than to equip him simply to be a better Indian" (pp. 109-110).

The government's enthusiasm to terminate services to the Indians reached its peak in the early 1950s. Brightman (1971) cited:

The legislative basis for termination was found in Public Law 280, which transferred control over "law and order" on the reservations from the federal government to the states, and House Concurrent Resolution 108 of 1953, which called for the end of federal social services to Indians . . . during which large numbers of Indian tribes, groups, and communities were legislatively or administratively declared to exist no longer (p. 17).

As a result of this congressional action, the Bureau of Indian Affairs terminated operation of its federal schools in several states. The Impact Aid programs assisted in supplying the necessary funds to public school districts for Indian students. A report developed by the United States Bureau of Indian Affairs (1965) titled Statistics

Concerning Indian Education explained that Public Law 874 was geared to provide general operating expenses for students living on tax-exempt lands. Under Public Law 815, construction funds were provided when local districts were unable to finance the needed building space alone (Coffer 1979). These bills were not geared specifically for the American Indian; they were developed originally in response to the growth of military and other federal installation.

The Johnson-O'Malley program continued funding public schools with Indian enrollment on or near reservations. Adult vocational training was again stressed with off-reservation placement. The Bureau of Indian Affairs was decentralized by establishing area offices in major cities throughout the United States. Administration of various programs was passed from Washington, D.C., to the area offices and then to the agencies. School officials were made responsible to reservation superintendents.

The newly formed National Congress of American Indians, which was developed in 1944, played an active role in persuading Congress to change its views toward American Indians (Szasz 1977). Mandatory termination ended in 1958 with Congress announcing that no tribe would be terminated without its consent. However, the termination policy had reduced many tribes to poverty levels and it created severe educational concerns for American Indians.

The Self-Determination Period -
1960 to 1981

During the self-determination period, American Indians throughout the United States began to realize the need to assume responsibility for managing their own affairs. Since the coming of the white

men, Indians had not had this opportunity and had witnessed much failure, particularly in the area of education. As its name implies, the new philosophy allowed Indians to determine their own destiny.

In the early 1960s, Congress began to take positive action regarding Indian people. The Task Force Five (1976) mentioned three important studies: Coleman et al. (1966) developed a report titled Equality of Educational Opportunity; the United States Congress (1969) report titled Indian Education: A National Tragedy-A National Challenge; and the National Study of American Indian Education: the Education of Indian Children and Youth developed by Havighurst (1970). These reports investigated a variety of areas in an attempt to determine the status of Indian education. Although the Kennedy Report revealed some shocking problems and recommended numerous changes, it aroused controversy when Coleman and Havighurst repudiated parts of it and proved that some of the findings were in error. However, the Kennedy Report did pave the way for certain changes to occur.

The self-determination period produced several other pertinent studies and reports affecting Indian education. Josephy (1969) in his study researched and recommended changes in the Bureau of Indian Affairs structure. A report titled An Even Chance investigated federal aid for Indian children in public schools (National Association for the Advancement of Colored People Legal Defense and Educational Fund, Inc. 1971). The First Annual Report to the Congress of the United States from the National Advisory Council on Indian Education (1974) stressed the need to improve Indian program management. The Report on Indian Education to the American Indian Policy Review Commission by the Task Force Five (1976) reviewed Indian educational policies. A

report by the United States Comptroller General (1980) to the Committee on Governmental Affairs titled Should the Bureau of Indian Affairs Continue to Provide Educational Services to Indian Children? studied the quality of Indian education and specified some requirements for the Bureau of Indian Affairs. The self-determination period also saw numerous state reports and several graduate student research studies on a variety of topics in Indian education.

The 1960s and 1970s had strong presidential support. Presidents Kennedy, Johnson, Nixon, Ford, and Carter were all quite supportive of Indian affairs (Coffer 1979). In 1960, President Kennedy instructed Secretary of the Interior Udall to speed up activities in providing schools for all Indian children (Allen 1968). Fuchs and Havighurst (1973) commented:

In March, 1968, President Johnson sent a message to Congress on Indian Affairs which stressed the government's policy of supporting a stronger Indian voice in Indian affairs, directed the BIA to establish advisory school boards at all federal schools, and created a National Commission on Indian Opportunity, including Indian leaders, with the Vice-President of the United States as chairman, and assigning to it an ombudsman function (p. 17).

In 1970, President Nixon proposed a series of policies and goals to Congress for American Indians (Jackson and Galli 1977). This message stressed better programs with more Indian involvement and responsibility for operating the projects. Presidents Ford and Carter continued this support during their administrations.

During the 1960s, a precedent was set by appointing Indian people to key positions at the national level. President Johnson appointed Robert Bennett in 1966 as the Commissioner of Indian Affairs. Louis Bruce was appointed to the post in 1969 and Morris Thompson in 1973. The United States Office of Education was also partly staffed

with Indian personnel. William Demmert, Jr., was appointed as the first Deputy Commissioner of Indian Education to administer the Office of Indian Education. Gerald Gipp was appointed to this position from 1976 to 1980 after Demmert transferred to the Bureau of Indian Affairs. This trend of Indians holding top positions gradually filtered down to area offices and local levels.

The 1960s and 1970s brought about a variety of "Indian interest organizations." The groups organized for a variety of reasons, but their common goal was to provide an Indian voice.

The National Congress of American Indians, which organized in 1944, seemed to be politically involved in the early 1960s. This group appeared to have been instrumental in changing the government's attitude from termination to self-determination. The goals of the National Congress of American Indians were to protect American Indian rights and benefits under treaties or agreements with the United States and to promote a better understanding of all Indian people.

The National Indian Education Association was formed in 1969 in response to concerns expressed by Indian educators who felt that their voices were not being heard. Since its first conference in Minneapolis, Minnesota, the organization has grown considerably. The goals of the organization were to promote quality education for American Indian people and to provide the federal government with direction on issues affecting Indian education.

The Coalition of Indian-Controlled School Boards was organized in 1971 because of dissatisfaction with the education system for Indian students (Szasz 1977). The Coalition believed that American Indians must control and manage their schools if progress was to be made.

Today, several schools and organizations are affiliated with the Coalition.

The National Advisory Council on Indian Education emerged in 1972 with the passage of Public Law 92-318, the Indian Education Act. This act created a fifteen member all-Indian council, appointed by the President and responsible for providing advice on Indian education issues.

Other organizations and groups, which had been formed during this period, also dealt with educational issues. Some of these groups included the American Indian Higher Education Consortium, the National Indian Youth Council, Americans for Indian Opportunity, American Indian Policy Review Commission, the National Tribal Chairmen's Association, and the American Indian Movement. In addition, several state and local groups had developed.

During this period, legislators became more interested in and responsive to Indian affairs. Congress began passing legislation allowing Indian people to exercise more authority in managing their own affairs.

The Economic Opportunity Act, which was passed in 1964, had a direct effect on Indian education. The National Advisory Council on Indian Education (1974) offered the following:

One of the most significant accomplishments in Indian affairs during the 1960's was the enactment of legislation--the Economic Opportunity Act--which gave Indians the opportunity to participate in and control their own programs. Head Start programs, for example, were the first meaningful effort to provide early childhood experiences for Indian children. Upward Bound, Job Corps, and VISTA all had significant Indian participation. But in terms of demonstrating the importance of Indian initiative and self-determination, and the ability of Indians to effectively carry out their own programs, the Community Action Programs on Indian reservations have been the most important innovation of the 1960's.

More than 60 Community Action Programs, involving 105 Federal reservations in 17 states, presently exist (p. 111).

The Rough Rock Demonstration School also became a reality because of the Economic Opportunity Act. Platero (1978) wrote in The Schooling of Native America:

In July 1966, Rough Rock Demonstration School on the Navajo Reservation at Chinle, Arizona came into being. It was a project predicated upon the premise that Navajo people are the ones best able to decide upon, most interested in being involved in, and the one group most vitally affected by the curriculum content and instructional methods used with Navajo children.

Being fully responsible for the operation of their own local school for several years, the people of Rough Rock became more and more impressed with the need for procedures whereby Indian people themselves might aspire to service [sic] as teachers and para-professionals (p. 45).

The passage of the Elementary and Secondary Education Act of 1965 was viewed as landmark legislation affecting Indian education. It greatly assisted both public and federal schools in developing new and more effective programs for meeting the special educational needs of Indian students. In addition, the Elementary and Secondary Education Act was amended with the passing of the Bilingual Education Act of 1967, which brought about a new awareness of American Indian language (Szasz 1977).

Johnson-O'Malley, Public Law 815, and Public Law 874 (all of which were intended to meet the financial needs of school districts) continued to operate during this period. However, these programs were subjected to much criticism. Jones (1977) pointed out several weaknesses in these federal funding programs. For example, a study of the National Association for the Advancement of Colored People Legal Defense and Education Fund, Inc. (1971) titled An Even Chance reported flagrant violations of several federal programs in many school districts around the country. Today, Indian people are more involved in managing

and planning these federal programs.

The Indian Education Act of 1972, Title IV, authorized funding for a series of new educational programs for Indian people. The act provided for parental and community participation and encouragement of community-operated schools, stressed culturally relevant and bilingual curriculum materials, provided for adult education projects, and provided funds for training teachers. In addition, it established the Office of Indian Education within the United States Office of Education to administer Title IV, a Deputy Commissioner for Indian Education, and a National Advisory Council on Indian Education. The Indian Education Act was viewed favorably by most American Indians throughout the country. A major reason for the success and acceptance of Title IV was its focus on Indian control.

Public Law 95-561 was passed in 1978 because of the Bureau of Indian Affairs' failure to provide American Indians with a quality education. A report of the United States Comptroller General (1980) titled Should the Bureau of Indian Affairs Continue to Provide Educational Services to Indian Children? discussed the possibility of transferring the Bureau of Indian Affairs' educational programs to the Department of Education if academic achievement levels of Indian students were not raised. Throughout the 1960s and 1970s, the Bureau of Indian Affairs' education programs were faced with the threat of possible transfer. It now appears that the Bureau must provide measureable and observable results or the transfer will occur.

This most recent period had also brought about numerous changes, programs, projects, and trends in Indian education. Some of these included the Indian Self-Determination and Education Assistance

Act of 1975; Teacher Corps, Follow Through, Talent Search, Special Services, and other educational projects focusing on Indian education; a change of direction from vocational education to higher education; a greater awareness of Indian culture; and numerous publications dealing with a variety of Indian topics. The self-determination period was summed up best by Coffey (1979). He wrote:

Hesitant to embark on the perilous journey of self-determination and not fully functional to immediately assume responsibility for all their activities, the Indians are slowly beginning to rouse from their slumber. They are stretching and awakening. Soon they will be fully alert and ready for the great battle which awaits. It is then the "Sleeping Giants" will begin in earnest to perform the "miracles of work done for the good of all and deeds of shining heroism." It is then that the Indian will be able to survive in a white man's world and yet maintain his dignity and individuality as a member of a great and noble race (p. 100).

History of American Indians in Higher Education

Higher education, learning beyond the levels normally available to the majority of individuals, was available to Native Americans either formally or informally for centuries. Before European contact, each tribe operated systems of specialized education. Interested individuals who had special aptitudes were able to relate closely to teachers who had expertise in religion, medicine, philosophy, art, and other areas requiring specialization. Such systems of higher education were well developed among Native Americans long before the first Europeans arrived in North America. Many Indian people spent substantial amounts of time acquiring advanced knowledge. Leisure time was often spent attending folk "seminars" where the young listened to and learned from the lectures and discussions of the old. Such higher education arose from the folk-group needs and its focus

on practical considerations such as the well-being and preservation of the people. Ford (1941), Simmons (1942), LaFlesche (1963), Qoyawayma (1964), and Dennis (1965) described this as the manner in which children were educated and enculturated into the community.

The coming of the Europeans brought many abrupt changes to the lifestyle of American Indians. Almost as soon as the American Indian tribes came into contact with the Europeans, the European concept of assimilation was initiated. No interest developed on the part of the Europeans in the American Indian-oriented education; rather the focus was on the destruction of native cultures. Lundquist (1934), Hunt (1946), Porter (1955), and King (1963) agreed that the early education programs, such as those at William and Mary, Dartmouth, and Harvard, were aimed solely at Europeanization of the American Indian and had no connection with folk education traditions or cultural background.

Various European nations, primarily England, France, and Spain, exerted control and influence upon the native populations during the colonial period. Western education and formal schooling of Indians was carried out by religious groups that were bent on christianizing. The thought of converting countless numbers of heathens in the New World was most interesting and challenging for European clergy, laymen, and rulers. The first explorers and colonists were accompanied by Franciscans and Jesuits. Protestant groups followed a short time later. Once these groups were settled among the tribes, it became evident that their original goal of conversion and baptism were not enough and that secular knowledge was also important. Therefore, christianizing and civilizing became

their dual goal. The chronicles of the early experiences of the various religious orders documented the plans they developed for "converting the heathens" (Layman 1942).

Before the close of the sixteenth century, schools and universities were established in various parts of America under Spanish rule. In 1568, a school was established in Havana, Cuba, for the instruction of American Indians. This can be pin-pointed as the specific date the white man began his efforts to formally educate American Indians (Berry 1968).

Institutions of higher education were established partly as a means of providing a formal religious education for Indians. An Indian college was established in 1654 for twenty pupils near Harvard College in Cambridge, Massachusetts (Adams 1971). Its purpose was to provide Indians with a higher education and prepare them for the ministry. The thought was that, if Indians became ministers, the goal of converting all Indians would be easily accomplished. This idea was not successful and the college building was soon converted to house a printing press belonging to Harvard.

Soon after the English gained a secure foothold in Virginia, the Anglican clergy began raising funds to build churches and schools for Indians. The College of William and Mary was established in 1691 for the purpose of civilizing and providing religious instruction to Indians (Berry 1968). A special house was also built to house Indian students. However, Indian students lost interest and the focus of the college was redirected to educating English youth (Smith 1950). The goal of the college saw little success and, as a result, the Indian students returned to their homes.

Dartmouth College was established in 1769 by Dr. Eleazer Wheelock (Adams 1971). The major goal of the school was to educate Indian tribes in reading, writing, and other pertinent skills to expedite civilizing and christianizing.

Nearly all the earliest institutions of higher education were established as a means of spreading christianity and transmitting European culture and civilization among the Indians. However, the European goal of educating the Indians in European traditions fell short of its aim. In 1724, a professor of the College of William and Mary observed that most Indians returned to their homes to follow their own customs and rites (Larabee 1961). Many of the European experiments in higher education for Indians failed because of the European antagonism toward the American Indian heritage (Fox 1943). Fox (1943) further explained that few colonial imperialist systems were successful because of the forced plan of indoctrination. A similar view was shared by Churchill and Hill (1979), who viewed the religious schools as sponsors for the assimilation of Indians at the expense of native cultures. Fuchs and Havighurst (1973) stated:

The schools of this period touched a few persons and met with a conspicuous lack of success as hostilities increased between expanding settlers and Indians; as intertribal hostilities were exacerbated by warfare between the colonial powers; and as Indians resisted giving up their religions and styles of life (p. 3).

Fletcher (1888) summed up the missionary movement to educate American Indians as essentially futile:

During the sixteenth century the Indians made no real progress towards civilization. Their contact with the white race was attended by wars, slavery, and other evils connected with the presence of soldiers. The introduction of fire arms [sic] gave to those who first secured them an advantage over the primitive weapons of less fortunate adversaries. This caused changes in the relative power of tribes, and tended to increase intertribal disturbances.

Some of the aborigines became possessors to a slight extent of domestic animals. A few Indians were taught letters, but it is doubtful if any tribe or number of individuals became christianized. Of the missionaries who endeavored to teach the people in the doctrine of the Roman Catholic Church, one-half lost their lives while making their zealous efforts in this behalf (p. 22).

After the Revolutionary War, the United States government was empowered to regulate commerce, make treaties, and control public lands occupied by Indians. American Indian tribes were dealt with as foreign nations and placed under federal jurisdiction. This unique relationship between the federal government and the American Indian tribes created the legal framework which guarantees various federal services such as health and education to all Indian people.

The Choctaws were granted federal monies in 1820 in exchange for land (Swinney 1935). This provided funds for schools. However, although no money was set aside for institutions of higher education, Indian boys were sent to colleges in Ohio and Indiana. Additionally, Thorton (1925), Ervin (1932), and Henshaw (1935) reported that the seminaries established by the Five Civilized Tribes in the 1840s were regarded as institutions of higher education. The education level and literacy of these Indian students surpassed that of white settlers in the area. These schools used the Cherokee syllabary in some classes and also taught the English language. By the late 1890s though, these schools were closed by the federal government.

The government did not play an active role in Indian education until the 1870s, when government grants were made directly to missionary groups to educate American Indian people. No distinction between the separation of church and state with respect to Indian education existed. In fact, the government negotiated with various religious sects and divided the country into jurisdictions.

During this period, Harvard, Dartmouth, and William and Mary Colleges continued with their commitment to educate Indians, but with little success. Few Indians were able to adjust to school and to a value system that was forced upon them (Fletcher 1888). Eastman (1916) recounted his college experience at Dartmouth in the 1870s, recalling that he was an "oddity" who adapted and persisted in his education until he was awarded a degree in medicine. He served as a physician for his people, the Sioux; but due to his dedication, he was always regarded with some curiosity and mistrust. This seemed to have been a dilemma of the educated Indian, caught between two worlds. Generally, the schools of higher education were alien to the Indian and held little relevance to the Indian way of life.

Ironically though, it may have been the emphasis on Indian education and catechism that saved the Indian. The European's religious thrust and interest in educating the Indians led to a policy of christianizing rather than to a policy of extermination. Assimilation was thought to be the answer. Fuchs and Havighurst (1973) cited: "The Bible was the primer, and the hoe and plow the weapons of those who sought to 'civilize' the Indians rather than physically eliminate them" (p. 5).

It was this spirit of assimilation that on 15 July 1870 led the federal government to appropriate \$100,000 to support industrial and other schools for American Indian tribes (Kickingbird and Kickingbird 1979). As a result, compulsory education, industrial trade schools, and federal Indian schools were mandated; among them the training facility at Carlisle, Pennsylvania.

The off-reservation boarding school at Carlisle dominated the approach to Indian higher education for the next fifty years. The founder of Carlisle, Gen. Richard Pratt, stressed total assimilation of Indian people. The school program stressed the removal of students from their homes, strict military discipline, a work and study program, and a major emphasis on industrial arts (Utley 1964). The philosophy at Carlisle was to train Indian students who would later return to their tribes to serve as role models. Brunhouse (1935), Fritz (1935), and Meyer (1954) all assessed the overall program as not having had much impact on Indian people.

Indian University, now known as Bacone College, was established by the American Baptist Church in 1880 (Chavers 1979). The college was designed to be the Indian territory equivalent of the land grant colleges in the states. The school also implemented a secondary program to promote the college level program.

The federal government attempted, in vain, to enroll Indian students in federal land grant colleges. It seemed impossible to find established schools that would provide Indian students a home, industrial training, and academic instruction. So, it was finally proposed to turn abandoned military barracks into Indian schools. In 1883, the Indian Service was granted use of these buildings in various locations (Adams 1971).

The United States Indian Industrial Training School, popularly known as Haskell, was opened in Lawrence, Kansas, in 1884. This institution operated much like Carlisle with students being relocated from reservations to learn trades and absorb the white culture. Again, the intent was to assimilate the Indian students into the

economic and social life of the nation. A document titled Self-Study Report of Haskell Indian Junior College by the United States Bureau of Indian Affairs (1978) explained that the course offerings in the 1920s seldom went beyond vocational-technical training, but in recent years academic programs have gradually developed. Today, Haskell holds junior college status and is supported by the Bureau of Indian Affairs.

American Indians also received higher education at various other institutions, notably Hampton Institute, which was established as a normal and agricultural school for Blacks. Large numbers of federally funded Indian students were accepted at Hampton between 1878 and 1924 (Adams 1971). Other than Hampton and the other schools previously mentioned, few early reports were noted of the federal government attempting to involve Indians in higher education

Carlisle, Haskell, and other Indian schools during the later part of the nineteenth century were really elementary schools that offered courses and training in vocational areas for older students. These schools were the classic examples of the federal government's attempts at higher education for Indians. These attempts were largely unsuccessful.

The publication of The Problem of Indian Administration (Meriam 1928), commonly known as the Meriam Report, appeared to be a turning point for American Indians in higher education. The report stressed the need for furnishing scholarships and loan programs to increase the numbers of Indians in higher education. Additionally, it recommended several changes for better preparation on the secondary level. The ideas of special institutions of higher learning for Indians was

discouraged. The Meriam Report maintained that Indians should be mainstreamed into the existing universities and colleges. It pointed out the trust responsibility that the federal government had to educate Indians, and it proposed the need for Indian education specialists, rather than administrators, to identify and oversee higher education programs.

