



A case study of American Indian students at the College of Great Falls  
by Audrey Kay Thompson

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education  
Montana State University

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Abstract:

The key challenge facing higher education today is not only meeting the learning needs of an increasingly diverse student population, but also responding on societal changes generated by dramatic economic changes, fast-paced technological advances, and a national population in which the traditional Anglo-American majority no longer exists. The College of Great Falls serves a region which contains a large American Indian population and which is within a two-hour drive of two of Montana's seven tribal colleges. Although the College of Great Falls has welcomed American Indian students since its inception, no institutional research has been compiled to determine if it is serving this minority well.

The purpose of this study was to determine if available institutional data could identify the profile of academically successful American Indian students and if, through discriminate analysis, it could differentiate between the Academically Successful and the At-Risk students. Further, the research sought to identify if the data were sufficient for future retention program planning. Institutional data collected at the College of Great Falls is filed in the Office of Admissions and Records on the application for admission forms and recorded grades and grade point averages as retained on official students' transcripts.

The profile of the American Indian student attending the College of Great Falls depicts a first generation college student who is a female, unmarried, less than 40 years of age, and a United States citizen residing in Montana. No set of characteristics could be drawn from the available data on American Indian students that could identify specific attributes that would contribute to academic success. At best, the identification of a non-traditional age group suggests that those students are most likely to be academically successful. No statistically significant relationship clearly discriminates between the Academically Successful and the At-Risk Indian students. Because of limitations in the institutional data described, the college does not have sufficient data for future retention program planning. It is possible, however, to identify necessary data and to recommend the use of that data to develop programs which will be beneficial for retention of American Indian students. The focus of such beneficial recommendations is not only to educate, but also to empower the minority students CGF serves.

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AT THE COLLEGE OF GREAT FALLS

by

Audrey Kay Thompson

A thesis submitted in partial fulfillment  
of the requirements for the degree

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Montana State University  
1995

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This thesis has been read by each member of the graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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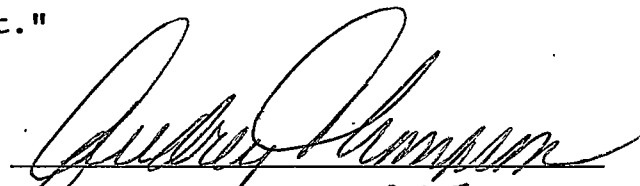
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## ABSTRACT

The key challenge facing higher education today is not only meeting the learning needs of an increasingly diverse student population, but also responding on societal changes generated by dramatic economic changes, fast-paced technological advances, and a national population in which the traditional Anglo-American majority no longer exists. The College of Great Falls serves a region which contains a large American Indian population and which is within a two-hour drive of two of Montana's seven tribal colleges. Although the College of Great Falls has welcomed American Indian students since its inception, no institutional research has been compiled to determine if it is serving this minority well.

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## CHAPTER 1

## INTRODUCTION

Differing Cultural Perspectives

In the year 1744 in Lancaster, Pennsylvania, following a treaty-making session between Indian people and early colonists, a spokesman for the colony of Virginia generously offered a dozen Indian youths a free education at the College of William and Mary in Williamsburg. There, the Indian people were told that the young men could be instructed in all the learning of the white people. The Indian chiefs did not respond to this offer until the next day. At that time, their speaker expressed the Indian people's deep sense of appreciation for the opportunity extended by the government of Virginia, but they refused it with the following explanation:

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, therefore, 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 with 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, unable to bear

either cold or hunger, knew neither how to build a cabin, take a deer, or kill an enemy, spoke our language imperfectly, were therefore neither fit for hunters, warriors, nor counsellors; they were totally good for nothing. We are, however, not the less obliged 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 great care of their education, instruct them in all we know, and make men of them. (Block, 1975, p. 141)

Benjamin Franklin's account is the only historical record of this incident. Accurate or not, Franklin clearly recognized how differently the Indian and white cultures perceived the benefits of the formal education offered to the young Indian men. It is ironic that for the next 200 years, white leaders continued to approach the education of American Indians with the same charitable attitudes and misguided expectations. To demonstrate these misunderstandings, a 1969 report identified several important factors that contributed to the lack of success of federally-funded programs for American Indians in both private and public education. The key factors delineated in the Joseph Study were as follows:

1. Basic deficiencies of knowledge about Indians resulting in actions and programs which bear no relation to the realities of what a tribe fashioned by a particular history and culture, needed, desired, or could accept and carry out with success.
2. A general lack of vision and historical perspective resulting in non-Indians ignoring certain basic truths about Indians:
  - a. Indians have been here for thousands of years.
  - b. This is their homeland.