During the early 1930s, reports showed that few Indian students were enrolled in institutions of higher education. In 1932, for example, only fifty-two American Indian college graduates could be located (Bronson 1944). Adams (1971) stated:

Annual appropriations from 1931 and allowances from tribal funds from 1930 were used for training in nursing, home economics, forestry, and other vocations. Five scholarships were available at the University of Michigan for Indians from any part of the United States. In 1933 an amount not in excess of ten thousand dollars was appropriated by the government to aid advanced Indian students. By 1932 sixty-nine reimbursable loans to students amounted to more than sixteen thousand dollars, and twelve tribal fund loans totaled thirty-five hundred dollars. With the aid of Federal and tribal funds, 161 Indian students had been enrolled by 1933 (p. 72).

The findings and recommendations of the Meriam Report brought about a reversal in Indian policy. The Wheeler-Howard Act, also known as the Indian Reorganization Act, was passed in 1934 (Fuchs and Havighurst 1973). This act made provisions for loans to American Indians for tuition in recognized colleges and vocational and trade schools. As a result, in 1934, with a \$250,000 appropriation, the Bureau of Indian Affairs established the Higher Education Grant Program (United States General Accounting Office 1977). These funds also provided for the position of guidance counselor. The responsibilities of the guidance counselor position included managing the loan fund and counseling the students.

The years following the implementation of the Indian Reorganization Act were referred to as a period of progressivism for Indian people (Szasz 1977). The many recommendations of the Meriam Report had begun to be implemented. The number of Indian students enrolling in college increased. However, even though the enrollment increased, success was limited as Indian high school graduates were not adequately prepared for college (Coombs et al. 1958). The result was a high attrition rate.

World War II effectively interrupted many phases of American life, including Indian higher education. The progressivism brought about by Meriam (1928) slipped into a blatant policy of assimilation. Congress felt that Indians should be taught to live off the reservations and assimilate into the mainstream of society. The Task Force Five (1976) reported that in 1952, the loans to Indian students for higher education were discontinued. Many Indian tribes became alarmed and attempted to work with state institutions to establish extension education centers. However, few of these arrangements were successful.

In 1953, Congress passed House Concurrent Resolution 108 declaring the official policy with respect to American Indians as "termination" of federal services and support (National Advisory Council on Indian Education 1974). This resolution had a devastating effect on educational programs, as it was designed primarily to effect termination. The major emphasis was placed on programs that provided marketable skills for off-reservation employment. Even though some Indians continued in college programs, due in part to the lack of funds, few graduated (Szasz 1977).

As a result of numerous reports and studies on the conditions of Indian affairs, "termination" ended in the early 1960s. The new trend was toward self-determination. Congress became more sensitive and supportive. Funds for Indian education were increased with more Indian involvement. With this new turn of events, education became a major concern and Indian enrollment in higher education programs was strongly encouraged. A United States General Accounting Office (1977) report titled The Bureau of Indian Affairs Should Do More to Help Educate Indian Students explained that secondary schools had begun stressing pre-college preparation. This helped to increase the numbers of Indian students enrolling in college. The Task Force Five (1976) reported that American Indians began to avail themselves of the Bureau of Indian Affairs scholarship assistance. By 1963, scholarship assistance totaled \$650,000 and it more than doubled one year later. In addition to the Bureau of Indian Affairs assistance, many tribes had begun providing monies for higher education.

Legislation in the 1960s encouraged the development of schools which departed from the vocational-technical focus (Nash 1964). Schools such as the Institute of American Indian Arts at Santa Fe, New Mexico, and Haskell Indian Junior College at Lawrence, Kansas, were reorganized with a new focus. Szasz (1977) reported:

By the fall of 1965 the last high school class had graduated, and the school became known as Haskell Indian Junior College. Although it continued to emphasize business training, it added courses in electronics, the building trades, and service occupations. . . . The Institute of American Indian Arts replaced the Santa Fe Boarding School. Opening in October 1962, it offered high school courses and two post-high school years of work in various media, including painting, sculpture, jewelry, ceramics, design and printing of textiles, and creative writing (p. 136).

These institutions attracted Indian students from tribes throughout the country.

Waddell and Watson (1971) concluded that the development of the Office of Economic Opportunity in 1964 had one of the most profound impacts of any agency upon Indian people. This office sought to directly involve Indian people in planning and managing the projects. A variety of programs and projects were developed: Job Corps, Upward Bound, Volunteers in Service to America (VISTA), demonstration schools, adult education, Indian community colleges, and grant and loan programs. The social programs of the 1960s allowed Indians the opportunity to choose programs other than those offered by the Bureau of Indian Affairs (Szasz 1977).

In the 1960s and 1970s, national attention focused on the American Indian. Various national, state, and local organizations were formed. The media paid special attention to covering Indian affairs. A variety of popular books was published; many were best sellers. Indian leaders recognized the value of these powerful tools and utilized them to gain support and express concerns. Colleges and universities sought to develop Indian study courses and actively recruited Indian students. The schools were quick to respond to potential federal grant monies. Programs were developed that included the training of teachers, administrators, counselors, lawyers, engineers, and doctors.

Concurrently, Indian community colleges began to appear. Task Force Five (1976) pointed out that the notable pioneering efforts in this regard were Navajo Community College at Tsaile, Arizona, begun in 1968; Oglala Sioux Community College at Pine Ridge, South Dakota, and

Sinte Gleska Community College at Rosebud, South Dakota, both begun in 1970; and Turtle Mountain Community College at Belcourt, North Dakota, begun in 1972. These community colleges allowed for the individual tribal view, as all were chartered by local tribal councils (Medicine 1975). Each community college developed offerings to meet the needs of the reservation community it served. In addition to emphasizing academics, native culture was viewed as a vital element of the curriculum. Today, these colleges are eligible to apply for funds provided by the Community College Bill.

The Indian Education Act of 1972 (Public Law 92-318, Title IV) created several new educational opportunities for Indian adults (Coffer 1979). This act allowed for tribes and Indian organizations to develop adult education programs, and it provided funds for teacher training. Since its inception, Title IV has been expanded to include funds for Indian students wanting to attend higher education institutions, although these funds were targeted for specific career areas such as medicine, law, education, engineering, and business administration.

An organization called American Indian Scholarship, Inc., based in Taos, New Mexico, was established in the early 1970s. The organization is a nonprofit organization governed by an All-Indian Board of Directors (Rainer 1976). Its major purpose was to provide financial assistance to Indian graduate students who were working toward their master's or doctoral degrees. The major source of funds was provided from Bureau of Indian Affairs appropriations and private foundations.

In 1976, the passage of the Indian Health Care Improvement Act (Public Law 94-437, Title I) appropriated funds to assist in correcting the poor health care of Indian people (United States Department of Health and Human Services 1981). This act provided financial assistance to Indian students who were planning health care careers to attend college. The goal of this program was to provide instruction in key medical areas to Indian students who would later return to serve Indian people.

From the late 1960s through 1980, the Bureau of Indian Affairs Higher Education Program grew substantially. The enrollment-appropriation table (see table 1) illustrates the growth rate of Indian students participating in the Bureau of Indian Affairs Higher Education Program (Locke 1978).

Even with the increases in appropriations and student enrollment, attrition was quite high. The United States General Accounting Office (1977) reported that the Bureau of Indian Affairs Higher Education Grant Program had never had any method of implementing student services that might improve retention; it had never had standard regulations; and it had never attained the success it should have in producing graduates.

In addition to Bureau of Indian Affairs funding for higher education, Indian people are eligible to apply for other educational assistance programs. Numerous grants, loans, scholarships, fellowships, and tribal monies are now available to Indian students; and as a result, more Indian students are now going to college.

Indian people apparently do want higher education and they want a voice in determining their education. They have already

TABLE 1
 BUREAU OF INDIAN AFFAIRS HIGHER
 EDUCATION PROGRAM

Year	Enrollment	Appropriation
1967	2,358	\$ 1,193,320
1968	2,660	2,296,000
1969	3,432	3,100,000
1970	4,271	3,848,000
1971	6,620	6,098,000
1972	12,438	15,248,000
1973	13,326	20,956,000
1974	13,500	22,556,000
1975	14,700	31,045,000
1976 ¹	16,000	33,119,000
1977 ¹	17,000	35,956,000
1978 ²	29,757	40,000,000
1979 ²	34,987	45,000,000
1980 ²	41,390	50,000,000

SOURCE: Patricia Locke. "Indian Post-Secondary Education and the Law." Paper presented at Flaming Rainbow/University Without Walls, Tahlequah, Oklahoma, April 1978, p. 9.

¹Estimates based on current enrollment data.

²Projected enrollment based on average increase of period 1967 through 1977.

attained legislation to encourage their goals. However, the need remains high for trained American Indian professional manpower. The grassroots commitment to education for Indians was expressed well by an official statement of the Coalition of Indian-Controlled School Boards in 1976 (cited in Task Force Five 1976) in the preface of the Report on Indian Education to the American Indian Policy Review Commission:

We want our children to take their rightful place in the destiny of America as have the children of so many people. We know that America is now a mosaic of many different groups. Most of them have made themselves a secure place in our system. We know that America allowed them to use the school system to better themselves, to insure their children's success. We only ask the same.

It has taken more than one hundred years to bring the Indian people to this present low point in our history. The schools must accept much of the blame for that decline. We know, however, that if Indian people are allowed to create a bicultural education for our children which will blend the best of two great civilizations then we will not need one hundred years to regain our greatness as a people. And we know we will live to see the day when our children take their place in the American sun (p. XII).

The American Indian College Student

Despite the numerous obstacles confronted during their elementary and secondary school experience, more American Indian students are now pursuing higher education than ever before. Locke (1978) surveyed college and university Indian faculty and counselors throughout the United States and found there to be thirty-two thousand Indian college students in 1976. Chavers (1979) using Locke's data, recalculated the 1976 estimates and found that up to thirty-four thousand Indian students were enrolled in that year. Chavers (1979) reported this estimate represents a 2,600 percent increase in enrollment from the 1963 enrollment figures. Chavers (1979) also believed the Indian college enrollment would increase through 1990. These data clearly show that American Indians believe higher education is now a

viable option.

The interest of American Indians in higher education was documented in two studies. Hamblin (1963) found in studying Apache and Navajo high school seniors that 91.1 percent wanted to attend college. Heath (1970) also reported that higher education was a top priority for American Indian students. In Heath's study, 124 American Indians were interviewed from fourteen reservations in the Southwest, Midwest, West, and Pacific Northwest. The study results indicated that Indian people felt they could better their lives through acquiring a higher education.

However, even through there were more American Indians attending college, the number experiencing success was quite low. Chavers (1979) estimated the dropout rate for American Indians to be 85 percent. McDonald (1978) believed it was between 79 and 93 percent. According to the United States General Accounting Office (1977) report on the Bureau of Indian Affairs Grant Program, 430 American Indian students were randomly selected to participate in the study from seven higher education institutions. The study revealed that 54 percent of the Indian freshmen did not return to the same school where they initially enrolled, compared to 39 percent of the non-Indian freshmen. The McGrath et al. (1962) study mentioned that 416 Indian students from twenty-seven southwestern colleges and universities were identified during the period of September 1958 through 1962. They also indicated that during the same period, 237 of these students were identified as dropouts. Charles (1962), in a article dealing with tutoring-counselings programs for Indian college students at the University of New Mexico, reported that about 75 percent of all Indian

students who entered the university dropped out. Zintz (1963) found in examining the records of one hundred Indians enrolled at the University of New Mexico between 1954 and 1958 that 70 percent dropped out. Salisbury (1967) reported the Indian freshman dropout rate to be 50 percent at the University of Alaska. These studies clearly indicated the extent of the dropout problems among American Indian college students.

Factors Which Contribute to American Indian Student Dropout Rates

Why Indian students leave college was a topic of interest to many writers, researchers, and college personnel. Over the years, studies throughout the United States have identified a wide variety of reasons and causes for Indians dropping out of college. Many of the presumed causes identified in the early 1960s were the same ones being identified today.

Artichoker and Palmer (1959) studied seventy-two South Dakota Indian college students in 1957 to identify the problems of college students. Data for the study were collected through two questionnaires. The one general and overriding finding of this study was that all problems identified appeared more serious and troublesome for Indian students than for their non-Indian counterparts. Among the special problems of the Indian students, the following were mentioned as having the greatest significance:

1. Poor academic training for college, especially in the areas of mathematics and science
2. Lack of funds, especially for clothing and personal expenses

3. Lack of future planning of educational and vocational objectives

4. Family concerns

5. Concerns about moral and religious issues

In addition, the study revealed Indian students felt it was an advantage to be an Indian and were proud of their ancestry. Racial prejudice and discrimination, dating, and social life apparently did not present any difficulty.

As determined by McGrath et al. (1962) in a study of fifty-two colleges and universities to investigate the problems American Indians encountered, they found that 48 percent of the American Indian students withdrew for financial reasons. The study also showed that inadequate high school preparation and lack of student encouragement by the family and tribe accounted for 38 percent of the dropout rate. An additional 17 percent of the students dropping out was attributed to cultural differences and academic difficulties. McGrath et al. (1962) also found that 68 percent of those dropping out of college were voluntary and that the other 32 percent were dismissed. Other findings of this study which affected American Indians in colleges were:

1. The Indian student was more dependent upon scholarship aid than the non-Indian student

2. Indian clubs fulfilled an important role within the lives of the Indian student

3. There were few special programs in counseling, curriculum development, and tutoring for Indian students at the institutions surveyed

4. The American Indian student was found to spend 16-20 hours per week in outside preparation and approximately seven additional hours per week studying the library

5. The age of the Indian student was found to be an important and determining factor in persistence in college--the older the student, the stronger the persistence

McDonald (1978), from interviews with Indian students, listed and discussed reasons these students drop out at a national Teacher Corps conference on Indian education. The summarized list of dropout cases, as stated by students, were:

1. The nature and quality of their previous education
2. Personal finances
3. Institutional and personal discrimination
4. The lack of persuasive role models available to students
5. Cultural differences between the student and the institution

McDonald (1978) pointed out that a poor high school education was ranked as the major dropout factor.

In 1973, a study of the Bureau of Indian Affairs Higher Education Program was conducted. The 13,000 students participating in the program were surveyed and 2,736 or 21 percent responded (United States Bureau of Indian Affairs 1973). The study indicated that the major problems reported were poor study habits, lack of finance, home sickness, and few friends with whom to relate. In addition, those who dropped out reported that their primary reasons were family obligations, lack of funds, went to work, and inability to see the relevance of their coursework.

Voorhees (1975) studied eight possible factors related to Haskell Indian Junior College dropout rates. The factors were previous attempts at college, sex, major, age, type of high school, marital status, degree of Indian blood, and cumulative grade point average in high school. She found that dropouts had academic problems prior to enrollment at Haskell, the younger students (17-19) had the higher dropout rates, and general education majors dropped out more frequently than those in the career-oriented fields. She found no significance among the other five factors.

Chavers (1979), in a feasibility study for an Indian university at Bacone College, identified a variety of reasons why Indian college students drop out. Some of the reasons included:

1. Differences in linguistics and cultural backgrounds
2. Few positive role models
3. Poor academic preparation
4. No personal commitment to career or educational goals

In a United States General Accounting Office (1977) report on the Bureau of Indian Affairs grant program, seven higher education institutions which enrolled approximately two thousand Native Americans were studied. A random sample of 430 students was reviewed. It was reported that American Indians dropped out of college for a variety of reasons. The major reasons cited included:

1. Weak academic backgrounds
2. Lack of study skills
3. Negative self-images
4. Lack of basic skills in English, mathematics, and sciences
5. Lack of adequate career guidance

6. Culture shock

7. Inadequate counseling, remedial, and tutoring services at educational institutions

In addition, the study reported Indian freshmen had a composite American College Testing Program score of thirteen, completed seven credit hours per semester, and earned a grade point average of 1.7 out of a possible 4.0 grade point average. The study further revealed that students with higher American College Testing (ACT) scores earned higher grade point averages in college.

A similar study also investigated American College Testing Program scores. Jeanotte and Monette (1980) studied eighty-three Turtle Mountain Community College students in North Dakota to determine preparedness for entering college and levels of college performance. The study found that American Indian freshmen began college with an American College Testing Program composite score of thirteen, compared to a composite average of 18.9 for all students nationally. North Dakota residents, as a group, had a composite average similar to the national average. It was also noted that the freshmen at the Turtle Mountain Community College completed an average of eight credit hours per semester with a 2.4 grade point average on a four-point scale. In addition, Jeanotte and Monette (1980) concluded that the college-bound students lacked basic skills and were not prepared well academically.

The United States Bureau of Indian Affairs (1966) reported that in a survey to ferret out possible roadblocks to academic success of American Indians at Northern Arizona University, it was found that the lack of sufficient proficiency in the English language was a factor

in the inability of the American Indian to complete college work. In addition, poor financial and time management were significant factors.

In telephone interviews with LeRoy Falling, Director of Post-Secondary Education for the Bureau of Indian Affairs at Washington, D.C., and Kenneth Davis, Bureau of Indian Affairs Education Specialist for the Higher Education Program at the Turtle Mountain Agency, Belcourt, North Dakota, the following major reasons were identified for Indian students dropping out of college. Falling (1981) believed the reasons to be a lack of finances, money management, family ties, and social adjustment to campus life. He also stated that the mismatching of work-study positions to Indian student interests was troublesome. He felt this caused the students to lose interest in school. Davis (1981) felt the lack of a comprehensive high school preparation was a major cause for students discontinuing their college educations. In addition, he felt the lack of family encouragement, adjustment to college, and financial concerns also contributed to students dropping out.

One study found a difference between students who attended rural parochial schools rather than public schools. Kleinfeld and Kohout (1974), in studying the success of Alaska Native students at the University of Alaska, found that rural students from parochial as opposed to public boarding schools, even when their levels of academic preparations were similar, were more successful.

Several studies also dealt with cultural issues. Boutwell et al. (1973) randomly selected a group of 110 students from a large, western private university. Of that number, 68 percent were American

Indians and 32 percent were non-Indians. The basic question of the study was must an Indian become "white on the inside" or assimilated to succeed in an institution of higher education. This led to an examination of differences between Indians and non-Indians regarding the value they place on education, their problems in school, their grade point averages, their reported absences, and their feelings about racial discrimination. Significant differences were found in three of the five areas. Indian students tended to value education more than the non-Indian students. Indian students' absences were higher than non-Indians', but there was no significant difference in their grade point averages. Indian students were more sensitive to discrimination at the university, indicating that they still "feel" Indian. In conclusion, Boutwell et al. (1973) reported that Indian students became at least partially assimilated into the non-Indian culture.

A study by Just (1970) consisted of administering a questionnaire to forty-six American Indians. The sample included sixteen full-time college students, fifteen part-time college students, and seventeen college-eligible high school graduates. The study was based on the assumptions that educational deficits stemmed from value conflicts with the dominant culture and underachievement was based on poverty and isolation. The results showed that conditions of limited income did affect educational advancement and increased education was positively associated with increased identification and/or acceptance of the white culture.

Carroll (1978) offered the following in an article dealing with cultural marginality among students at Haskell Indian Junior

College: "The dropout rates for traditional males, who are culturally designated as playing a key role in the preservation of tribal ways and traditions, are higher than the dropout rates for any other Haskell group" (p. 15). This indicated that cultural expectations play an important part in the success and failure of American Indian males and/or females who may have extended responsibilities to their respective cultures, which may pull them away from completing their educational degrees.

Cultural conflicts were also identified as problems for Indian students in two other documents. The United States General Accounting Office (1977) and McDonald (1978) found that the high school to college transition was difficult to make because the college campus and activities were somewhat foreign to reservation students.

Factors Which Contribute to American Indian Student Retention Rates

As revealed in the previous section, the college dropout rates among American Indians were extremely high. Few studies have been devoted to the American Indian college graduate and statistical information was limited. The United States General Accounting Office (1977) reported that only 10 percent of the 430 American Indian students surveyed eventually earned degrees. As determined by Voorhees (1975) in a study of four semester periods at Haskell Indian Junior College, it was found that of the 497 students who enrolled in the fall of 1975, only 40 percent completed their degree programs. Salisbury (1967) reported that less than 2 percent of the American Indian freshmen students at the University of Alaska completed degrees. Zintz (1963), in his study of one hundred Indians enrolled at the University of New

Mexico between 1954 and 1958, found that only 10 percent had received degrees.

In reviewing the literature, only a modicum of information was found on factors which contributed to the success of American Indian college students. On the following pages will be an examination of the factors identified which contributed to successful completion of college requirements by American Indian students.

According to Patton and Edington (1973), in their study of American Indian students enrolled at New Mexico State University and the University of New Mexico on factors relating to persistence of the college student, they found that the Indian student most likely to succeed in college was:

1. Female
2. Less than nineteen years of age when first enrolled in college
3. A graduate of a larger public high school
4. In the upper one-third of her high school graduating class
5. In the seventeen or above range on ACT test
6. Planning to enroll in a four-year degree granting program

Patton and Edington (1973) also stated:

. . . for those students at New Mexico State University, it can be noted that 62% of the persisters were members of the campus Indian club, while only approximately 44% of the non-persisters were members (p. 20).

Havighurst (1970), in the Final Report on the National Study of American Indian Education: The Education of Children and Youth, found that Indian Studies programs consisting of courses in Indian culture, history, and adaptations to the surrounding society, which may be offered as a complete first-year college program, provided the Indian

students with the opportunity to adjust to the demands of college study. While working on courses which related to him personally and while he associated with other Indian students in classes, the Indian student could begin the adjustment to campus life. Under these circumstances, instructors were better able to understand the Indian student's academic strengths and weaknesses. After a successful first year, American Indian students had a good chance of coping with college responsibilities and thus successfully completing graduation requirements.

In a telephone interview, LeRoy Falling (1981), Bureau of Indian Affairs Director of Post-Secondary Education, said that Indian Studies programs were a factor contributing to American Indian students' decisions to stay in school. Currently, 210 colleges have Indian Studies programs. Many of these programs have become established as creditable departments on campus and thus have a positive influence on American Indian students.

The results of the research study conducted by Cooper, Norris, and McCabe (1971) regarding the factors affecting dropout rates among Native American college students enrolled in the University of New Mexico obtained a reduction in the dropout rate of 13 percent from what it had been in previous years. This was achieved by providing students with counseling, tutoring, assistance with registration, and financial aid assistance. In addition, the combined grade point average was raised from 1.99 in 1969-70 to 2.37 in 1970-71.

Based on findings from the United States General Accounting Office (1977), it was concluded that pre-college orientation programs could improve the Indian students' self-image and ease adjustment to college life. Analysis of one such pre-college program which included

visits to local industries, instruction in study skills and problem solving, assistance in selection of a college major, instruction in positive thinking, and instruction in English and math concluded that the orientation program better prepared American Indian students for college and assisted the transition from home to college. Furthermore, a follow-up on college grade point averages, one year later, showed that Indian students who had participated in the orientation program had greater increases in their grade point average than those not enrolled in the program.

Counseling services for Indian students also aided in lowering their attrition rates and elevated their grade point averages. As ascertained by Kleinfeld and Kohout (1974), the college success of Alaska Natives at the University of Alaska at Fairbanks markedly increased for students with low and medium levels of academic preparation due, in large part, to the Special Services Program with its emphasis on transitional courses. Charles (1962), in a study of tutor-counseling programs for Indian college students, found that active participation in the program resulted in improvement of basic skills, improved morale, increased motivation, and a healthier outlook on college in general.

At one university visited by the General Accounting Office study team, Indian freshmen utilizing the special services program had a dropout rate of 25 percent, whereas the overall Indian freshmen class had a 46 percent dropout rate (United States General Accounting Office 1977). Indian counselors at the seven institutions studied made the following recommendations which they believed would benefit Indian students:

1. Develop a survival skills program which would provide such information as how to register, drop or add a course, etc.
2. Develop pre-college orientation programs
3. Implement a Native American Studies curriculum
4. Provide Indian tutors
5. Provide training sessions in money management
6. Provide workshops for college faculty to familiarize them with Indian culture
7. Employ qualified Indians in faculty and staff positions

The United States Bureau of Indian Affairs (1966) recommendations, based on a survey of factors contributing to the success or failure of Indian students at Northern Arizona University, stated that a counselor of Indian background should be available to Indian students. This person would not only provide academic, career, and personal counseling but would also serve as a role model for Indian students. A second recommendation would be to allow Indian students who speak English as a second language to carry a reduced academic load during their freshman year. A program of not more than twelve hours would be advised. Included in these twelve hours would be a required course in "English for Bilingual Students." Indian students should also have access to a reading clinic to diagnose their reading deficiencies and be assigned remedial work to improve their English reading and writing skills.

Other researchers have also made similar recommendations to assist Native American students to remain in college. Cooper, Norris, and McCabe (1971) made the following recommendations to the University of New Mexico regarding Indian students:

1. Include staff with knowledge of college programs and of American Indian students during registration week

2. Provide counseling and tutoring services

3. Develop a special compensatory class in English

McGrath et al. (1962), in a research study to determine the success and failure of southwestern Indians in higher education, interviewed tribal officials to identify means by which tribal leaders could assist students in their college pursuits. The following list presents some recommendations made by them:

1. The tribal officials should keep in touch with the Indian students in college and let them know they care

2. The students should be provided with adequate financial support

3. The reservation schools should offer more college-oriented programs

4. The students should be given better pre-college preparation

Chavers (1980) recommended the following actions which college administrators and trustees could take to improve the success rates for Indian students:

1. Setting goals to have a "critical mass" of Indian students on campus to provide support to one another

2. Offering supportive service programs

3. Incorporating Indian Studies into the curriculum

4. Utilizing the local Indian community either as an advisory committee or by other means for support

5. Avoiding loans as part of the financial aid package

6. Encouraging Indian students to live on campus rather than in off-campus apartments or at home
7. Planning cultural events for them

Relationship of the Literature
to the Study

In summary, the review of the literature concerning the history of Indian education was relevant to the understanding of American Indians in higher education. The specific focus on the factors of attrition and retention of American Indians in higher education was necessary to the understanding of this study. Specific attention was given to the literature which discussed the factors which contributed to students continuing or discontinuing their college education.

CHAPTER III

DESIGN OF THE STUDY

Introduction

The purpose of this study was to examine attrition and retention as it related to American Indian students in educational programs at the University of North Dakota, Grand Forks, North Dakota. A comparison of the descriptive data from two groups, those who drop out and those graduate, was made.

Factors to be Studied

The three categories of factors to be studied were biographical, pre-college, and college. Some of the factors were single-variable and others were multi-variable. The following explanations will assist the reader to better understand the factors and variables involved in this study.

Biographical Factors

Sex. Sex was a single-variable factor. Consideration was given only to whether the participant was a male or female.

Age. Age was a multi-variable factor. Consideration was given to the age of the participant at first enrollment in a college or university, age at the time of enrollment at the University of North Dakota, and age during the last semester of attendance at the University of North Dakota.

Marital status. Marital status was a two-variable factor. Consideration was given to the marital status of the participant at the time of enrollment at the University of North Dakota and whether the marital status changed after enrollment at the University of North Dakota.

Dependents. The factor, dependents, was a two-variable factor. Consideration was given to the size of the participant's own family when first enrolled at the University of North Dakota and whether the size of the family increased or decreased since his/her first enrollment at the University of North Dakota.

Reservation where enrolled. Reservation where enrolled was a single-variable factor. Consideration was given to the participant who was enrolled at the Fort Berthold, Fort Totten, Standing Rock, or Turtle Mountain reservations.

American Indian blood quantum. American Indian blood quantum was a single-variable factor. Consideration was given to the American Indian blood quantum of the participant.

Family structure. Family structure was a single-variable factor. Consideration was given to the participant's family structure prior to coming to the University of North Dakota.

Parental income. Parental income was a two-variable factor. Consideration was given to the approximate annual income of the participant's parents while enrolled at the University of North Dakota and the number of family members supported by the parents' income.

Parental occupations. The factor, parental occupations, was a two-variable factor. Consideration was given to the occupations of the father and the mother.

Parental educational level. Parental educational level was a two-variable factor. Consideration was given to the educational level of the father and the mother.

Pre-College Factors

High school location. High school location was a single-variable factor. Consideration was given to whether the participant attended high school on or off a reservation.

Type of high school attended. Type of high school attended was a single-variable factor. Consideration was given to what type of high school the participant attended: Bureau of Indian Affairs non-boarding, Bureau of Indian Affairs boarding, tribally controlled, private/parochial, or public.

Size of high school graduating class. Size of high school graduating class was a single-variable factor. Consideration was given to the size of the participant's high school graduating class.

Pre-college educational graduation status. Pre-college educational graduation status was a single-variable factor. Consideration was given to whether the participant received a General Educational Development (GED) or high school diploma.

High school grade point average. High school grade point average was a single-variable factor. Consideration was given to the high school grade point average of the participant.

American College Testing (ACT) scores. The factor, American College Testing (ACT) scores; was a multi-variable factor. Consideration was given to the participant's scores in English, math, natural science, social studies, and composite on the American College Testing instrument.

High school preparation. High school preparation was a single-variable factor. Consideration was given to the participant's feelings regarding high school preparation for attempting college-level coursework.

High school career pathway. High school career pathway was a single-variable factor. Consideration was given to the type of career pathway the participant was preparing for while in high school: no career plans, employment, vocational training, or college education.

Use of high school guidance services. Use of high school guidance services was a single-variable factor. Consideration was given to how often the participant used the high school guidance services.

College Factors

Class level. Class level was a single-variable factor. Consideration was given to the participant's college class level: freshman, sophomore, junior, or senior.

College major. College major was a single-variable factor. Consideration was given to the college major declared by the participant.

College cumulative grade point average. College cumulative grade point average was a single-variable factor. Consideration was given to the participant's college cumulative grade point average.

College semester hour completion rate. College semester hour completion rate was a single-variable factor. Consideration was given to the average number of semester hours the participant completed each semester.

Number of semesters enrolled at the University of North Dakota.

Number of semesters enrolled at the University of North Dakota was a single-variable factor. Consideration was given to the number of semesters the participant was enrolled at the University of North Dakota.

Relevance of college coursework. Relevance of college coursework was a single-variable factor. Consideration was given to whether the college coursework was perceived as relevant or not relevant to the participant.

Career goal. Career goal was a single-variable factor. Consideration was given to whether the participant felt he/she had a definite career goal set at the time of enrollment at the University of North Dakota.

Study habits. The factor, study habits, was a multi-variable factor. Consideration was given to whether the study habits of the participant were well developed, the amount of time spent on college coursework, how the participant studied and the percentage of time that was spent on each method, and where the participant studied, including the percentage of time that was spent in each location.

Student financial aids. The factor, student financial aids, was a multi-variable factor. Consideration was given to how the participant managed college financial aids, the adequacy of financial aid received, whether the University of North Dakota should have distributed the student financial aids, and how student financial aids should be disbursed if the University of North Dakota developed a new disbursement plan.

Adjustment to life at the University of North Dakota. Adjustment to life at the University of North Dakota was a two-variable factor. Consideration was given to whether the participant felt the transition from home and high school to the University of North Dakota was difficult to make and how difficult the transition was from home and high school to the University of North Dakota.

Cultural conflict. Cultural conflict was a single-variable factor. Consideration was given to whether the participant experienced any significant cultural conflicts while attending the University of North Dakota.

Encouragement for college continuation. Encouragement for college continuation was a single-variable factor. Consideration was given to whom had the greatest influence on the participant's continuation of educational pursuits while attending the University of North Dakota.

Family responsibilities. The factor, family responsibilities, was a two-variable factor. Consideration was given to whether the participant had any direct responsibilities to his/her immediate family while attending the University of North Dakota and the type of responsibilities to the immediate family.

American Indian cultural involvement. American Indian cultural involvement was a single-variable factor. Consideration was given to the involvement by the participant in American Indian cultural activities.

Perceptions of being American Indian. The factor, perceptions of being American Indian, was a multi-variable factor. Consideration was given to whether the impressions held by the participant of being

American Indian were an advantage while attending the University of North Dakota, the college instructors' impressions of the participant's American Indian heritage, and the non-Indian students' impressions of the participant's American Indian heritage.

Participation in social activities. Participation in social activities was a two-variable factor. Consideration was given to the kinds of social activities the participant was involved in and the frequency of involvement in each activity and the effect the social activity involvement had on the participant's educational experience.

Use of American Indian counselors and staff. Use of American Indian counselors and staff was a multi-variable factor. Consideration was given to whether the participant used the American Indian counselors and staff, what kinds of assistance were received from the University of North Dakota American Indian counselors and staff, and how helpful the University of North Dakota American Indian counselors and staff were to the participant.

University of North Dakota instructor assistance. University of North Dakota instructor assistance was a single-variable factor. Consideration was given to how the participant felt regarding the assistance received by academic instructors.

Enrollment in Indian studies courses. Enrollment in Indian studies courses was a two-variable factor. Consideration was given to whether the participant enrolled in any Indian Studies courses and whether the Indian Studies courses provided encouragement to continue at the University of North Dakota.

Use of campus supportive services. Use of campus supportive services was a multi-variable factor. Consideration was given to the

types of campus supportive services used by the participant, how often the campus supportive services were used, and how satisfied the participant was with the campus supportive services.

Use of off-campus supportive services. Use of off-campus supportive services was a multi-variable factor. Consideration was given to the types of off-campus supportive services used by the participant, how often the off-campus supportive services were used, and how satisfied the participant was with the off-campus supportive services.

Instruments

A questionnaire and two information forms were constructed specifically for use in this study. The titles given to the instruments were the University of North Dakota American Indian Student Questionnaire (see appendix A), the Bureau of Indian Affairs Higher Education Information Form (see appendix B), and the University of North Dakota Registration Information Form (see appendix C). The instruments were designed to obtain information on the biographical factors, pre-college factors, and college factors. The three categories of factors selected from examination were developed by careful analysis of existing student records. In addition, there was consultation with currently enrolled University of North Dakota American Indian students, University of North Dakota American Indian faculty and staff, Bureau of Indian Affairs education specialists, American Indian educators, graduate committee members, and other professional personnel working with American Indian youth.

The University of North Dakota American Indian Student Questionnaire was used to gather data on the biographical, pre-college, and

college factors. The biographical factors on the questionnaire included marital status, number of dependents, family structure, parental occupations, and parental educational levels. The pre-college factors on the questionnaire included high school location, size of high school graduating class, pre-college educational graduation status, high school preparation, high school career pathway, and use of high school guidance services. The college factors on the questionnaire included relevance of college coursework, career goals, study habits, student financial aids, adjustment to life at the University of North Dakota, cultural conflict, encouragement for college continuation, family responsibilities, American Indian cultural involvement, perceptions of being American Indian, participation in social activities, use of American Indian counselors and staff, University of North Dakota instructor assistance, enrollment in Indian studies courses, use of campus supportive services, and use of off-campus supportive services.

The University of North Dakota Registration Information Form was used to gather data on the pre-college and college factors. The pre-college factors on the University of North Dakota Registration Information Form included high school grade point average and American College Testing (ACT) scores. The college factors on the University of North Dakota Registration Information Form included class level, college major, college cumulative grade point average, college semester hour completion rate, and number of semesters enrolled at the University of North Dakota.

The Bureau of Indian Affairs Higher Education Information Form was used to gather data on five biographical factors and one college

factor. The biographical factors on the Bureau of Indian Affairs Higher Education Information Form included sex, age, reservation where enrolled, American Indian blood quantum, and parental income. The college factor on the Bureau of Indian Affairs Higher Education Information Form was the type of high school attended.

The questionnaire was administered as a pilot study to American Indian students currently enrolled at the University of North Dakota for the purpose of validating clarity and readability. Any questions causing confusion or difficulty of interpretation to the pilot group were revised for clarity and readability. The Bureau of Indian Affairs Higher Education and University of North Dakota Registration Information Forms were reviewed by appropriate personnel to confirm availability of data from student records.

Research Sample

The research population consisted of undergraduate American Indian students receiving Bureau of Indian Affairs financial assistance who enrolled at the University of North Dakota during academic years 1970-1979. The total sample was to have included up to 160 students--80 dropouts and 80 graduates. There were to be 20 dropouts and 20 graduates randomly selected from each of the four reservations in North Dakota. The final total sample included 116 students--71 dropouts and 45 graduates.

A random sample of twenty students in the dropout category was selected from the Fort Berthold, Fort Totten, and Turtle Mountain reservations in North Dakota. There were eleven identified dropouts from the Standing Rock reservation in North Dakota. Of the 71 dropouts identified, questionnaire returns were obtained from 66 persons.

Information from the Registrar's Office and the Bureau of Indian Affairs was obtained on all 71 of the persons selected.

A random sample of twenty students in the graduate category was selected from the Fort Berthold and Turtle Mountain reservations. There were four graduates identified from the Standing Rock reservation and one from the Fort Totten reservation. Of the 45 graduates identified, questionnaire returns were obtained from 42 persons. Information from the Registrar's Office and the Bureau of Indian Affairs was obtained on all 45 of the persons selected.

The Table of Random Numbers was utilized to select out participants for the study when feasible. The Bureau of Indian Affairs education specialists assisted in selecting the research sample. Table 2 shows the rate of return of the three instruments used in this study.

Data Collection

To assist with data collection techniques and understanding of the study, the writer met with each of the Bureau of Indian Affairs education specialists responsible for the Higher Education Program at the four North Dakota reservations from 2-6 February 1981. A thorough description of the study was provided. As a result, each education specialist endorsed the study in the form of a letter (see appendix D).

A cover letter was developed for the purpose of providing pertinent information to the sample group (see appendix E). The letter was attached to each questionnaire at the time of administration. The letter included:

1. A statement regarding the need for the study
2. A statement regarding the purpose of the study

TABLE 2
INSTRUMENT RETURNS

Reservation Instruments	Groups	Fort Berthold Reservation	Fort Totten Reservation	Standing Rock Reservation	Turtle Mountain Reservation	Total Returns
The University of North Dakota Indian Student Question- naire	Dropouts	17	19	10	20	66
	Graduates	18	1	3	20	42
Questionnaire Returns		35	20	13	40	108
The Bureau of Indian Affairs Higher Education Information Form	Dropouts	20	20	11	20	71
	Graduates	20	1	4	20	45
BIA Information Form Return		40	21	15	40	116
The University of North Dakota Registration Information Form	Dropouts	20	20	11	20	71
	Graduates	20	1	4	20	45
UND Registration Information Form Return		40	21	15	40	116

3. A statement regarding the request for information
4. A statement assuring confidentiality
5. A statement regarding the manner in which participants were selected
6. A statement asking each person to assist by completing the enclosed questionnaire
7. A statement guaranteeing a summarization of the study if requested by the student

To insure a high rate of return for the questionnaire, a variety of data-gathering techniques was used. The process used at the Turtle Mountain and Fort Totten reservations was to hand deliver each questionnaire to each available student, then return later in the day to collect it. The personal contacts were made on 2-3 February 1981. For those who did not complete the questionnaire, a self-addressed envelope was provided and they were asked to return it as soon as possible. The letter, questionnaire, and a self-addressed envelope were sent to those not available. After one week, the writer attempted to contact those who had not responded by telephone. Those reached by telephone were interviewed using the questionnaire.

The process used at Fort Berthold and Standing Rock reservations was to mail the letter, the questionnaire, and a self-addressed envelope to all participants in the study. The first mailing was made shortly after 4 February 1981. A follow-up letter was prepared and sent approximately two weeks after the original mailing. The follow-up letter contained a restatement of the purpose of the study and a reassurance that responses were treated confidentially (see appendix E). After two additional weeks, a telephone interview was conducted

to gather the data from as many of the individuals who could be contacted who had not returned the questionnaire.

The data from the Bureau of Indian Affairs Higher Education offices and University of North Dakota Registrar's Office were collected in late February 1981. Personnel from the offices previously mentioned assisted the writer in gathering the necessary data on the information forms.

The data obtained from the questionnaire and two information forms were scored and transferred to Fortran C coding forms, then keypunched onto standard IBM computer cards, and analyzed statistically. The Statistical Package for the Social Sciences (SPSS) was used in the development of the computer program (Nie et al. 1975). The IBM 370/158 computer at the University of North Dakota Computer Center was used to process the data.

Statistical Procedures

In treating the data, appropriate statistical tests were employed. The suitable statistics to be used in analyzing the data for this study were chi square and t test. The familiar percentage and number descriptive statistics were also used.

As stated, when the data meets the assumptions of the t test, it is preferable to use the parametric statistic. Siegel (1956) presented the following:

The most powerful tests are those which have the strongest or most extensive assumptions. The parametric tests, for example, the t or F test, have a variety of strong assumptions underlying their use. When those assumptions are valid, these tests are the most likely of all tests to reject H_0 when H_0 is false. That is, when research data may appropriately be analyzed by a parametric test, that test will be more powerful than any other in rejecting H_0 when it is false . . . (p. 19).

The chi square test was the most appropriate statistical technique for this study. According to Siegel (1956), the rationale for using chi square is as follows:

The usual parametric technique for analyzing data from two independent samples is to apply a t test to the means of the two groups. The t test assumes that the scores (which are summed in the computing of the means) are independent observations from normally distributed populations with equal variances. This test, because it uses means and other statistics arrived at by arithmetical computation, requires that the observations be measured on at least an interval scale.

For a given research, the t test may be inapplicable for a variety of reasons. The researcher may find that (a) the assumptions of the t test are unrealistic for his data, (b) he prefers to avoid making the assumptions and thus to give his conclusions greater generality, or (c) his "scores" may not be truly numerical and therefore fail to meet the measurement requirement of the t test. In instances like these, the researcher may choose to analyze his data with one of the nonparametric statistical tests for two independent samples . . . (p. 96).

Siegel (1956) also states:

When the data of research consist of frequencies in discrete categories, the χ^2 test may be used to determine the significance of differences between two independent groups: The measurement involved may be as weak as nominal scaling.