- c. They evolved their own distinctive cultures and did not share points of view, attitudes, and thinking that came to the rest of the American population from Judeo-Christian and Western Civilization legacies.
  - d. Although the Indians were conquered militarily, they are confirming the lesson of history that no people has ever been coerced by another people into scuttling its own culture.
  - e. Although acculturation and assimilation do occur, they occur only on an individual's own terms.
3. Lack of self-government.
  4. Lack of understanding of the Indian experience and the Indian point of view.
  5. Inability to listen or accept Indian recommendations for change. (National Advisory Council on Indian Education [NACIE], 1992, p. 47)

The similarities between this analytical report and Franklin's historical account clearly indicate that the education of the American Indians has been negatively influenced by cultural misunderstandings for more than two centuries. The extent of this situation has been researched thoroughly, and researchers have found that the American Indians have achieved the lowest educational results of any other ethnic group (Lin, LaCounte, & Eder, 1988, p. 8) and that the Indian drop-out rate is higher than that of any other ethnic group (Astin, 1982, p. 51). Statistically, less than one-third of American Indian ninth graders attend college. Worse yet, out of every 100 American Indian ninth graders,

only three will earn a baccalaureate degree (Wright & Tierney, 1991, p. 18).

In an effort to attract and retain more American Indian students, a few non-Indian colleges have attempted to improve their environments by providing curricula which include Indian Studies programs and special support systems for the traditions of the various ethnic groups (Wright, 1987, p. 69). The existence of such programs allows American Indian students to feel more a part of an educational institution. Similarly, the colleges also seem more responsive to their interests. However, even with these institutional changes, nearly 90% of the total population of American Indian college students still drop out (Boyer, 1989, p. 25).

#### Federal Policy as a Socialization Instrument

Between 1778 and 1871, the United States negotiated a total of 389 treaties with the Indian people. During this process Indian tribes ceded a billion acres of land in exchange for pledges made by the federal government concerning the security of their remaining lands and promised federal services in human service areas such as education and health care (Fuchs & Havighurst, 1973, p. 4). The need for these services was not indigenous to the Indian culture but was a result of interactions with the encroaching white society. It is interesting to turn to Benjamin Franklin once again for a description of Indian society. His observations demonstrate



the success with which Americans Indians had lived during the hundreds of years prior to the arrival of the white Europeans.

The Indian men, when young, are hunters and warriors; when old, counsellors; for all their government is by counsel of the sages; there is no force, there are no prisons, no officers to compel obedience or inflict punishment. Hence they generally study oratory, the best speaking having the most influence. The Indian women till the ground, dress the food, nurse and bring up the children, and preserve and hand down to posterity the memory of public transactions. These employments of men and women are accounted natural and honorable. Having few artificial wants, they have abundance of leisure for improvement by conversation. Our laborious manner of life, compared with theirs, they esteem slavish and base; and the learning on which we value ourselves they regard as frivolous and useless. (Van Doren, 1938, p. 705)

Although anthropological evidence of Indian cultures dates back 50,000 years, life for America's natives has changed most dramatically since 1,500 A.D. when approximately 6,000,000 people lived in several hundred societies throughout North America (NACIE, 1992, p. 41). Europeans bestowed the name "Indian" on all of these natives despite the fact that they differed dramatically in their economic, social, and religious lives. No place were differences more evident than in the realm of linguistics. Native Americans spoke more than 200 different languages (Fuchs & Havighurst, 1973, p. 2). The number of American Indians dropped to an all-time low of 220,000 by 1910. Although the American Indian population has now grown to over 2,000,000, the story that accompanies these statistics is a tale of disillusionment and disappointment.

America's natives have come to envision themselves as an insignificant minority in the land they once claimed (NACIE, 1992, p. 41).

Greed drove many white settlers to acquire more and more of the land until finally the Indian people were allotted reservations that comprised only 2.9% of their original 2,000,000,000 acres of land holdings (NACIE, 1992, p. 40). Reservations were and still remain isolated and chronically neglected places. Life on reservations is comparable to existence in Third World countries in respect to unemployment, poverty, life expectancy, infant mortality, and educational opportunities (Boyer, 1989, p. 2).

With the continual failure of others to understand the culture of the diminishing Indian race, hopelessness and despair increased among the American Indian population. The white culture typically criticized Indian people for not being willing to fit into the white society and to compete on the terms of the dominant culture. The solution appeared to be assimilation, and education was offered to the Indian people as the quickest, easiest way to assimilate into the American society (Makofsky, 1990, p. 36).

#### American Indians and Higher Education

Proponents of higher education have expressed a commitment to working with American Indians since the earliest colleges were founded. Gifts of more than 2000 pounds enabled

the East India School to open its doors in the colony of Virginia in 1621 (Cremin, 1970, p. 209). The stated reason for educating Indian students was to "draw the best disposed among the Indians to converse and labor with our people for a convenient reward that they might not only learn a civil way of life, but be brought to a knowledge of religion and become instruments in the conversion of their countrymen" (Boyer, 1989, p. 7). A year later during an Indian uprising, the East India School superintendent and some of the residents were killed. The "college for the Children of Infidels" was forced to close by the natives it was designed to serve (Wright & Tierney, 1991, p. 13).