The hypothesis under test is usually that the two groups differ with respect to some characteristic and therefore with respect to the relative frequency with which group members fall in several categories (p. 104).

In the case of k independent samples, Siegel (1956) explains:

The usual parametric technique for testing whether several independent samples have come from the same population is the one-way analysis of variance or F test. The assumptions associated with the statistical model underlying the F test are that the observations are independently drawn from normally distributed populations, all of which have the same variance. The measurement requirement of the F test is that the research must achieve at least interval measurement of the variable involved.

If a researcher finds such assumptions are unrealistic for his data, or if his measurement is weaker than interval scaling, or if he wishes to avoid making the restrictive assumptions of the F test and thus to increase the generality of his findings, he may use one of the nonparametric statistical tests for k independent samples. . . . These nonparametric tests have the further advantage of enabling data which are inherently only classificatory (in a nominal scale) or in ranks (in an ordinal scale) to be examined for significance (pp. 174-175).

Siegel (1956) further explains:

When frequencies in discrete categories (either nominal or ordinal) constitute the data of research, the χ^2 test may be used to determine the significance of the differences among k independent groups. The χ^2 test for k independent samples is a straightforward extension of the χ^2 test for two independent samples. . . . In general, the test is the same for both two and k independent samples (p. 175).

Siegel (1956) concludes:

There is usually no clear alternative to the χ^2 test when it is used, and thus the exact power of the χ^2 test usually cannot be computed. However, Cochran (1952, pp. 323-324) has shown that the limiting power distribution of χ^2 tends to 1 as N becomes larger (p. 179).

Percentages and numbers were sometimes used to describe data. Comparisons may be drawn from a visual examination of those descriptive data.

CHAPTER IV

ANALYSIS OF DATA

Introduction

This chapter is presented in four parts: a description of the groups which were studied, the biographical variables, the pre-college variables, and the college variables. The analysis and results of this study are presented according to the testable hypotheses stated in the null form. Tables summarizing the data concerning specific hypotheses were included in the discussion.

Description of the Groups

The study surveyed 116 (100%) students--45 (39%) graduates and 71 (61%) dropouts. Fort Berthold and the Turtle Mountain reservations each had forty students who participated in the study; Fort Totten had twenty-one and Standing Rock had fifteen. In the total group, 41 (35%) were male and 75 (65%) were female. The average age of the group was twenty-four years. On the basis of American Indian blood quantum, it was found that 19 (17%) of the respondents were between one-fourth and one-half degree, 49 (42%) were between one-half and three-fourths degree, and 48 (41%) were between three-fourths degree and full blood. The majority (N = 86 or 74%) had attended high school on the reservation, and the total group had a mean high school grade point average of 2.76 on a four-point scale. In addition, the majority of the students (N = 76 or 66%) surveyed were enrolled in University

College and the Center for Teaching and Learning, and the entire sample had completed an average of 8.6 semester hours per semester. The college cumulative grade point average for the total group was 1.93.

Of the 71 (100%) students who did not complete their college education, 20 (28%) were enrolled at Fort Berthold, 20 (28%) were enrolled at Fort Totten, 20 (28%) were enrolled at the Turtle Mountains, and 11 (16%) were enrolled at Standing Rock. Forty-six (65%) of the 71 (100%) students were female and 25 (35%) were male. The average age of the group at first enrollment in any college was twenty, and the average at first enrollment at the University of North Dakota also was twenty. Eleven (16%) of the dropouts were between one-fourth and one-half degree Indian blood, 33 (46%) were between one-half and three-fourths degree, and 27 (38%) were between three-fourths degree and full blood. The preponderance of the dropouts grew up in homes with their parents (N = 47 or 66%) and had attended high school on reservations (N = 49 or 69%). Based on the scores available, they had an average American College Testing (ACT) composite score of 13.76 and had done "C" high school work. At the University of North Dakota, the majority of these students were enrolled in University College. Of the dropouts, 38 (53%) were freshmen, 19 (27%) were sophomores, 11 (16%) were juniors, and 3 (4%) were seniors. Dropouts had an average semester hour completion rate of 6.34 and a college grade point average of 1.45.

Of the 45 (100%) graduates identified, 20 (45%) were enrolled at Fort Berthold, 20 (45%) were enrolled at the Turtle Mountains, 4 (8%) were enrolled at Standing Rock, and 1 (2%) was enrolled at Fort

Totten. Twenty-nine (64%) of the 45 (100%) students were female and 16 (36%) were male. On the basis of Indian blood quantum, 8 (18%) were between one-fourth and one-half degree, 16 (36%) were between one-half and three-fourths degree, and 21 (46%) were between three-fourths degree and full blood. The average age of the graduates was twenty-four years at the time of first enrollment at the University of North Dakota. The majority of these students grew up in homes with their parents (N = 35 or 78%) and had attended high school on the reservation (N = 28 or 62%). In high school, they had done "B" work and, based on the scores available, had a mean American College Testing (ACT) composite score of 18.14. This group had an average semester hour completion rate of 12.24 with an average college grade point average of 2.69. The majority of the graduates received degrees from the Center for Teaching and Learning and were enrolled in college an average of 9.11 semesters.

Biographical Factors

Null hypothesis 1. There will be no significant difference on the basis of sex between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 3.

An examination of the data presented in table 3 which were treated with the chi square statistic shows that there was no statistical difference on the basis of sex at the .05 level when comparing those who drop out with those who graduate. Thus, the null hypothesis was retained.

TABLE 3

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO
DIFFERENCE ON THE BASIS OF SEX BETWEEN
DROPOUTS AND GRADUATES

Group	Male	Female
Graduates	16	29
Dropouts	25	46

$$\chi^2 = .001 \text{ with } df = 1, p > .05$$

Null hypothesis 2. There will be no significant difference on the basis of age between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 4.

An examination of the data presented in table 4 which were treated with the t test reveals that there was a highly significant statistical difference on the basis of age at the .001 level when comparing those who drop out with those who graduate. The graduates tended to be older at the time of first enrollment in any college and at the time of first enrollment at the University of North Dakota. The age during the last semester of attendance at the University of North Dakota may be higher for graduates due to the fact that they remained in school longer. The null hypothesis was rejected.

Null hypothesis 3. There will be no significant difference on the basis of marital status between American Indian students who drop out of and American Indian students who graduate from educational

TABLE 4

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF AGE BETWEEN
DROPOUTS AND GRADUATES

Group	Dropouts		Graduates		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
Age at first enrollment in a college or uni- versity	20.11	4.25	24.38	8.02	3.73 ^a
Age at the time of enrollment at UND	20.76	4.60	25.38	7.58	4.08
Age during the last semester of atten- dance at UND	21.89	4.59	28.69	7.00	6.32

^a significant at the .001 level with *df* = 114

programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 5 and table 6.

An examination of the data presented in table 5 which were treated with the chi square test shows that there was a significant difference on the basis of marital status at the time of first enrollment at the University of North Dakota at the .001 level when comparing those who drop out with those who graduate. Dropouts were more likely to be single. In relation to table 4, it may be assumed that because the dropouts were younger there was a greater probability that they were single. Therefore, this portion of the null hypothesis was rejected.

An examination of the data presented in table 6 which were treated with the chi square test reveals that there was no significant

TABLE 5

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF MARITAL STATUS AT THE TIME OF FIRST
ENROLLMENT AT THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

Group	Never Married	Married	Separated	Divorced
Graduates	19	16	1	6
Dropouts	55	7	0	4

$$x^2 = 18.01 \text{ with } df = 3, p < .001$$

TABLE 6

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF CHANGE IN MARITAL STATUS AFTER
ENROLLMENT AT THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	9	33
Dropouts	13	52

$$x^2 = .15 \text{ with } df = 1, p > .05$$

difference on the basis of change in marital status after enrollment at the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. Therefore, this portion of the null hypothesis was retained.

In summary, it was determined that there was a significant difference between the two groups on the basis of marital status at the time of enrollment at the University of North Dakota. There was

no significant difference between the two groups on the basis of change in marital status after enrollment at the University of North Dakota.

Null hypothesis 4. There will be no significant difference on the basis of number of dependents between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 7 and table 8.

TABLE 7

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF THE NUMBER OF DEPENDENTS AT THE TIME OF
FIRST ENROLLMENT AT THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

Group	0	1	2	3	4	5 or More
Graduates	4	11	6	10	6	8
Dropouts	11	36	6	5	3	10

$$\chi^2 = 18.47 \text{ with } df = 5, p < .05$$

An examination of the data presented in table 7 which were treated with the chi square statistic shows that there was a statistical difference on the basis of number of dependents at the time of first enrollment at the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. The seventy-one dropouts tended to have fewer dependents than the forty-five graduates. Therefore, this portion of the null hypothesis was rejected.

TABLE 8

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF CHANGE IN NUMBER OF DEPENDENTS AFTER
ENROLLMENT AT THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	17	24
Dropouts	23	39

$$\chi^2 = 1.97 \text{ with } df = 1, p > .05$$

An examination of the data presented in table 8 which were treated with the chi square statistic shows that there was no statistical difference on the basis of change in number of dependents after enrollment at the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. Therefore, this portion of the null hypothesis was retained.

In summary, there was a significant difference between the groups on the basis of the number of dependents at the time of first enrollment at the University of North Dakota. However, it should be noted that because the dropouts were younger and single, it would be expected that they would have had fewer dependents. There was no significance between the groups on the basis of change in number of dependents after enrollment at the University of North Dakota.

Null hypothesis 5. There will be no significant difference on the basis of reservation where enrolled between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

This hypothesis was not statistically tested for significance because of the quota sampling process. These data were used for description purposes as shown in table 9.

TABLE 9
RESERVATION ENROLLMENT OF DROPOUTS AND GRADUATES

Group	Fort Berthold	Fort Totten	Standing Rock	Turtle Mountain
Graduates	20	1	4	20
Dropouts	20	20	11	20

Null hypothesis 6. There will be no significant difference on the basis of American Indian blood quantum between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 10.

An examination of the data presented in table 10 which were treated with the chi square statistic shows that there was no statistical difference on the basis of American Indian blood quantum at the .05 level when comparing those who drop out and those who graduate. A visual review of table 10 reveals that the majority of students surveyed were of one-half degree American Indian blood or more. However, the null hypothesis was retained.

Null hypothesis 7. There will be no significant difference on the basis of family structure between American Indian students who drop out of and American Indian students who graduate from educational

TABLE 10

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF AMERICAN INDIAN BLOOD QUANTUM
BETWEEN DROPOUTS AND GRADUATES

Group	1/4 - less than 1/2	1/2 - less than 3/4	3/4 To Full
Graduates	8	16	21
Dropouts	11	33	27

$$x^2 = 1.36 \text{ with } df = 3, p > .05$$

programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 11.

TABLE 11

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF FAMILY STRUCTURE BETWEEN
DROPOUTS AND GRADUATES

Group	My Own Parents	A Parent or Step-Parent	1 Parent Only	My Grand- Parent	My Aunt or Uncle	Other (Guardian or Foster Parents)
Graduates	35	1	2	3	0	2
Dropouts	47	2	8	9	2	2

$$x^2 = 6.17 \text{ with } df = 5, p > .05$$

An examination of the data presented in table 11 which were treated with the chi square statistic shows that there was no statistical difference on the basis of family structure at the .05 level

when comparing those who drop out with those who graduate. A visual examination of table 11 shows that the majority from both groups lived with both parents. The null hypothesis was retained.

Null hypothesis 8. There will be no significant difference on the basis of parental income between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 12.

TABLE 12

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF PARENTAL INCOME BETWEEN
DROPOUTS AND GRADUATES

Group	\$ 0 to 5,000	\$5,000 to 10,000	\$10,000 to 15,000	\$15,000 to 20,000	\$20,000 to 30,000	\$30,000 and over
Graduates	28	9	7	0	1	0
Dropouts	40	18	9	2	1	0

$$\chi^2 = 2.67 \text{ with } df = 4, p > .05$$

An examination of the data presented in table 12 which were treated with the chi square test shows that there was no statistical difference on the basis of parental income at the .05 level when comparing those who drop out with those who graduate. The preponderance of the study group reported lower income levels. Few parents had income levels over \$15,000. The null hypothesis was retained.

Null hypothesis 9. There will be no significant difference on the basis of parental occupations between American Indian students who

drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 13 and table 14. (See appendix F for a more detailed list of occupation categories.)

An examination of the data presented in table 13 which were treated with the chi square test shows that there was no statistical difference on the basis of the mother's occupation during time of enrollment at the University of North Dakota at the .05 level comparing those who drop out with those who graduate. This portion of the null hypothesis was retained.

An examination of the data presented in table 14 which were treated with the chi square test shows that there was no statistical difference on the basis of the father's occupation during time of enrollment at the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. This portion of the null hypothesis was retained.

In summary, parents' occupations were not significant factors in comparing the two groups. Thus, the null hypothesis was retained.

Null hypothesis 10. There will be no significant difference on the basis of parental educational levels between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 15 and table 16.

An examination of the data presented in table 15 which were treated with the chi square test shows that there was no statistical

TABLE 13

CHI SQUARE TEST FOR TESTING FOR HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF THE MOTHER'S OCCUPATION DURING THE TIME OF ENROLLMENT AT THE UNIVERSITY OF NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

Groups	Professional Technical & Kindred Workers	Managers Officials Proprietors	Clerical Sales & Kindred Workers	Craftsman Foreman Kindred Workers	Operatives & Kindred Workers	Service Workers	Laborers	No Occupation	Doesn't Work	Deceased
Graduates	5	4	1	2	0	13	1	13	3	0
Dropouts	7	4	8	7	0	8	4	16	9	3

$\chi^2 = 13.19$ with $df = 9$, $p > .05$

TABLE 14

CHI SQUARE TEST FOR TESTING FOR HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF THE FATHER'S
OCCUPATION DURING THE TIME OF ENROLLMENT AT THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

Groups	Professional Technical & Kindred Workers	Managers Officials Proprietors	Clerical Sales & Kindred Workers	Craftsman Foreman Kindred Workers	Operatives & Kindred Workers	Service Workers	Laborers	No Occupation	Doesn't Work	Deceased
Graduates	2	9	2	2	1	3	6	7	4	6
Dropouts	2	9	2	10	1	7	8	6	6	14

$x^2 = 6.39$ with $df = 9$, $p > .05$

TABLE 15

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF THE
MOTHER'S EDUCATIONAL LEVEL BETWEEN DROPOUTS AND GRADUATES

Group	0-4th Grade	5-8th Grade	9-12th Grade	Vocational Technical Training	1-2 years College	3-4 years College	Graduate Work	Unknown
Graduates	3	12	11	3	4	5	0	3
Dropouts	4	12	31	1	6	6	1	5

$x^2 = 9.19$ with $df = 7$, $p > .05$

TABLE 16

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF THE
FATHER'S EDUCATIONAL LEVEL BETWEEN DROPOUTS AND GRADUATES

Group	0-4th Grade	5-8th Grade	9-12th Grade	Vocational Technical Training	1-2 years College	3-4 years College	Graduate Work	Unknown
Graduates	3	14	13	0	6	2	0	3
Dropouts	4	18	25	0	6	5	1	7

$\chi^2 = 2.74$ with $df = 7$, $p > .05$

difference on the basis of mother's educational level at the .05 level comparing those who drop out with those who graduate. The null hypothesis was retained.

An examination of the data presented in table 16 which were treated with the chi square test shows that there was no statistical difference on the basis of the father's educational level at the .05 level when comparing those who drop out with those who graduate.

In summary, parents' educational levels were not significant factors in comparing the two groups. Therefore, the null hypothesis was retained.

Pre-College Factors

Null hypothesis 1. There will be no significant difference on the basis of high school location between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 17.

An examination of the data presented in table 17 which were treated with the chi square test shows that there was no statistical difference on the basis of high school location at the .05 level when comparing those who drop out with those who graduate. The majority of the students studied attended high school on the reservation. Thus, the null hypothesis was retained.

Null hypothesis 2. There will be no significant difference on the basis of type of high school attended between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

TABLE 17

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF HIGH SCHOOL LOCATION BETWEEN
DROPOUTS AND GRADUATES

Group	On reservation	Off reservation
Graduates	28	12
Dropouts	49	17

$$x^2 = 1.97 \text{ with } df = 1, p > .05$$

The results of the statistical treatment of this hypothesis are presented in table 18.

TABLE 18

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF TYPE OF HIGH SCHOOL ATTENDED
BETWEEN DROPOUTS AND GRADUATES

Group	BIA Non-Boarding	BIA Boarding	Tribally Controlled	Private/ Parochial	Public
Graduates	17	6	0	4	17
Dropouts	27	7	2	6	30

$$x^2 = 6.83 \text{ with } df = 4, p > .05$$

An examination of the data presented in table 18 which were treated with the chi square test shows that there was no statistical difference on the basis of type of high school attended at the .05 level when comparing those who drop out with those who graduate. Therefore, the null hypothesis was retained.

Null hypothesis 3. There will be no significant difference on the basis of size of high school graduating class between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 19.

TABLE 19

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF SIZE OF HIGH SCHOOL GRADUATING CLASS BETWEEN DROPOUTS AND GRADUATES

Dropouts		Graduates		<i>t</i> value
\bar{X}	SD	\bar{X}	SD	
41.96	34.07	66.84	107.84	1.81

df = 114, $p > .05$

An examination of the data presented in table 19 which were treated with the *t* test indicates that there was no significant difference on the basis of the size of high school graduating class at the .05 level when comparing those who drop out with those who graduate. The mean value for those who graduate was higher than for those who drop out. However, since no significant difference was found, the null hypothesis was retained.

Null hypothesis 4. There will be no significant difference on the basis of pre-college educational graduation status between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 20.

TABLE 20

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF PRE-COLLEGE EDUCATIONAL GRADUATION
STATUS BETWEEN DROPOUTS AND GRADUATES

Group	General Educational Development (GED)	High School Diploma
Graduates	4	37
Dropouts	6	60

$$x^2 = .14 \text{ with } df = 1, p > .05$$

An examination of the data presented in table 20 which were treated with the chi square statistic shows that there was no statistical difference on the basis of pre-college educational graduation status at the .05 level comparing those who drop out with those who graduate. A visual analysis shows that a majority of the sample completed a regular high school program. However, the null hypothesis was retained.

Null hypothesis 5. There will be no significant difference on the basis of high school grade point average between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 21.

An examination of the data presented in table 21 which were treated with the chi square statistic shows that there was a

TABLE 21

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF HIGH SCHOOL GRADE POINT AVERAGE
BETWEEN DROPOUTS AND GRADUATES

Group	A (4.00)	B (3.9 - 3.0)	C (2.9 - 2.0)	D (1.9 - 1.0)	F (.9 - Below)
Graduates	0	20	20	4	0
Dropouts	0	14	46	10	0

$$\chi^2 = 8.47 \text{ with } df = 2, p < .05$$

statistical difference on the basis of high school grade point average at the .05 level when comparing those who drop out with those who graduate. Analysis of the data shows that the graduates tended to have higher grades in high school than the dropouts. Therefore, the null hypothesis was rejected.

Null hypothesis 6. There will be no significant difference on the basis of American College Testing (ACT) scores between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 22.

An examination of the data presented in table 22 which were treated with the *t* test indicates that there were significant differences in all American College Testing (ACT) subject-area scores when comparing those who drop out with those who graduate. There was statistical difference at the .01 level for English, social science, natural science, and composite. In addition, there was statistical

TABLE 22

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE
BASIS OF AMERICAN COLLEGE TESTING (ACT) SCORES
BETWEEN DROPOUTS AND GRADUATES

	Dropouts (N = 45)		Graduates (N = 21)		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
English	13.11	4.94	17.43	4.15	3.47 ^a
Math	12.24	5.94	17.18	6.63	2.98 ^b
Social Science	13.27	5.51	18.24	5.65	3.39 ^a
Natural Science	15.80	5.24	19.42	4.72	2.70 ^a
Composite	13.76	4.34	18.14	4.23	3.85 ^a

^asignificant at .01 level with df = 64

^bsignificant at .001 level with df = 64

difference at the .001 level for math. It should be pointed out, however, that the American College Testing (ACT) scores were unavailable on all participants. A total of sixty-six scores were available of which forty-five were dropouts and twenty-one were graduates.

In summary, the mean scores for those who graduate were higher in all five subject areas than for those who drop out. In further examination of the data, it is noted that both groups surveyed scored highest in the natural science area and lowest in the math area. The higher American College Testing (ACT) scores of graduates are consistent with the information in table 21, which shows that graduates had higher high school grade point averages. Since there was a significant difference found, the null hypothesis was rejected.

Null hypothesis 7. There will be no significant difference on the basis of high school preparation between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 23.

TABLE 23

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF HIGH SCHOOL PREPARATION FOR
ATTEMPTING COLLEGE-LEVEL COURSEWORK
BETWEEN DROPOUTS AND GRADUATES

Group	Poor	Fair	Average	Above Average	Superior
Graduates	10	8	17	6	1
Dropouts	13	18	26	8	0

$$\chi^2 = 2.71 \text{ with } df = 4, p > .05$$

An examination of the data presented in table 23 which were treated with the chi square statistic reveals that there was no significant difference on the basis of high school preparation for attempting college-level coursework at the .05 level when comparing those who graduate. Therefore, the null hypothesis was retained.

Null hypothesis 8. There will be no significant difference on the basis of high school career pathway between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 24.

TABLE 24

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF HIGH SCHOOL CAREER PATHWAY
BETWEEN DROPOUTS AND GRADUATES

Group	Employment	Vocational School Training	College Education	On The Job Training	No Career Plans
Graduates	2	5	26	1	8
Dropouts	5	7	39	1	14

$$\chi^2 = .55 \text{ with } df = 4, p > .05$$

An examination of the data presented in table 24 which were treated with the chi square statistic shows that there was no statistical difference on the basis of high school career pathway at the .05 level when comparing those who drop out with those who graduate. Analysis of table 24 shows that the majority of the sample group was planning for a college education. The null hypothesis was retained.

Null hypothesis 9. There will be no significant difference on the basis of use of high school guidance services between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 25.

An examination of the data presented in table 25 which were treated with the chi square statistic shows that there was no statistical difference on the basis of use of high school guidance services at the .05 level when comparing those who drop out with those who graduate. Further analysis of table 25 shows that use of the high

TABLE 25

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF USE OF HIGH SCHOOL GUIDANCE SERVICES
BETWEEN DROPOUTS AND GRADUATES

Group	Never	Seldom	Occasionally	Often	Frequently
Graduates	12	14	11	5	0
Dropouts	13	26	19	3	2

$$x^2 = 4.96 \text{ with } df = 4, p > .05$$

school guidance services by both groups was from low to moderate. Therefore, the null hypothesis was retained.

College Factors

Null hypothesis 1. There will be no significant difference on the basis of class level between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

This hypothesis was not statistically tested for significance. It is easily deduced that there would be a significant difference since the graduates all have completed their programs and hold senior class status. However, class level was used for descriptive purposes as shown in table 26.

Null hypothesis 2. There will be no significant difference on the basis of college major between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

TABLE 26

CLASS LEVELS OF DROPOUTS AND GRADUATES

Group	Freshman	Sophomore	Junior	Senior
Graduates	0	0	0	45
Dropouts	38	19	11	3

This hypothesis was not statistically tested for significance. It is easily deduced that there would be a significant difference since the dropouts would typically be enrolled in University College and would not have declared a major. However, college major was used for descriptive purposes as shown in table 27. (See appendix G for a complete list of the University of North Dakota departments.)

Null hypothesis 3. There will be no significant difference on the basis of college cumulative grade point average between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 28.

An examination of the data presented in table 28 which were treated with the t test shows that there was a statistical difference on the basis of college cumulative grade point average at the .001 level when comparing those who drop out with those who graduate. The mean value for those who graduate was higher than for those who drop out. However, it is important to note that the University of North Dakota requires a 2.00 cumulative grade point average to graduate.

TABLE 27

DECLARED COLLEGE MAJORS OF DROPOUTS AND GRADUATES

	Graduates	Dropouts
Arts and Sciences	1	6
Business Administration	2	6
Business and Vocational Education	1	0
Center for Teaching and Learning	23	3
Engineering	1	1
Fine Arts	1	0
Home Economics	1	0
Human Resource & Development	2	3
Indian Studies	2	0
Mathematics	1	0
Medicine	1	1
Political Science	2	0
Social Work	5	1
Visual Arts	1	0
University College	1	49

TABLE 28

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF COLLEGE CUMULATIVE GRADE POINT AVERAGE BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
College Grade Point Average	1.45	1.03	2.69	.35	7.73 ^a

^asignificant at .001 level with *df* = 4

Therefore, this is somewhat misleading, as all the graduates surveyed would have had to meet this requirement to graduate. However, since there was a significant difference, the null hypothesis was rejected.

Null hypothesis 4. There will be no significant difference on the basis of college semester hour completion rate between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 29.

An examination of the data presented in table 29 which were treated with the *t* test shows that there was a statistical difference on the basis of college semester hour completion rate at the .001 level when comparing those who drop out with those who graduate. The mean value for those who graduate was higher than those who drop out. However, it is easily deduced that those who drop out are not going to have as many semester hours as those who graduate. The null hypothesis was rejected.

TABLE 29

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF COLLEGE SEMESTER HOUR COMPLETION RATE BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
Semester Hour Completion Rate	6.34	4.27	12.24	2.00	8.68 ^a

^asignificant at .001 level with *df* = 114

Null hypothesis 5. There will be no significant difference on the basis of number of semesters enrolled at the University of North Dakota between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 30.

An examination of the data presented in table 30 which were treated with the *t* test shows that there was a statistical difference on the basis of number of semesters enrolled in the University of North Dakota at the .001 level when comparing those who drop out with those who graduate. Further analysis of the data in table 30 shows the mean value for those who graduate was higher than for those who drop out. However, it is important to note that those who graduate will typically be enrolled for more semesters than those who drop out. In addition, it is important to point out that it took the graduates an average of 9.11 semesters to complete their college degrees. Since there was significant difference, the null hypothesis was rejected.

TABLE 30

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF NUMBER OF SEMESTERS ENROLLED AT THE UNIVERSITY OF NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
Number of Semesters Enrolled at the University of North Dakota	3.13	2.40	9.11	3.14	11.60 ^a

^asignificant at .001 level with df = 114

Null hypothesis 6. There will be no significant difference on the basis of relevance of college coursework between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 31.

TABLE 31

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF RELEVANCE OF COLLEGE COURSEWORK BETWEEN DROPOUTS AND GRADUATES

Group	Not Relevant	Relevant
Graduates	5	37
Dropouts	28	35

χ^2 13.19 with df = 1, $p < .01$

An examination of the data presented in table 31 which were treated with the chi square statistic shows that there was a statistical difference on the basis of relevance of college coursework at the .01 level when comparing those who drop out with those who graduate. In analyzing the data in table 31, the coursework was of greater relevance to the graduates than it was to the dropouts. In addition, it may be assumed that because the dropouts did not complete their college programs, they viewed college coursework to be less relevant. The null hypothesis was rejected.

Null hypothesis 7. There will be no significant difference on the basis of career goals between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 32.

TABLE 32

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF CAREER GOALS BETWEEN
DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	27	15
Dropouts	29	37

$$x^2 = 4.27 \text{ with } df = 1, p < .05$$

An examination of the data presented in table 32 which were treated with the chi square test shows that there was a statistical difference on the basis of career goals at the .05 level when comparing

those who drop out with those who graduate. The graduates tend to have had more clear career goals than did the dropouts. Therefore, the null hypothesis was rejected.

Null hypothesis 8. There will be no significant difference on the basis of study habits between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 33, table 34, table 35, table 36, table 37, and table 38.

TABLE 33

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF DEVELOPMENT OF STUDY HABITS PRIOR TO
COLLEGE ENROLLMENT BETWEEN
DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	14	28
Dropouts	19	46

$$\chi^2 = .32 \text{ with } df = 1, p > .05$$

An examination of the data presented in table 33 which were treated with the chi square test shows that there was no statistical difference on the basis of development of study habits prior to college enrollment at the .05 level when comparing those who drop out with those who graduate. Thus, this portion of the null hypothesis was retained.

TABLE 34

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF THE AMOUNT OF TIME SPENT ON
COLLEGE COURSEWORK OUTSIDE OF CLASS
BETWEEN DROPOUTS AND GRADUATES

Group	0 hrs Per Week	1-5 hrs Per Week	6-10 hrs Per Week	11-15 hrs Per Week	16-20 hrs Per Week	More than 20 hrs Per Week
Graduates	1	10	16	8	5	2
Dropouts	3	23	24	12	3	1

$$\chi^2 = 4.24 \text{ with } df = 5, p > .05$$

An examination of the data presented in table 34 which were treated with the chi square test shows that there was no statistical difference on the basis of amount of time spent on college coursework outside of class at the .05 level when comparing those who drop out with those who graduate. It may be noted that the majority of the students surveyed spent one to ten hours per week studying outside of class. In addition, few participants spent zero hours or more than twenty hours per week in study. Thus, this portion of the null hypothesis was retained.

Table 35 shows the number and percentage of respondents who utilized each study method. An examination of the data presented in table 35 which was treated with the chi square statistic shows that there was a statistical difference on the basis of study methods used at the .05 level when comparing those who drop out with those who graduate. Graduates apparently preferred to study with friend/peer and utilized the aid of a tutor to a greater extent than did the

dropouts. In addition, the primary preference for both groups was to study alone rather than with others. Therefore, this portion of the null hypothesis was rejected.

TABLE 35

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF STUDY METHODS USED BY STUDENTS
BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates	
	N	%	N	%
Alone	63	88.73	41	91.11
With a friend/peer	24	33.80	26	57.77
With the aid of a tutor	8	11.27	8	17.78
Study group(s)	6	8.45	6	8.45
Other	1	1.41	2	2.82

$$\chi^2 = 10.42 \text{ with } df = 4, p < .05$$

An examination of the data presented in table 36 which were treated with the *t* test shows that there was no statistical difference on the basis of percentage of time spent on each study method at the .05 level when comparing those who drop out with those who graduate. In analyzing the mean scores, both groups spend similar proportions of time on each study method. In addition, both groups spend the greatest proportion of their time studying alone. Therefore, this portion of the null hypothesis was retained.

Table 37 shows the number and percentage of respondents who utilized each location to study. An examination of the data presented in table 37 which were treated with the chi square statistic reveals

TABLE 36

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE
BASIS OF PERCENTAGE OF TIME SPENT ON EACH STUDY
METHOD BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
Alone	75.97	34.72	74.35	32.96	.25
With a friend/peer	11.76	23.51	12.29	18.85	.13
With the aid of a tutor	2.41	8.69	1.69	4.70	.51
Study group(s)	2.11	12.09	2.11	6.17	.00
Other	.28	1.66	.55	.37	.54

df = 114, $p > .05$

TABLE 37

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF LOCATION OF STUDY BETWEEN
DROPOUTS AND GRADUATES

	Dropouts		Graduates	
	N	%	N	%
In my dormitory room/home	63	88.73	42	93.33
In the library	24	33.80	28	62.22
In my academic department	7	9.86	7	15.55
In the University Center	10	14.08	1	2.22
In the Cultural Center	8	11.27	8	17.78
In special program areas	3	4.23	2	4.44

$\chi^2 = 13.48$ with df = 5, $p < .05$

that there was a statistical difference on the basis of location of study at the .05 level when comparing those who drop out with those who graduate. The library, academic department, and cultural center were significant with more graduates preferring to study in these locations. Fewer graduates preferred to study in the University Center than did dropouts. An almost equal percentage of graduates and dropouts preferred to study in their dormitory room/home and in special program areas. Since there were significant differences found, the null hypothesis for this portion was rejected.

TABLE 38

t TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF PERCENTAGE OF TIME SPENT STUDYING IN EACH LOCATION BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates		<i>t</i> value
	\bar{X}	SD	\bar{X}	SD	
In my dormitory/room	72.89	33.50	66.78	28.55	1.01
In the library	9.15	17.32	15.82	17.50	2.01 ^a
In my academic dept.	1.76	5.86	3.85	12.82	1.25
In the University Ctr.	3.23	9.49	2.33	4.95	-0.59
In Cultural Center	2.68	9.29	4.22	10.92	.82
In special program areas	.38	1.77	.33	1.65	.14

^asignificant at .05 level with *df* = 14

An examination of the data presented in table 38 which were treated with the *t* test shows that there was a statistical difference on the basis of percentage of time spent studying in each location at

the .05 level when comparing those who drop out with those who graduate. The one factor which was significant was the percentage of time spent studying in the library. Graduates tended to spend more time studying in the library than did dropouts. Since one of the six comparisons was significant, this portion of the null hypothesis was partially rejected.

In summary, no difference was found between the two groups based on the development of study habits prior to college enrollment and on the amount of time spent on college coursework outside of class. There was a significant difference found between the groups based on the study methods used, but no significance was found based on the percentage of time spent on each study method. Graduates tended to study with a friend/peer and with the aid of a tutor more so than did dropouts. On the basis of location of study, significant differences were found in that more graduates studied in the library than did dropouts. In addition, the dropouts preferred to study in the University Center more than did graduates. There was only one factor which was significant for the percentage of time spent studying in each location. Graduates spent more time studying in the library than did dropouts.

Null hypothesis 9. There will be no significant difference on the basis of student financial aids between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 39, table 40, table 41, and table 42.

TABLE 39

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF PERCEPTIONS OF FINANCIAL AIDS
MANAGEMENT BETWEEN DROPOUTS AND GRADUATES

	Poorly	Fair	Average	Above Average	Superior
Graduates	1	10	15	13	3
Dropouts	18	16	20	8	3

$$x^2 = 14.39 \text{ with } df = 4, p < .05$$

An examination of the data presented in table 39 which were treated with the chi square statistic shows that there was a statistical difference on the basis of perceptions of financial aids management at the .05 level when comparing those who drop out with those who graduate. More dropouts than graduates rated themselves poorly on the basis of financial aids management. Since a significant difference was identified, the null hypothesis for this portion was rejected.

An examination of the data presented in table 40 which were treated with the chi square statistic shows that there was no significant difference on the basis of perceptions of whether or not the financial aids received were adequate at the .05 level when comparing those who drop out with those who graduate. Thus, the null hypothesis was retained.

An examination of the data presented in table 41 which were treated with the chi square statistic shows that there was a statistical difference on the basis of change in procedure of financial aids disbursement at the University of North Dakota at the .05 level when

TABLE 40

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF PERCEPTIONS OF WHETHER OR NOT
FINANCIAL AIDS RECEIVED WERE ADEQUATE
BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	20	22
Dropouts	24	42

$$x^2 = 1.35 \text{ with } df = 1, p > .05$$

TABLE 41

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF CHANGE IN PROCEDURE OF FINANCIAL
AIDS DISBURSEMENT AT THE UNIVERSITY OF NORTH
DAKOTA BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	10	32
Dropouts	32	33

$$x^2 = .16 \text{ with } df = 1, p < .05$$

those who drop out with those who graduate. Graduates recommended that the University of North Dakota not change the procedure in which financial aids are disbursed. Since a statistical difference was found, the null hypothesis for this portion was rejected.

An examination of the data presented in table 42 which were treated with the chi square statistic shows that there was statistical difference on the basis of recommendations for financial aids disbursement at the .05 level when comparing those who drop out with those who

TABLE 42

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF RECOMMENDATIONS FOR FINANCIAL AIDS
DISBURSEMENT BETWEEN DROPOUTS AND GRADUATES

Group	Weekly	(3 times) Monthly	2 times beginning & middle Mid-Semester
Graduates	9	18	13
Dropouts	25	31	8

$$\chi^2 = 7.03 \text{ with } df = 2, p < .05$$

graduate. Dropouts preferred financial aids to be disbursed more often (weekly) than did the graduates. Since statistical difference was revealed, the null hypothesis for this portion was rejected.

In summary, no significant difference was found between the two groups on the basis of the adequacy of financial aids. There was a significant difference in that the dropouts tended to rate themselves as less adequate in financial aids management than did the graduates. In addition, it was found that the graduates preferred the financial aids disbursement procedures to stay the same, whereas dropouts preferred a change in the disbursement procedures. Significant difference was found between the groups on the basis of recommendations for financial aids disbursement.

Null hypothesis 10. There will be no significant difference on the basis of adjustment to life at the University of North Dakota between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 43 and table 44.

TABLE 43

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF WHETHER OR NOT THE STUDENT EXPERIENCED DIFFICULTY IN MAKING THE TRANSITION FROM HOME AND HIGH SCHOOL TO THE UNIVERSITY OF NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	20	22
Dropouts	41	25

$$x^2 = 2.20 \text{ with } df = 1, p > .05$$

TABLE 44

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF THE AMOUNT OF DIFFICULTY EXPERIENCED IN MAKING THE TRANSITION FROM HOME AND HIGH SCHOOL TO THE UNIVERSITY OF NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

	Not Difficult	Moderately Difficult	Extremely Difficult
Graduates	16	20	5
Dropouts	22	33	11

$$x^2 = .70 \text{ with } df = 2, p > .05$$

An examination of the data presented in table 43 which were treated with the chi square statistic shows no statistical difference on the basis of whether or not the student experienced difficulty in making the transition from home and high school to the University of North Dakota at the .05 level when comparing those who drop out with

those who graduate. Therefore, the null hypothesis for this portion was retained.

An examination of the data presented in table 44 which were treated with the chi square test shows no statistical difference on the basis of the amount of difficulty experienced in making the transition from home and high school to the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. Therefore, the null hypothesis for this portion was retained.

In summary, no significant difference was found on the basis of adjustment to life at the University of North Dakota. The null hypothesis was retained.

Null hypothesis 11. There will be no significant difference on the basis of cultural conflict between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 45.

TABLE 45

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF WHETHER OR NOT STUDENTS EXPERIENCED
CULTURAL CONFLICTS WHILE AT THE UNIVERSITY OF
NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	21	20
Dropouts	28	37

$$\chi^2 = .68 \text{ with } df = 1, p > .05$$

An examination of the data presented in table 45 which were treated with the chi square test shows that there was no statistical difference on the basis of cultural conflicts at the .05 level when comparing those who drop out with those who graduate. Thus, the null hypothesis was retained.

Null hypothesis 12. There will be no significant difference on the basis of encouragement for college continuation between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 46.

An examination of the data presented in table 46 which were treated with the chi square statistic reveals that there was no statistical difference on the basis of the person(s) who provided encouragement for college continuation when comparing those who drop out with those who graduate. It is important to note that both groups believed parents were the primary persons who provided encouragement for continuation in college. However, the null hypothesis was retained.

Null hypothesis 13. There will be no significant difference on the basis of family responsibilities between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 47 and table 48.

An examination of the data presented in table 47 which were treated with the chi square test shows that there was no statistical

TABLE 46

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE BETWEEN DROPOUTS AND GRADUATES
ON THE BASIS OF THE PERSON WHO ENCOURAGED STUDENTS TO CONTINUE IN COLLEGE

Groups	Spouse	Parents	Brothers and Sisters	Grand- parents	Other Relatives	Instructors	Counselors	Adminis- trators	Peers	Others
Graduates	9	14	3	0	0	8	0	0	4	4
Dropouts	5	30	4	1	2	6	1	0	7	7

$\chi^2 = 10.32$ with $df = 9$, $p > .05$

TABLE 47

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF WHETHER OR NOT THE STUDENT HAD ANY FAMILY RESPONSIBILITIES TO PARENTS, BROTHERS, OR SISTERS BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	10	32
Dropouts	12	54

$$\chi^2 = .51 \text{ with } df = 1, p > .05$$

TABLE 48

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF TYPE OF ASSISTANCE GIVEN TO PARENTS, BROTHERS, OR SISTERS BETWEEN DROPOUTS AND GRADUATES

	Dropouts		Graduates	
	N	%	N	%
Finances	8	11.27	11	24.44
Problem solving	9	11.27	23	51.11
Care of other family members	8	11.27	15	33.33
Other	7	9.86	4	8.89

$$\chi^2 = 31.43 \text{ with } df = 3, p < .001$$

difference on the basis of whether or not the student had any family responsibilities to parents, brothers, or sisters at the .05 level when comparing those who drop out with those who graduate. Therefore, this portion of the null hypothesis was retained.

An examination of the data presented in table 48 which were treated with the chi square test shows that there was a statistical

difference on the basis of type of assistance given to parents, brothers, or sisters at the .001 level when comparing those who drop out with those who graduate. The significant difference found was that graduates tended to provide more financial, problem-solving, and care of other family member assistance than did dropouts. Therefore, this portion of the null hypothesis was rejected.

In summary, there was no significant difference between the groups on the basis of whether or not the student had any family responsibilities to parents, brothers, or sisters. But there was a difference on the type of assistance provided to parents, brothers, or sisters; graduates provided more assistance than did dropouts.

Null hypothesis 14. There will be no significant difference on the basis of American Indian cultural involvement between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 49.

An examination of the data presented in table 49 which were treated with the chi square statistic shows statistical differences on the basis of American Indian cultural involvement at the .05 level when comparing those who drop out with those who graduate. In analyzing the data, significant differences were found in that the graduates tended to be more culturally involved in use of American Indian language, practice of Indian religion and ways, dance at powwows, and participation in other Indian activities than were dropouts. Since four of the six comparisons were significant, the null hypothesis was partially rejected.

TABLE 49

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF AMERICAN INDIAN CULTURAL INVOLVEMENT
BETWEEN DROPOUTS AND GRADUATES

Group	Dropouts Median	Graduates Median	χ^2
American Indian language usage	2.02	2.75	10.35 ^a
Practice of Indian religion and ways	2.08	2.55	9.82 ^a
Dance at pow-wows	1.48	2.45	11.10 ^a
Sing at pow-wows	1.11	1.09	1.99
Eat traditional foods	3.67	4.03	4.67
Participate in other Indian activities (medicine, media work, cultural committee work)	3.29	3.89	10.00 ^a

^asignificant at .05 level with df = 4

Null hypothesis 15. There will be no significant difference on the basis of perceptions of being American Indian between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 50, table 51, and table 52.

An examination of the data presented in table 50 which were treated with the chi square test shows a statistical difference on the basis of whether or not students felt their American Indian heritage was an advantage to them while at the University of North Dakota at the .05 level when comparing those who drop out and those who

graduate. More graduates viewed their American Indian heritage as an advantage to them while attending the University of North Dakota than did dropouts. Because of the significant difference found, this portion of the null hypothesis was rejected.

TABLE 50

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF WHETHER OR NOT STUDENTS FELT THEIR AMERICAN INDIAN HERITAGE WAS AN ADVANTAGE TO THEM WHILE ATTENDING THE UNIVERSITY OF NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	35	7
Dropouts	37	27

$$x^2 = 7.99 \text{ with } df = 1, p < .05$$

TABLE 51

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF PERCEPTIONS OF COLLEGE INSTRUCTOR'S FEELING ABOUT THE STUDENT'S ETHNIC HERITAGE BETWEEN DROPOUTS AND GRADUATES

Group	Negative	Neutral	Positive
Graduates	4	25	13
Dropouts	11	49	5

$$x^2 = 10.29 \text{ with } df = 2, p < .05$$

An examination of the data presented in table 51 which were treated with the chi square statistic shows that there was a statistical difference on the basis of perception of college instructor's

feeling about the student's ethnic heritage at the .05 level when comparing those who drop out with those who graduate. Graduates perceived the instructor's feelings as being more positive while dropouts perceived the instructor's feelings as more negative. Because of this significance, this portion of the null hypothesis was rejected.

TABLE 52

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF THE STUDENTS' PERCEPTIONS OF THE INFLUENCE THEIR AMERICAN INDIAN HERITAGE HAD ON NON-INDIAN STUDENTS BETWEEN DROPOUTS AND GRADUATES

Group	Negative	Neutral	Positive
Graduates	7	26	9
Dropouts	19	34	12

$$\chi^2 = 2.32 \text{ with } df = 2, p > .05$$

An examination of the data presented in table 52 which were treated with the chi square statistic shows that there was no statistical difference on the basis of non-Indian students' views toward American Indian students' heritage at the .05 level when comparing those who drop out with those who graduate. Therefore, the null hypothesis for this portion was retained.

In summary, more graduates perceived that their ethnic heritage was an advantage to them while fewer dropouts perceived their ethnic heritage as an advantage. In addition, more graduates perceived the instructors as having a positive attitude about their ethnic heritage than did the dropouts. The Indian students' perceptions of the influence their American Indian heritage had on non-Indian students were found to be significant between the two groups.

Null hypothesis 16. There will be no significant difference on the basis of participation in social activities between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 53 and table 54.

An examination of the data presented in table 53 which were treated with the chi square test shows that there were statistical differences in three of the ten social activities studied when comparing those who drop out with those who graduate. There was statistical difference found at the .001 level for involvement in organizations and clubs. Graduates tended to be more involved in organizations and clubs than did dropouts. Statistical difference was found at the .01 level for involvement in cultural activities. Graduates were more involved in cultural activities than were dropouts. In addition, statistical difference was indicated at the .05 level for extracurricular involvement with graduates being more involved than were dropouts. Since three of the ten comparisons were significant, this portion of the null hypothesis was partially rejected.

An examination of the data presented in table 54 which were treated with the chi square test shows that there was statistical difference on the basis of students' perceptions of how social activity involvement affected their educational experience at the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. More dropouts than graduates tended to feel that the involvement in social activities hindered their educational experience at the University of North Dakota. Therefore, this portion of the null hypothesis was rejected.

TABLE 53

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF PARTICIPATION IN SOCIAL ACTIVITIES
WHILE ATTENDING THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

	Dropouts Median	Graduates Median	χ^2
Organization and Club Involvement (student government, sorority, fraternity, etc.)	1.09	1.71	19.11 ^c
Cultural Activities (art show, play, etc.)	1.60	2.54	12.59 ^b
Extracurricular activities (church, school, com- munity-wide entertain- ment, etc.)	1.35	2.35	9.25 ^a
Intramurals (sporting events)	2.23	1.48	4.15
Attended dances	2.32	2.11	5.17
Attended movies	2.95	2.80	2.37
Visited friends	3.90	3.76	1.29
Dating	1.93	1.33	6.29
Attended parties	3.02	2.85	.93
Social drinking	3.06	2.85	3.02

^asignificant at .05 level with df = 4

^bsignificant at .01 level with df = 4

^csignificant at .001 level with df = 4

TABLE 54

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON
THE BASIS OF STUDENTS' PERCEPTIONS OF HOW SOCIAL ACTIVITY
INVOLVEMENT AFFECTED THEIR EDUCATIONAL EXPERIENCE
AT THE UNIVERSITY OF NORTH DAKOTA
BETWEEN DROPOUTS AND GRADUATES

Group	Mostly Hindered	Mostly Helped	Neither
Graduates	10	8	23
Dropouts	31	5	28

$$\chi^2 = 7.30 \text{ with } df = 2, p < .05$$

In summary, graduates tended to be more involved in organizations and clubs, cultural activities, and extracurricular activities than were dropouts. Dropouts perceived that the involvement in social activities hindered their educational experience at the University of North Dakota.

Null hypothesis 17. There will be no significant difference on the basis of use of American Indian counselors and staff between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 55, table 56, and table 57.

An examination of the data presented in table 55 which were treated with the chi square statistic shows no statistical difference on the basis of whether or not students used the American Indian counselors and staff members at the .05 level when comparing those who

TABLE 55

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF WHETHER OR NOT STUDENTS USED THE UNIVERSITY OF NORTH DAKOTA AMERICAN INDIAN COUNSELORS AND STAFF MEMBERS BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	32	10
Dropouts	47	19

$$x^2 = .33 \text{ with } df = 1, p > .05$$

out with those who graduate. The majority of the students surveyed had utilized the American Indian counselors and staff; however, no significant difference was found. Thus, this portion of the null hypothesis was retained.

An examination of the data presented in table 56 which were treated with the chi square test shows that there was no statistical difference on the basis of types of assistance received from American Indian counselors and staff members at the .05 level when comparing those who drop out with those who graduate. Therefore, this portion of the null hypothesis was retained.

An examination of the data presented in table 57 which were treated with the chi square test shows no statistical difference on the basis of helpfulness of the University of North Dakota American Indian counselors and staff members at the .05 level when comparing those who drop out with those who graduate. The majority of the students surveyed found the assistance received from American Indian counselors and staff to be helpful in some degree. However, this portion of the null hypothesis was retained.

TABLE 56

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON
THE BASIS OF TYPES OF ASSISTANCE RECEIVED FROM AMERICAN
INDIAN COUNSELORS AND STAFF MEMBERS BETWEEN
DROPOUTS AND GRADUATES

	Dropouts		Graduates	
	N	%	N	%
Problem solving	17	23.94	20	44.44
Advisement	31	43.66	21	46.67
Financial aid assistance	32	45.07	28	62.22
Fee payment	10	14.08	8	17.77
Budgeting	8	11.27	6	13.33
Registration	35	49.30	20	44.44
Counseling	17	23.94	13	28.89
Scheduling	31	43.66	14	31.11

$$x^2 = 8.65 \text{ with } df = 7, p > .05$$

TABLE 57

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON
THE BASIS OF HELPFULNESS OF THE UNIVERSITY OF NORTH
DAKOTA AMERICAN INDIAN COUNSELORS AND STAFF
BETWEEN DROPOUTS AND GRADUATES

Group	Not Helpful	Somewhat Helpful	Very Helpful
Graduates	4	12	19
Dropouts	6	26	29

$$x^2 = 1.91 \text{ with } df = 2, p > .05$$

In summary, no significant difference was found on the basis of American Indian counselor and staff use when comparing the dropouts with the graduates. However, the majority of the students did use the services provided by American Indian counselors and staff. In addition, the majority of both groups felt the American Indian counselors and staff were helpful. However, the null hypothesis was retained.

Null hypothesis 18. There will be no significant difference on the basis of University of North Dakota instructor assistance between American Indian students who drop out of and American Indian students who graduate from educational programs.

The results of the statistical treatment of this hypothesis are presented in table 58.

TABLE 58

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE BASIS OF ASSISTANCE RECEIVED FROM ACADEMIC INSTRUCTORS AT THE UNIVERSITY OF NORTH DAKOTA BETWEEN DROPOUTS AND GRADUATES

	Poor	Fair	Average	Above Average	Superior
Graduates	4	4	19	14	0
Dropouts	9	26	18	9	3

$$\chi^2 = 17.63 \text{ with } df = 4, p < .01$$

An examination of the data presented in table 58 which were treated with the chi square statistic reveals that there was a statistical difference on the basis of University of North Dakota instructor assistance at the .01 level when comparing those who drop out with those who graduate. Graduates tended to feel that the assistance

received from instructors was average to above average while dropouts tended to feel it was fair to average. Thus, the null hypothesis was rejected.

Null hypothesis 19. There will be no significant difference on the basis of enrollment in Indian Studies courses between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of the hypothesis are presented in table 59 and table 60.

TABLE 59

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF ENROLLMENT IN INDIAN STUDIES
COURSES BETWEEN DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	35	6
Dropouts	47	19

$$x^2 = 2.95 \text{ with } df = 1, p > .05$$

TABLE 60

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE ON THE
BASIS OF WHETHER OR NOT ENROLLMENT IN INDIAN STUDIES
COURSES ENCOURAGED STUDENTS TO CONTINUE AT THE
UNIVERSITY OF NORTH DAKOTA BETWEEN
DROPOUTS AND GRADUATES

Group	Yes	No
Graduates	28	8
Dropouts	36	18

$$x^2 = 1.56 \text{ with } df = 1, p > .05$$

An examination of the data presented in table 59 which were treated with the chi square statistic shows that there was no statistical difference on the basis of enrollment in Indian Studies courses at the .05 level when comparing those who drop out with those who graduate. The majority of the students surveyed had enrolled in Indian Studies courses. However, because there was no significant difference found, the null hypothesis was retained.

An examination of the data presented in table 60 which were treated with the chi square statistic reveals no statistical difference on the basis of whether or not Indian Studies courses encouraged students to continue at the University of North Dakota at the .05 level when comparing those who drop out with those who graduate. The majority of the students surveyed felt that Indian Studies courses encouraged them to continue. However, since no statistical difference was found when comparing the two groups, the null hypothesis for this portion was retained.

In summary, the majority from both groups enrolled in Indian Studies courses and felt the enrollment in these courses encouraged students to continue their education at the University of North Dakota. However, since no significant difference was found between the groups, the null hypothesis was retained.

Null hypothesis 20. There will be no significant difference on the basis of use of campus supportive services between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 61. (See appendix H for explanations of some of the less familiar on-campus supportive services.)

TABLE 61

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF FREQUENCY OF USE AND THE DEGREE OF
SATISFACTION WITH CAMPUS SUPPORTIVE SERVICES
BETWEEN DROPOUTS AND GRADUATES

Group	Frequency of Usage of Campus Supportive Services			Degree of Satisfaction with Supportive Services		
	Dropouts Median	Graduates Median	χ^2	Dropouts Median	Graduates Median	χ^2
Admissions Office	2.03	2.02	3.83	1.48	1.50	2.62
Registrar's Office	2.05	2.20	5.55	1.52	1.30	2.67
Financial Aids Office	2.17	2.41	6.95	1.70	1.30	5.14
Business Office	2.01	2.29	9.55 ^a	1.72	1.44	1.47
Your Academic Department	2.15	3.04	16.04 ^c	1.60	1.14	12.08 ^d
Learning Services	1.23	1.17	2.66	1.56	1.33	3.03
Counseling Center	1.25	1.30	.32	1.39	1.33	3.21
Career Planning & Placement Office	1.09	1.17	2.67	1.83	1.88	1.57
Student Health Services	1.56	1.98	10.11 ^a	1.23	1.24	5.03
Native American Programs	3.27	3.36	5.31	1.17	1.09	1.77
Student Opportun- ity Programs	2.39	2.03	14.39 ^a	1.37	1.16	3.35
Women's Programs	1.06	1.07	3.02	1.70	1.50	2.21
Religious Groups	1.13	1.08	9.68	1.80	1.50	1.54
UND Indian Associ- ation	3.14	3.60	2.99	1.32	1.07	7.57
Housing Office	1.70	1.93	6.06	1.81	1.44	6.87

TABLE 61--Continued

Group	Frequency of Usage of Campus Supportive Services			Degree of Satisfaction with Supportive Services		
	Dropouts Median	Graduates Median	χ^2	Dropouts Median	Graduates Median	χ^2
Pre-Registration	1.84	1.88	.52	1.57	1.39	3.23
Orientation	1.57	1.29	3.20	1.71	1.70	2.70
College Advisement	1.41	1.39	10.57	2.03	1.23	10.62 ^b
Fee Payment	1.74	1.86	2.87	1.47	1.56	2.47
Pass Book Account	1.19	1.37	5.65	1.32	1.44	1.07
Games Room	2.56	2.50	3.90	1.13	1.13	1.76
Field House Use	2.38	1.93	1.80	1.18	1.14	1.82
Dean of Students Services	1.08	1.26	6.66	2.25	1.50	10.40 ^d

^asignificant at .05 level with df = 4

^bsignificant at .05 level with df = 2

^csignificant at .01 level with df = 4

^dsignificant at .01 level with df = 2

An examination of the data presented in table 61 which were treated with the chi square statistic shows that there were statistical differences on the basis of frequency of use of campus supportive services found in the twenty-three services surveyed when comparing those who drop out with those who graduate. There was a statistical difference at the .05 level when comparing usage of the Business Office, Student Health Services, and the Student Opportunity Program. In addition, there was a statistical difference at the .01 level in use

of the Academic Department. In a visual analysis of the data using the median, it shows that more graduates tend to use the Business Office, Academic Department, and Student Health Services than did dropouts. However, this significance may be related to the fact that the graduates were on campus longer and therefore would have had the opportunity to use campus services more. Also, it was found that more dropouts used the Student Opportunity Program than did graduates. It would seem reasonable that more dropouts would utilize the Student Opportunity Program since its focus is directed toward the student experiencing difficulty.

Further examination of the data presented in table 61 shows that there were statistical differences on the basis of degree of satisfaction with campus supportive services in three of the twenty-three campus supportive services surveyed when comparing those who drop out with those who graduate. There was statistical difference at the .05 level for College Advisement. In addition, statistical significance at the .01 level was indicated for Academic Department and Dean of Students Services. From an examination of the median values, it can be seen that the dropouts tended to be less satisfied with these three services than the graduates.

In summary, four of the twenty-three comparisons were significant for frequency of use of the campus supportive services. In addition, three of the twenty-three comparisons were significant for the degree of satisfaction with the campus supportive services. Therefore, the null hypothesis was partially rejected.

It is also important to note that Native American Programs and the University of North Dakota Indian Association were used more by both groups than any other campus supportive service. Learning

Services, Counseling Center, Career Planning and Placement Office, Women's Programs, Religious Groups, and Dean of Students Services were least used by both groups. Both groups rated nearly all campus supportive services between satisfactory and neutral. The students surveyed were most satisfied with the services of the Games Room, Native American Programs, Field House, and Student Health Services.

Null hypothesis 21. There will be no significant difference on the basis of use of off-campus supportive services between American Indian students who drop out of and American Indian students who graduate from educational programs at the University of North Dakota.

The results of the statistical treatment of this hypothesis are presented in table 62. (See appendix H for explanations of some of the less familiar off-campus supportive services.)

TABLE 62

CHI SQUARE TEST FOR TESTING THE HYPOTHESIS OF NO DIFFERENCE
ON THE BASIS OF FREQUENCY OF USE AND THE DEGREE OF
SATISFACTION WITH OFF-CAMPUS SUPPORTIVE
SERVICES BETWEEN DROPOUTS
AND GRADUATES

Group	Frequency of Usage of Off-Campus Supportive Services			Degree of Satisfaction with Off-Campus Supportive Services		
	Dropouts Median	Graduates Median	χ^2	Dropouts Median	Graduates Median	χ^2
Social Services	1.04	1.09	5.75	1.10	1.83	4.17
Health Services	1.11	1.41	9.90 ^a	1.22	1.15	13.20 ^c
Job Services	1.13	1.03	5.41	1.50	2.00	4.47
BIA Education Specialist Services	1.77	1.73	2.74	1.64	1.24	4.34

TABLE 62--Continued

Group	Frequency of Usage of Off-Campus Supportive Services			Degree of Satisfaction with Off-Campus Supportive Services		
	Dropouts Median	Graduates Median	χ^2	Dropouts Median	Graduates Median	χ^2
Low Income Housing	1.04	1.04	3.83	1.13	1.00	1.75
Churches/ Religious Groups	1.13	1.11	9.51	1.50	1.07	3.01
Broken Arrow, Inc.	1.03	1.20	12.57 ^a	1.17	1.36	10.52 ^c
Dakota Association of Native Americans	1.09	1.18	4.28	1.42	1.11	3.83
Eagle Feather Day Care Center	1.09	1.26	10.83	1.19	1.00	8.47 ^b
Legal Services	1.04	1.08	2.94	1.33	1.17	1.06
Community Involvement	1.03	1.07	2.86	1.83	1.13	3.99
Public/Private School Involvement	1.03	1.13	9.29	1.50	1.08	4.75
Babysitting Services	1.03	1.11	6.97	1.17	1.20	3.88

^asignificant at .05 level with df = 4

^bsignificant at .05 level with df = 2

^csignificant at .01 level with df = 2

An examination of the data presented in table 62 which were treated with the chi square statistic shows that there were statistical differences on the basis of frequency of use of off-campus supportive services at the .05 level when comparing those who drop out with those

who graduate. More graduates than dropouts used the Health Services and Broken Arrow, Inc. It is important to note that off-campus supportive services showed minimal use by both groups.

Further examination of the data presented in table 62 shows there were statistical differences on the basis of degree of satisfaction with off-campus supportive services when comparing those who drop out with those who graduate. Statistical difference was found at the .05 level for Eagle Feather Day Care Center. In addition, statistical difference was also found at the .01 level for Health Services and Broken Arrow, Inc. The graduates tended to be more satisfied with Health Services and Eagle Feather Day Care Center than were the dropouts. Dropouts were more satisfied with the services of Broken Arrow, Inc., than were the graduates.

In summary, two of the thirteen comparisons were significant for frequency of use of the off-campus supportive services. In addition, three of the thirteen comparisons were significant for the degree of satisfaction with the off-campus supportive services. Therefore, the null hypothesis was partially rejected.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Indian higher education is as old as Indian life. Before the coming of the white man, tribes operated systems of specialized education. These systems of higher education emphasized survival practices and the preservation of the tribal way of life. They were well developed yet informal. Interested individuals acquired advanced knowledge from elders who had expertise in specialized areas.

The education of American Indian people progressed through several distinct periods since the colonization of America and especially since the period of time from the late 1700s when treaties and executive orders created reservations and the special trust responsibility of the federal government to American Indians. These periods include the Mission Period (1500-1775), Treaty and Reservation Period (1775-1892), Meriam Report and New Deal Period (1924-1944), Termination Period (1944-1960), and the Self-Determination Period (1960-1981).

Today, more American Indians than ever before are enrolled in colleges and universities throughout the United States. In addition, this increase in enrollment is expected to continue for some time. American Indians believe that higher education is a viable option. However, even though there were more American Indians enrolled in higher

education, few experience success. The national attrition rate for American Indians was much higher than that of the general student population. American Indian students in higher education were confronted with a variety of problems which apparently resulted in failure to complete college requirements. Some of the causes for dropping out identified by various studies included: (1) inadequate high school preparation, (2) inadequate financial aids, (3) poor management of financial aids, (4) unclear career plans, (5) cultural shock, and (6) inability to adjust to college life.

On the other hand, there were few studies devoted to the American Indian graduate. Some of the factors which contribute to American Indian college student retention included: (1) college Indian Studies programs, (2) college supportive service programs, and (3) college cultural events and awareness programs.

These attrition and retention factors identified from the review of the literature and a number of others were included in the development of the present study. The primary purpose of this study was to examine attrition and retention as it relates to American Indian students in educational programs at the University of North Dakota, Grand Forks, North Dakota. A comparison of the groups, those who drop out and those who graduate, was made based on three categories of factors: biographical, pre-college, and college.

Biographical Factors

A brief summary of the findings for the biographical factors is provided. The study found graduates to be older than dropouts at the time of first enrollment in any college and at the time of first enrollment at the University of North Dakota. In relation to marital

status, dropouts had a greater tendency to be single, but no significant difference was found on the basis of change in marital status after enrollment. In addition, dropouts tended to have fewer dependents. No significant difference was found on the basis of change in the number of dependents after enrollment. The reservation where enrolled data had such a limited number of students from some reservations that the finding of significant difference is questionable.

Those biographical factors identified as not significant include sex, American Indian blood quantum, family structure, parental income, parental occupations, and parental educational levels. It was important to note that the majority of both dropouts and graduates surveyed reported an American Indian blood quantum of one-half or more. It was found that the majority from both groups grew up in homes with both parents. Parental income was not a significant factor between persisters and dropouts; however, the preponderance of the study group reported lower income levels. In addition, the study showed that few parents held professional positions. It was also revealed that forty-two (20%) parents had some college experience.

Pre-College Factors

A summary of the pre-college factors which showed significant differences between the two groups were high school grade point average and American College Testing scores. The study revealed that graduates had higher grades in high school than did dropouts. In addition, graduates scored higher in all areas of the American College Testing (ACT) test. In further examination of the ACT test data, it was found that both groups scored highest in the natural science area

and lowest in the math area.

The pre-college factors which were determined not significant were high school location, type of high school attended, size of high school graduating class, pre-college graduation status, high school preparation for attempting college level coursework, high school pathway, and use of high school guidance services. It was interesting to note, however, that the majority of the students surveyed had attended high school on the reservation. It was also reported by both groups that the types of high school most had attended were either Bureau of Indian Affairs non-boarding or public schools. The study reported that the high school graduating classes were smaller for dropouts. The vast majority of the sample completed a regular high school program and were planning for a college education. In high school, the use of guidance services by both groups was from low to moderate.

College Factors

The college factors were summarized individually. Even though college major was not statistically tested, it was found that the majority of the graduates received degrees from the Center for Teaching and Learning. Graduates had a higher cumulative grade point average and their college semester hour completion rate was also higher. The low grade point average and the low semester hour completion rate was somewhat misleading as these factors may have been influenced by a small number of students who drop out of college each semester and fail to withdraw. The result of failing to withdraw would be that the student received failing grades in all courses which would also reflect on the semester hour completion rate. An analysis of the number of

semesters enrolled at the University of North Dakota showed that the graduates enrolled in more semesters. Graduates reported that it took an average of 9.11 semesters to complete their college degrees. Again, it is important to note that those who graduate will typically be enrolled during more semesters than those who drop out. In addition, graduates perceived their college coursework to be of greater relevance with clearer career goals.

In the summarization of study habits, no differences were found between the two groups based on the development of study habits prior to college enrollment or on the amount of time spent on college coursework outside of class. The majority of both of the groups felt that they lacked in study skills prior to college enrollment. It was also revealed that a greater number of both groups spent one to ten hours per week in study outside of class. Significant differences were identified on the basis of study methods; graduates preferred to study with a friend/peer and utilized the aid of a tutor. The primary preference for both groups was to study alone. However, no significant difference was found based on the percentage of time spent on each method of study. On the basis of location of study, graduates preferred to use the library, academic department, and the cultural center while the preference of the dropouts was in the University Center. Both groups favored studying in their dormitory room or home more than in any other location. Also, it was revealed that graduates spent a greater percentage of time studying in the library.

Few significant differences were found based on financial aids. More dropouts than graduates rated themselves poorly on the basis of financial aids management. No significant differences were

identified based on the adequacy of financial aids. A larger number of graduates than dropouts recommended a change in the University of North Dakota financial aids disbursement procedures; however, dropouts preferred having financial aids disbursed more often if the University of North Dakota should revise their present procedure.

No differences were found when comparing the groups on the basis of adjustment to life at the University of North Dakota, cultural conflicts, and encouragement for college continuation. However, it was found that parents had the greatest influence for students' continuation in college. Family responsibilities revealed a significant difference, with the graduates providing more financial, problem solving, and care of other family members than dropouts.

Significant differences were found between the groups on the basis of American Indian cultural involvement; graduates tended to be more "culturally" involved in the use of American Indian language, practice of Indian religion and ways, dancing at pow-wows, and participation in other Indian-related activities. In addition, more graduates viewed their American Indian heritage as an advantage to them while attending the University of North Dakota. On the basis of perceptions of college instructor's feelings about the student's ethnic heritage, graduates perceived the instructor's feelings as being more positive while dropouts perceived the instructor's feelings as being more negative. The Indian students' perceptions of the influence their Indian heritage had on the non-Indian students were not found to be significant.

Related to participation in social activities, graduates were more involved in organizations and clubs, cultural events, and

extracurricular programs. More dropouts than graduates believed the involvement in social activities hindered their education experiences at the University of North Dakota.

No significant differences were found between the groups related to the use of American Indian counselors and staff. However, the vast majority from both groups reported they had utilized the American Indian counselors and staff and felt they were helpful. The type of assistance most often received from the American Indian counselors and staff for both groups was for financial aids and registration. Budgeting assistance was found to be used least by both groups. Instructor assistance was viewed by graduates from average to above average, and the dropouts rated it from fair to average. Indian Studies course enrollment was found to be not significant. However, the majority from both groups enrolled in Indian Studies courses and felt the enrollment in these courses encouraged students to continue their education.

On the basis of campus supportive services, there were statistical differences identified. Graduates tended to use the Business Office, Academic Department, and Student Health Services more than the dropouts. However, this may be related to the fact that the graduates were on campus longer and therefore would have had the opportunity to use campus services more. It was also found that more dropouts used the Student Opportunity Program than did graduates. Again, it would seem to be reasonable that more dropouts would utilize this program since its focus was directed toward the student experiencing difficulty. Regarding College Advisement, graduates were more satisfied. For the Academic Department and the Dean of Students Services, dropouts tended

to be less satisfied than the graduates. It is important to note that Native American Programs and the University of North Dakota Indian Association were used more by both groups than any other campus supportive service. Learning Services, Counseling Center, Career Planning and Placement, Women's Programs, Religious Groups, and Dean of Students Services were least used by both groups. Both groups rated nearly all services between satisfactory and neutral with the services of the Games Room, Native American Programs, Field House, and Student Health Services being rated most satisfying.

It was reported regarding the use of off-campus supportive services that more graduates used the Health Services and Broken Arrow, Inc. The study also revealed that both groups made minimal use of these services. The perception of the services of the Bureau of Indian Affairs Education Specialist were not found to be significantly different between the two groups. On the basis of satisfaction with the off-campus supportive services, graduates tended to be more satisfied with the Health Services and Eagle Feather Day Care Center, while dropouts were more satisfied with Broken Arrow, Inc.

Conclusions

The conclusions which follow are based on the statistical treatment of the data gathered and were drawn on those American Indian students who were enrolled at the University of North Dakota. The following major conclusions are presented according to the biographical, pre-college, and college factors.

Biographical Factors

The conclusions for the biographical factors are:

1. Students apparently do not drop out or graduate in any systematic way on the basis of being male or female. The sex of the student does not appear to influence the completion of a college degree

2. Students who enter college at an older age tend to persist and graduate. This may be related to older students being more mature. Older students may have had more opportunity and exposure in the work force and may have decided that education is needed for advancement. Younger students may have had less clear career goals

3. Dropouts had a greater tendency to be single. This may be related to the fact that dropouts were younger. In addition, married students may receive more support from their spouse and family members. Perhaps married students tend to have more responsibility and thus are able to better deal with more responsibility. Furthermore, change in marital status after enrollment was not a determining factor for students dropping out or graduating. Change in marital status apparently had no effect on securing a college education

4. The graduates had more dependents than did the dropouts. This may be due to the fact that they are older and married. Therefore, the probability of them having more dependents would be greater. It appears that students with more dependents may evoke a greater sense of responsibility, thus it became more necessary to complete a college degree. In addition, the change in the number of dependents did not necessarily increase or decrease the chances for completing a degree

5. The American Indian blood quantum had no effect on whether or not students graduated or dropped out. These data fail to support

the popular stereotype that intelligence is directly related to Indian blood quantum. It should also be pointed out that the comparison of retention/attrition to a biographical factor is more suggestive of cultural differences than of the more direct comparison

6. Family structure was not a factor that determined whether students graduated or dropped out. This seems to dispel findings that how children are reared (both parents, single parents, etc.) influence success in college

7. Parental income had no effect on dropouts or graduates. This appears to contradict the notion that parental income has had an influence on academic success in college. It should be noted that there were few parents in the higher income brackets

8. The type of occupations parents hold did not affect whether students graduated or dropped out. This appears to contradict the notion that suggested that parental occupations affect educational success in college. It should be noted that there were few parents who had professional occupations

9. The educational levels of parents did not affect whether students graduated or dropped out. This appeared to contradict reported findings that educational achievements of students are directly correlated with the educational achievements of parents. It should be noted that there were few parents (20%) who had some college training

Pre-College Factors

The conclusions for the pre-college factors are:
type of high school attended had no effect on whether students dropped

out or graduated. This appeared to indicate that students may be equally well or ill prepared to attend college regardless of the high school location or type. In addition, it may be that American Indian students attend high school of equal quality

2. The size of the high school graduating class was not a determining factor for students dropping out or graduating. It appeared that students' adjustment to college life was independent of the size of the high school graduating class

3. Pre-college graduation status had no effect on dropouts or graduates. It appeared that the General Educational Development (GED) program and regular high school program graduates do equally well in college study

4. High school grade point average does predict success in college. It may be concluded that those students who have demonstrated academic success in high school are more likely to have success, leading to graduation, in college than are those who fail to demonstrate academic success in high school

5. ACT data showed those students with higher scores had a better chance to graduate from college. This finding may indicate the ACT test was a relatively stable predictor of success in college. Similar findings were also reported by the United States General Accounting Office (1977) and Patton and Edington (1973)

6. The students' perceptions of their high school preparation was not a factor which encourages students to drop out or continue. It appeared that students may or may not allow their high school backgrounds to unduly influence their success or lack of it in their college programs

7. High school career pathways apparently had no effect on dropping out of or graduating from college. It may be concluded that the planning of career pathways by high school students neither enhances nor precludes success in college

8. The use of high school guidance services had no effect on dropping out of or graduating from college. This may indicate that the high school guidance personnel were unable to anticipate factors which affect a student dropping out of or graduating from college. High school guidance services may be concerned with pre-college direction, i.e., defining career goals and identifying institutions which will meet these goals

College Factors

1. It was found that the Center for Teaching and Learning had more Indian graduates than other departments. This seems to indicate that Indian students are recognizing the potential job market for teachers on North Dakota reservations. The Center for Teaching and Learning, as part of the University of North Dakota, is making a great effort to assist American Indian students, as evidenced by its support of Indian students in teacher education programs

2. It was found that graduates have higher college grade point averages than dropouts. However, this may be due to the University of North Dakota requirements that, in order to graduate, a student must have a 2.00 college grade point and that dropouts do not withdraw from their courses properly before leaving college. This results in failing grades. No unrestricted conclusions could be made

3. It was found that graduates complete more semester hours. However, because graduates were enrolled longer, it would be easily

deduced that they would complete more semester hours. No useful conclusions could be made regarding these data

4. It was found that the graduates had enrolled in more semesters at the University of North Dakota. However, this was intuitive as graduates would typically be enrolled in more semesters than dropouts. No useful conclusions could be made regarding these data

5. It was found that graduates felt a greater relevance to college coursework and had clearer career goals. Students who have a well-defined career goal were more likely to take courses which were more relevant to their career goals, and, therefore, they were more likely to continue in college. University counselors and other appropriate personnel should apparently assist students to clarify career goals

6. Study Habits

(a) The development of study habits prior to entering college was not a significant factor for either group. This seems to indicate that the study habits developed prior to college were not applicable to the type of study required for college coursework

(b) The amount of study outside of class was not a factor between the groups. This seems to suggest that time spent in class was more relevant to both groups than amount of time spent studying outside of class

(c) Study methods were found to be a determining factor when comparing the two groups. It can be concluded that Indian students benefit from studying with others. Based upon statistical results, it could be concluded that studying with someone (another person or in a group) was found to significantly affect persistence

(d) Percentage of time spent on each method was not a factor when comparing the groups. This seemed to indicate that how much time a student spent studying was not as important as how they studied

(e) It was found that the graduates studied in the library, cultural center, and academic departments whereas those who dropped out studied in the University Center. It may be concluded that those students who studied in places other than the University Center recognized that these places were more conducive to study and were found to have fewer distractions than the University Center. Also, the availability of resources in the library, cultural center, and academic departments may have been more conducive to study

(f) Graduates spent a greater percentage of time in the library. It may be concluded that the graduates utilized more of the library services. This seemed to indicate that time spent in the library contributed to a greater success in college

7. Student Financial Aids

(a) More dropouts than graduates rated themselves poorly in the area of financial aids management. In conclusion, it appeared that how students manage their financial aids affected their college continuation. Those students who are able to budget their money were less likely to drop out

(b) There was no statistical difference found between the two groups on the basis of whether or not students felt they received adequate financial aids. Apparently, the adequacy of financial aids while in college did not contribute to student decisions to continue or drop out of academic study

(c) Graduates recommended that the University of North Dakota not change its present financial aids disbursement plan. It could be concluded that graduates prefer to receive all their financial aids at the beginning of each semester, which is the University of North Dakota's present financial aids disbursement plan. This also indicates that graduates felt that they could manage their financial aids on a long-term semester basis

(d) Dropouts preferred that financial aids be disbursed more often (weekly). This seemed to indicate that how often financial aids are disbursed potentially affects continuation in college

8. No difference was found between the groups in making the transition from home and high school to the University of North Dakota. Apparently, university life was not a difficult adjustment for either of the groups. This seems to refute the notion that the transition from home to college has an effect on persistence

9. No difference was found between the groups when cultural conflicts were considered as a factor in dropping out or persisting. This would seem to indicate that both groups tend to view university life as a situation which students accepted as it was, and cultural conflicts, whether they existed or not, did not affect a student's persistence or attrition choice

10. No difference was found between the two groups based on encouragement for college continuation. It appears that whether someone encouraged a student or not had no significant bearing on whether she/he stayed in college or dropped out

11. Graduates provided more problem solving, financial assistance, and care to family members. It appeared that as schooling

increased the ability to provide more responsible assistance increased

12. Graduates tended to be more culturally involved than were dropouts. This may be related to the fact that graduates were older and thus may take their ethnicity more seriously, i.e., it was more important to become involved in cultural activities. Cultural activities evidently provided a support base for those students who graduated. This appeared to refute the notion that students who were inclined to be more "traditional" have a more difficult time in adjusting to college

13. Perceptions of Being American Indian

(a) Graduates viewed their American Indian heritage as an advantage which appeared to be reflective of a good self-concept. This conclusion also appeared to refute the notion that poor academic performance was culturally related

(b) Graduates perceived the instructor's feelings toward their American Indian heritage as being more positive. Apparently, a good self-concept about being an American Indian person was reflected in the way graduates perceived others' feelings toward them

(c) Non-Indian students' perceptions of the Indian student's ethnic heritage made no difference when comparing the two groups. It would appear that non-Indian students were not among the group of people whose perceptions were considered to be of great importance to Indian students

14. Participation in Social Activities

(a) Graduates were more involved in social activities than were dropouts. It may be concluded that graduates were better able to handle a greater involvement in social activities which may

be attributed to maturity and responsibility. Graduates also appeared to have a feeling of belongingness to the total university experience

(b) Dropouts reported that the involvement in social activities hindered their college experiences. It may be concluded that students need to budget their free time in such a way as to not let it interfere with their study

15. Use of American Indian counselors and staff was not significant. Although Indian counselors and staff were used in a variety of services and were viewed as being helpful, it appears that their presence was accepted, i.e., Indian students naturally go to Indian counselors and staff, and there was no basis for students to compare the importance of Indian counselors and staff over others

16. Graduates felt that the assistance received from instructors was average to above average. As a result of more clearly identified career goals, graduates were probably more likely to seek out assistance. This may also be related to previous conclusions concerning self-concept of graduates

17. Enrollment in Indian Studies courses did not have an effect on continuing or dropping out of college. Again, Indian Studies may be a "given" for Indian students. The department may be taken for granted since it is available. Also, students had no substantive basis for comparison with other Indian Studies departments. Evidently, Indian Studies classes were treated as other coursework. It may be concluded that Indian Studies became institutionalized as far as students are concerned

18. Campus Supportive Services

(a) Graduates used some campus supportive services more

often than did the dropouts by virtue of graduates' longevity, i.e., they were in college longer. Students tended to use the Indian programs more than any other campus service. Many campus supportive services were not used very often by Indian students. Those services which were used were clearly needed by students. Some services appeared to be more responsive to Indian students

(b) Dropouts were less satisfied than graduates with some campus supportive services. It was apparent from the data that those campus supportive services which provided physical and cultural support for both groups were ones which students turned to more often than those which provided academic support. It may be speculated that those services which were more academic in nature were either not being sought out or were not meeting the needs of those who had dropped out

19. Off-Campus Supportive Services

(a) Graduates used Health Services and Broken Arrow, Inc., more frequently than did dropouts. This seemed to indicate that students who graduate were more likely to have families and were more in need of and used off-campus services such as health and Indian community services than did dropouts

(b) Graduates were more satisfied with Health Services and Eagle Feather Day Care Center. Dropouts were more satisfied with Broken Arrow, Inc. This may be related to dropouts having greater difficulty and, as a result, they turned to Broken Arrow, Inc., for assistance. Thus, they feel satisfied with the assistance given

Limitations

Some of the limitations which may have affected the results of this study were:

1. The statistical procedures utilized to treat the data imposed some limitations on the research design. These limitations were associated with the statistic and its use
2. The use of a self-reporting instrument was subject to individual perception and interpretation, thus, was likely to be a less objective measure than the direct observation of behavior
3. The potential for interrelationships among the factors existed but was not examined
4. The process used for gathering participant data was different at each reservation, based on input from the Bureau of Indian Affairs Higher Education Specialist. Some of the processes for gathering data were more successful than others
5. Some of the University services and programs were not in operation during the early 70s. In addition, some staff members have changed or been added during the period of time between 1970 and 1979. These changes may have influenced the study findings
6. The anticipated sample group was not obtained at two of the reservations. The smaller sample may have made the findings less reliable and/or valid
7. A wider and larger sample would provide data which could be generalized to the broader Indian population and to its broader higher education perspective
8. Some of the data pertinent to the study, from the Bureau of Indian Affairs and Registrars Office, was not available

Recommendations

The following recommendations are offered to promote a better understanding of the American Indian student at the University of North Dakota. Where student populations and university programs are comparable, these recommendations may have some applicability.

1. It is recommended that a similar study be undertaken utilizing a larger and more diverse research population to include American Indian students from each of the eleven Bureau of Indian Affairs Area Offices. In addition, it is recommended that the study explore potential interrelationships among the factors

2. It is recommended that a replication of this study be made at the University of North Dakota using a similar sample of American Indian students and a comparable sample of non-Indian students as a control group

3. It is recommended that a longitudinal study be conducted tracking individual students to identify the factors which contribute to success in college

4. It is recommended that separate and more extensive studies be conducted on each of the three factors: biographical, pre-college, and college

5. It is recommended that high schools with a high degree of Indian enrollment conduct an assessment of such components as academic programs, course offerings, parental involvement, career planning, and guidance services in order to determine their contribution to success of American Indian students going into higher education

6. It is recommended that the Bureau of Indian Affairs Higher Education Offices develop a management information system which

would provide data relative to attendance and success of American Indian students on college campuses on an annual basis

7. It is recommended that University of North Dakota administrators make policy changes and implement programs based on the findings of this study, with particular attention to the following:

(a) Implementation of a developmental program with special emphasis on basic skills which would respond to the unique educational background of American Indian students

(b) Development of an orientation program for newly enrolled Indian students which would provide information about campus services

(c) Development of a career-planning program which would provide Indian students with necessary information regarding career choices

(d) Development of a financial aids disbursement plan which would provide assistance to those Indian students having difficulty managing their funds

(e) Development of financial aids training sessions in budgeting and management for Indian students

(f) Development of ongoing cultural awareness programs for the entire campus, students as well as faculty

(g) Development of a greater variety of social activities which would attract Indian students as well as the entire campus community

The following recommendations are an expression of the writer's views reflecting not only the data but also reflecting insights developed by reviewing the literature and conducting the study. In some

cases, the insights do not necessarily have an evidentiary base but, nevertheless, are presented for consideration.

1. The development of more Indian-related programs through proposal writing to expand and meet the unique educational needs of American Indian people

2. The development of a counselor orientation program which would provide high school counselors, teachers, administrators, and tribal and other Bureau of Indian Affairs educational personnel with a thorough background regarding the services available to American Indian students at the University of North Dakota

3. The development of an annual meeting of high school teachers, administrators, counselors, tribal and Bureau of Indian Affairs educational personnel to plan for the needs of American Indian students at the University of North Dakota

4. The development of a peer counseling program to assist new Indian students with the transition to the University of North Dakota

5. The providing of financial support by the University of North Dakota to those Indian programs determined to be beneficial to Indian students but are presently sponsored and funded by the federal government

6. Finally, a mandate from the University of North Dakota administration that all the Indian-related programs plan and coordinate various services and activities to better respond to the needs of all Indian students

APPENDICES

APPENDIX A

UNIVERSITY OF NORTH DAKOTA AMERICAN

INDIAN STUDENT QUESTIONNAIRE

UNIVERSITY OF NORTH DAKOTA
AMERICAN INDIAN STUDENT QUESTIONNAIRE

NAME _____ CODE NUMBER _____

SOCIAL SECURITY NUMBER _____

Please assist me by providing all the information requested! This information will help me and the University of North Dakota to better understand and respond to the needs of American Indian students enrolled at the University of North Dakota. Let me assure you that your responses will be held in the strictest confidence.

1. A. What was your marital status when you first enrolled at the University of North Dakota?

_____ never married
 _____ married
 _____ separated
 _____ divorced

- B. Did your marital status change after enrollment at the University of North Dakota?

_____ yes _____ no If yes, please explain _____

2. A. What was the size of your own family when you first enrolled at the University of North Dakota (please include, children, spouse, and other family members living in your household)?

- B. Has the size of your family increased/decreased since you first enrolled?

_____ yes _____ no If yes, please give the size change, increase (as + 1) or decrease (-1).

3. As a child where did you have your home?

_____ my own parents
 _____ a parent and a step parent
 _____ one parent only
 _____ my grandparents
 _____ my aunt or uncle
 _____ other (specify) _____

4. What is/was your parents occupations during your enrollment at the University of North Dakota?
 _____ mother _____ father
5. What is/was your parents educational level (put in the highest level or grade achieved)?
 _____ mother _____ father
6. Where did you attend high school?
 _____ on reservation _____ off reservation
7. The size of my high school graduating class was (approximately)?
 _____ students
8. My pre-college educational graduation status was:
 _____ General Education Development (GED) _____ High School Diploma
9. How well would you rate your high school preparation for attempting college-level course work?
 ___ poor ___ fair ___ average ___ above average ___ superior
10. What type of career pathway were you preparing for while in high school?
 ___ employment ___ vocational school training ___ college education
 ___ on the job training ___ no career plans
11. To what extent did you utilize the available high school guidance services offered by your high school?
 ___ never ___ seldom ___ occasionally ___ often ___ frequently
12. Do you feel your college course work was relevant in meeting your needs?
 ___ not relevant ___ relevant Explain: _____

13. Did you feel you had a definite obtainable career goal set for yourself at the time of enrollment at the University of North Dakota?
 _____ yes _____ no

14. A. Do you feel that your study habits were well developed prior to your college enrollment?

_____yes _____no

B. Please check the amount of time you spent on college course work outside of class?

- _____ 0 hours per week
- _____ 1-5 hours per week
- _____ 6-10 hours per week
- _____ 11-15 hours per week
- _____ 16-20 hours per week
- _____ more than 20 hours per week

C. Please check the items that describe how you studied and the percentage of time that was spent on each method?

<u>ITEM</u>	<u>PERCENTAGE OF TIME</u>
_____ alone.	_____
_____ with a friend/peer	_____
_____ with the aid of a tutor.	_____
_____ study group(s)	_____
_____ other.	_____

Above should total to 100%

D. Please check the items that describe where you studied and the percentage of time spent studying in this location?

	<u>PERCENTAGE OF TIME</u>
_____ in my dormitory room/home.	_____
_____ in the library	_____
_____ in my academic department.	_____
_____ in the university center	_____
_____ in the cultural center	_____
_____ in special program areas	_____

15. A. How do you feel you managed your student financial aids while attending the University of North Dakota?

- _____ poorly
- _____ fair
- _____ average
- _____ above average
- _____ superior

B. Do you feel you received adequate student financial aids while attending the University of North Dakota?

_____yes _____no

- C. Do you feel the University of North Dakota should have distributed your student financial aids in a different way?

yes no

- D. If the University of North Dakota were to implement a new disbursement plan of student financial aids, how would you like it disbursed?

weekly

monthly (3 times)

mid semester (2 times, beginning and middle of semester)

16. A. Did you feel the transition from your home and high school to the University of North Dakota was difficult to make?

yes no

- B. How difficult was the transition from your home and high school to the University of North Dakota?

not difficult moderately difficult extremely difficult

17. Did you experience any significant cultural conflicts while attending the University of North Dakota?

yes no If yes, please explain _____

18. Who do you feel had the greatest influence on your educational pursuits while attending the University of North Dakota? (Check one only)

spouse

parents

brothers/sisters

grandparents

other relatives

instructors

counselors

administrators

peers

other, _____

19. A. Did you have any direct responsibility for your parents, brothers, or sisters while attending the University of North Dakota?

yes no

B. Please check all that pertains to the assistance you gave to your parents, brothers, or sisters?

- finances
- problem solving
- care of other family members
- other, please explain _____

20. How involved are you in the following American Indian customs and traditions?

<u>ACTIVITY</u>	<u>FREQUENCY OF INVOLVEMENT</u>				
	never	seldom	occasionally	often	frequently
American Indian language usage.....	—	—	—	—	—
practice of Indian religion/ways....	—	—	—	—	—
dance at pow-wows.....	—	—	—	—	—
sing at pow-wows.....	—	—	—	—	—
eat traditional foods.....	—	—	—	—	—
participates in other Indian activities.....	—	—	—	—	—
other _____.....	—	—	—	—	—

21. A. Do you feel your American Indian heritage was an advantage for you while attending the University of North Dakota?

yes no

B. How do you feel your college instructors felt about your ethnic heritage?

negative neutral positive

C. Do you feel that your American Indian heritage influenced non-Indian students in their relationship to you?

negative neutral positive

22. A. While attending the University of North Dakota how often did you participate in the following social activities?

<u>ACTIVITY</u>	<u>FREQUENCY OF INVOLVEMENT</u>				
	never	seldom	occasionally	often	very often
organization and club involvement (student government, sorority, fraternity, etc).....	—	—	—	—	—
cultural activities (art show, plays, etc.).....	—	—	—	—	—
extra-curricular activities (church, school, community-wide entertainment, etc.).....	—	—	—	—	—
intramurals (sporting events).....	—	—	—	—	—
attended dances.....	—	—	—	—	—
attended movies.....	—	—	—	—	—
visited friends.....	—	—	—	—	—
dated.....	—	—	—	—	—
attended parties.....	—	—	—	—	—
social drinking.....	—	—	—	—	—
other _____.....	—	—	—	—	—

B. How do you feel your social activities affected your educational experience at the University of North Dakota?

_____ mostly hindered _____ mostly helped _____ neither

23. A. Did you use the University of North Dakota American Indian counselors and staff members while attending the University of North Dakota?

_____ yes _____ no

- B. What kinds of assistance did you receive from the University of North Dakota American Indian counselors or staff?

problem solving
 advisement
 financial aid assistance
 fee payment
 budgeting
 registration
 counseling
 scheduling
 other, please explain _____

- C. How helpful were the University of North Dakota American Indian counselors/staff to you?

not helpful somewhat helpful very helpful

24. How would you rate the assistance received by academic instructors at the University of North Dakota?

poor fair average above average superior

25. A. Did you enroll in any Indian Studies courses while attending the University of North Dakota?

yes no

- B. If yes, do you feel the Indian Studies courses encouraged you to continue your education at the University of North Dakota?

yes no

27. During your experience at the University of North Dakota how often did you use the following off campus supportive services each semester and how satisfied were you with the assistance provided?

<u>Off Campus Supportive Services</u>	<u>FREQUENCY OF USAGE</u>					<u>DEGREE OF SATISFACTION</u>		
	never	once each semester	once a month (3 times)	twice a month (6 times)	once a week or more	satisfied	neutral	dissatisfied
Social Services.....	—	—	—	—	—	—	—	—
Health Services.....	—	—	—	—	—	—	—	—
Job Services.....	—	—	—	—	—	—	—	—
BIA Educ.Spec. Serv...	—	—	—	—	—	—	—	—
Low Income Housing....	—	—	—	—	—	—	—	—
Churches/Religious Groups.....	—	—	—	—	—	—	—	—
Broken Arrow, Inc.....	—	—	—	—	—	—	—	—
Dakota Association of Native Americans...	—	—	—	—	—	—	—	—
Eagle Feather Day Care.....	—	—	—	—	—	—	—	—
Legal Services.....	—	—	—	—	—	—	—	—
Community Involvement.....	—	—	—	—	—	—	—	—
Public/Private School Involvement.....	—	—	—	—	—	—	—	—
Baby Sitting Services.	—	—	—	—	—	—	—	—
Other.....	—	—	—	—	—	—	—	—

28. What factors do you feel contributed to your continuation or termination at the University of North Dakota?

29. What do you feel the University of North Dakota can do to better meet the needs of American Indian students?

30. Is there any particular program, office, or person which you feel made a significant impact on you while attending the University of North Dakota?

31. Do you have specific plans for returning to college?

yes no

Check if you want a summary of this study.

APPENDIX B

UNIVERSITY OF NORTH DAKOTA
REGISTRATION INFORMATION FORM

UNIVERSITY OF NORTH DAKOTA
REGISTRATION INFORMATION FORM

NAME _____ CODE NUMBER _____

SOCIAL SECURITY NUMBER _____

1. High school grade point average:

___(4.0) A ___(3.9 to 3.0) B ___(2.9 to 2.0) C ___(1.9 to 1.0) D
___(.9 and below) F

2. American College Testing (ACT) scores:

___ English
___ Math
___ Natural Science
___ Social Science
___ Composite

3. College class level:

___ Freshman (1 to 23 semester hours)
___ Sophomore (24 to 59 semester hours)
___ Junior (60 to 89 semester hours)
___ Senior (90 to 125 semester hours)

4. College major:

5. Cumulative grade point average:

6. Average semester hours completed per semester at the University
of North Dakota:

_____ semester hours

7. Number of terms (semesters and summer sessions) enrolled at the
University of North Dakota:

_____ terms

APPENDIX C

BUREAU OF INDIAN AFFAIRS

HIGHER EDUCATION INFORMATION FORM

BUREAU OF INDIAN AFFAIRS HIGHER EDUCATION

INFORMATION FORM

NAME _____ CODE NUMBER _____

1. Sex: ___ male ___ female SOCIAL SECURITY NUMBER _____

2. Age:

A. ___ Age at first enrollment in a college or university?

B. ___ Age at the time of enrollment at the University of North Dakota?

C. ___ Age during the last semester of attendance at the University of North Dakota?

3. Reservation where enrolled:

___ Fort Berthold
 ___ Fort Totten
 ___ Standing Rock
 ___ Turtle Mountain

4. American Indian blood quantum:

___ 1/4 to less than 1/2
 ___ 1/2 to less than 3/4
 ___ 3/4 to full

5. Parental income:

A. Approximate annual income of the student's parents while enrolled at the University of North Dakota?

___ 0 to \$5,000
 ___ \$5,000 to 10,000
 ___ \$10,000 to 15,000
 ___ \$15,000 to 20,000
 ___ \$20,000 to 30,000
 ___ \$30,000 and over

B. ___ How many family members did the above parental income support? (include all persons living in the parental home)

6. Type of high school attended:

___ Bureau of Indian Affairs (non-boarding)
 ___ Bureau of Indian Affairs (boarding)
 ___ Tribally controlled
 ___ Private/Parochial
 ___ Public

APPENDIX D
BUREAU OF INDIAN AFFAIRS LETTERS OF
ENDORSEMENT AND APPROVAL



IN REPLY REFER TO:

Division of Education

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
ABERDEEN AREA OFFICE
115 FOURTH AVENUE S.E.
ABERDEEN, SOUTH DAKOTA 57401

February 17, 1981

Mr. Leigh Jeanotte
518 Oak St.
Grand Forks, ND 58201

Dear Mr. Jeanotte:

This is to advise you of the support and approval given by this office for the study you are conducting involving Indian students from North Dakota tribes and the University of North Dakota.

The results will be timely and of great interest to those agencies who are funding students at the University.

Our office will be appreciative in receiving the findings of this study.

If we can be of any further assistance, please do not hesitate to contact this office.

Sincerely,

Harry Edge Bull

Area Education Program Administrator



United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
TURTLE MOUNTAIN AGENCY
BELLCOURT, NORTH DAKOTA 58316

IN REPLY REFER TO:
Higher Education

February 11, 1981

Leigh Jeanotte
Teacher Corp Office
CTL-UND
Grand Forks, North Dakota 58202

Dear Leigh:

Congratulations on the progress you are making on your Doctoral Program. I'm anxious to read your dissertation when its completed. As you know, many of the students you are studying were recruited by me during my days at UND and I've always felt a special pride and concern regarding them.

You may want to contact the Special Services Program for additional information on the needs assessments that were done in 1970 and 1971.

Please do not hesitate to contact me if I can be of any help. Good Luck.

Sincerely yours,

Kenneth W. Davis
Education Specialist

KWDavis:msl
Enclosures



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
FORT BERTHOLD AGENCY
P.O. BOX 370
NEW TOWN, NORTH DAKOTA 58763

IN REPLY REFER TO:

Education

February 13, 1981

Mr. Leigh D. Jeanotte
518 Oak Street
Grand Forks, North Dakota 58201

Dear Leigh:

This is to advise you that I am in complete agreement with your doctoral study related to why American Indian Students drop out of or persist in their educational program at the University of North Dakota.

To my knowledge since there has never been a study of this kind done on Indian students, I am looking forward to receiving a summary of your results. I feel that the information you will receive from this study will help me counsel students who plan to pursue higher education in general and specifically those who are planning to attend the University of North Dakota.

If I can be of further assistance, please feel free to contact me. Attached are the two lists of students you requested, which are the drop outs and the graduates.

Sincerely,

Joseph L. Gregory
Education Specialist

Attachment



United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
STANDING ROCK AGENCY
FORT YATES, NORTH DAKOTA 58538

IN REPLY REFER TO:
HIGHER EDUCATION

February 9, 1981

Lee Jeanotte
The Center for Teaching and Learning
Box 8158, University Station
Grand Forks, ND 58202

Dear Lee;

I have reviewed the questionnaire for the survey you are doing toward requirement of your Ph. D. Since this should reflect information about indian students funded by the BIA, our office is in favor and will give you the necessary co-operations.

Sincerely yours,

Robert Gipp
Higher Education Specialist

cc: chron file

APPENDIX E
QUESTIONNAIRE LETTERS

THE
UNIVERSITY
OF
NORTH
DAKOTA

THE CENTER FOR TEACHING AND LEARNING
Box 8158, University Station
Grand Forks, North Dakota 58202

February 3, 1981

Dear

Even though the numbers of American Indians attending higher education institutions is increasing every year and may continue to do so for some time, colleges and universities, with few exceptions, seem to know little about how to respond effectively to their educational needs. Because a large number of American Indian students attend the University of North Dakota, I am attempting to study the contributing factors related to why American Indian students drop out of or persist in educational programs. Hopefully, the information I gather will assist University personnel to better meet the educational needs of American Indian students.

I am currently completing my doctoral studies at the University of North Dakota and plan to graduate in May 1981. In order to complete my dissertation, I am asking your assistance in providing information. I assure you that the information you provide will be kept confidential and no one will know your identity. Would you please complete the questionnaire as soon as possible and return it to me in the self-addressed stamped envelope? Should you be interested in receiving a summary of my paper, I would be willing to mail you a copy in the Fall of 1981.

Your name was selected from among the Indian college students having attended the University of North Dakota. You are one of forty individuals from your reservation sampled for this study.

I am eagerly waiting my return to the position of Assistant to the Vice President for Student Affairs for Native American Programs so that I can renew my daily contacts with Indian students. I am committed to implement changes to benefit Indian students which are indicated as necessary through the results of my doctoral study.

I shall be grateful for your cooperation, and a prompt reply will certainly be appreciated.

Sincerely,

Leigh D. Jeanotte
Graduate Student

LDJ:haj

Enclosures

THE
UNIVERSITY
OF
NORTH
DAKOTA

THE CENTER FOR TEACHING AND LEARNING
Box 8158, University Station
Grand Forks, North Dakota 58202

February 16, 1981

Dear

About two weeks ago I mailed you a letter regarding your participation in a study I am conducting here at the University of North Dakota as a part of my doctoral program. The study has to do with the contributing factors related to why American Indian students drop out of or persist in educational programs at the University of North Dakota. The information gathered in this study will assist University personnel to better meet the educational needs of American Indian students.

Perhaps you have misplaced the original form or laid it aside till a more convenient time. Because it is important to the accuracy of the study for each person to participate, I am taking the liberty of sending you a duplicate set of materials. Let me reassure you that your responses will be treated confidentially.

I would appreciate it if you would take some time to complete the enclosed questionnaire, put it in the self-addressed envelope, and drop it in the mail. Thank you for your cooperation.

Sincerely,

Leigh D. Jeanotte
Graduate Student

LDJ:haj

Enclosures

APPENDIX F
OCCUPATION CATEGORY CODES

OCCUPATION

CATEGORY CODE01 Professional, Technical and Kindred Workers

Accountants	Dietitians, nurses, pharmacists, etc.
Architects	Engineers
Clergy	Lawyers
College-University faculty and administrators	Social Workers
Medical doctors, dentists, etc.	Teachers

02 Managers, Officials and Proprietors

Buyers	Postmasters
Store managers -retail managers	Banking officers
Public officials	Insurance
	Farmers

03 Clerical, Sales and Kindred Workers

Banktellers	Stenographers
Cashiers	Typists
File clerks	Secretaries
Office machine operators	Real estate agents
Payroll clerks	Salesmen
Receptionists	

04 Craftsmen, Foreman and Kindred Workers

Bakers	Locomotive engineers
Printers	Mechanics
Brick masons	Millers
Carpenters	Painters
Electricians	Tailors
Jewelers	Air Force Base
Fireman	Police

05 Operatives and Kindred Workers

Apprentices	Truck Drivers
Assemblies	Welders
Bus drivers	Chemical workers
Delivery men	Mill operators
Meat cutters	

06 Service Workers

Babysitters	Bartenders
Housekeepers	Maids
Laundress	Waiters, waitresses
Hairdressers	Teacher Aide

07LaborersCarpenter's helper
CarwashersGeneral construction
Farm laborers08 No Occupation09 Doesn't know10 Deceased

APPENDIX G
UNIVERSITY OF NORTH DAKOTA
DEPARTMENT CODES

UNIVERSITY OF NORTH DAKOTA DEPARTMENTSCODE

1 Accounting	33 Industrial Engineering
2 Aerospace Studies	34 Industrial Technology
3 Anatomy	35 Journalism
4 Anthropology	36 Languages
5 Arts & Sciences	37 Law
6 Aviation	38 Library Science & Audio Visual
7 Biochemistry	39 Linguistics
8 Biology	40 Management
9 Business Administration	41 Marketing
10 Business & Vocational Admin	42 Mathematics
11 Center for Teaching & Learning	43 Mechanical Engineering
12 Communication Disorders	44 Medicine
13 Chemical Engineering	45 Microbiology
14 Chemistry	46 Military Science
15 Civil Engineering	47 Music
16 Communications	48 Nursing
17 Computer Science	49 Occupational Therapy
18 Counseling & Guidance	50 Pathology
19 Economics	51 Pharmacology
20 Electrical Engineering	52 Philosophy
21 Engineering	53 Physical Therapy
22 English	54 Physics
23 Fine Arts	55 Physiology
24 Geography	56 Political Science
25 Geology	57 Psychology
26 Health, Physical Educ. Recr.	58 Religious Studies
27 History	59 Social Work
28 Home Economics	60 Sociology
29 Honors	61 Speech
30 Humanities	62 Theatre Arts
31 Human Resource Development	63 Visual Arts
32 Indian Studies	64 Vocational Education
	65 University College

APPENDIX H
EXPLANATION OF ON AND OFF-CAMPUS
SUPPORTIVE SERVICES

EXPLANATION OF ON AND OFF-CAMPUS

SUPPORTIVE SERVICES

Broken Arrow, Inc. is a non-profit Indian-oriented community group which serves to address the needs of Indian people living in the Grand Forks area.

Dakota Association of Native Americans is a program designed to assist Indian people from the Grand Forks area. The program provides assistance in family planning, location of housing, employment assistance, and addresses other needs of Indian people.

Learning Services is a University of North Dakota program which offers academic support services to students. This includes: basic skills credit courses, tutoring, assessing needs, individualized assistance, and training sessions and workshops.

Native American Programs is a program designed to assist all aspects of the University to develop a climate that is responsive to the needs of American Indian students. In addition, the program serves as a general institutional contact for students, assists in advising faculty and staff, coordinates recruiting, assists in planning, and addresses other needs of Indian students.

Pass Book Account is a service of the University of North Dakota Business Office which allows Indian students to deposit their financial aids and are allowed to withdraw funds periodically throughout each semester.

Student Opportunity Program is a University of North Dakota program which offers academic and financial aid advisement, tutoring,

reading and study skills classes, career guidance, housing assistance, and personal counseling to students meeting program requirements. The program is now titled Special Services.

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