Three other early independent colleges--Dartmouth, College of William and Mary, and Harvard University--were also founded with the vision of contributing to the education of Indian youth. Harvard's charter in 1636 declared the purpose to educate the English and Indian youth of this country in knowledge and goodness. A college-within-a-college was created in 1656 with the construction of the Indian College building for 20 Indian students on Harvard's campus; however, the response was poor. Never did more than two Indian students occupy the Indian College at any given time (Wright, 1988, p. 7). Most of the time the building was used as housing for English students and a convenient location for the college printing press (Wright & Tierney, 1991, p. 12).

According to its charter, the College of William and Mary was "to teach the Indian boys to read and write . . . and especially to teach them thoroughly the catechism and the principles of the Christian religion" (Boyer, 1989, p. 8). In 1723, the college opened special facilities to house Indian students even though no Indian students were in attendance. Rather than concern for housing Indian students, it appears that the president revived the appearance of a commitment to Indian education in order to use funds left to the college for that purpose (Wright, 1988, p. 10).

Dartmouth College, chartered in 1769, was founded for the purpose of "education & instruction of Youth of the Indian tribes in this Land in reading, wrighting [sic] and all parts of Learning which shall appear necessary and expedient for civilizing and Christianizing children of pagans . . . and also of English Youth" (Wright & Tierney, 1991, p. 13). Dartmouth also became the first college to receive federal assistance for the education of Indian youths with a 1775 act of the Continental Congress which established an appropriation of \$500 for that purpose (Reyhner, 1992, p. 37).

As for the sincerity of the desire to advance Indian education and convert the natives to Christianity, doubt has been expressed concerning the true motives. The possibility exists that the colonists were cunningly appealing to the stay-at-home Englishmen for money to support political, economic, and educational agendas of which Indian education

was of secondary importance (Wright, 1988, p. 12). Even if the efforts were sincere, no attempts were made to incorporate Indian languages, culture, or history into the curriculum (Fuchs & Havighurst, 1973, p. 3). To illustrate the results of such an oversight, one contemporary analyst capsulized the perspective on Indian education as follows:

Indians and non-Indians are who they are because of the cultural heritage influencing their outlook on life. A need to identify with a group or a subgroup has led to the faithful rendition of ancient customs and rituals. A culture becomes paralyzed when it is not accepted by the dominant culture, however, and coexistence is an unsatisfactory solution. Total assimilation is usually the goal of a dominant culture, and it can involve the absolute destruction of a people's ideals, tradition, and language. Indians have been fighting this battle for centuries. (Pepper, 1985, p. 2)

The Meriam Report in 1928 was the first study to acknowledge that the educational, social, and economic problems of the American Indians possibly resulted from trying to force them to conform to an alien culture. As a result of that study, congressional legislation was passed in 1934 which allowed Indian people to participate in the development of educational programming. However, World War II and a resurgence of patriotic "Americanism" brought a quick end to such progress, and Native American schools were criticized for becoming too pro-Indian. Not until the 1960s was further progress made. Then the Civil Rights Movement and the Higher Education Act of 1965 provided the environment in which the

American Indian voices were finally heard (NACIE, 1992, p. 41).

### Tribal and Independent Colleges

The 1968 opening of Navajo Community College, the first tribally controlled community college, represented a significant event in the history of American Indian education. Since that time, more than two dozen tribal colleges have been founded, and a new era for American Indian education has begun (Olivas, 1982, pp. 42-44). Tribal colleges, primarily two-year institutions, are unique in that they are controlled by the Indian people and strive to meet the specific needs of reservation residents. Their success is based on the ideal of self-determination and a firm commitment to reclaim the Indian cultural heritage. Up until this time, education at every level had been largely controlled by the non-Indian society. Its pedagogy and curriculum were unchanged for the American Indian students, and assimilation into the dominant culture was the goal (Fuchs & Havighurst, 1972, p. 19).

On July 8, 1970, President Richard Nixon clearly characterized the ideal of self-determination when he communicated to the U.S. Congress his recommendation for Indian Policy. He stated:

The goal of any new national policy toward the Indian people must be to strengthen the Indian's sense of autonomy without threatening his sense of community. We just assure the Indian that he can assume control of his own life without being

separated involuntarily from the tribal group. And we must make it clear that Indians can become independent of federal control without being cut off from federal concern and federal support. (Lankford & Riley, 1986, p. 31)

This recommendation acknowledged a change from two false assumptions in which early government policies were founded. First, the practice had been to remove American Indians from their own culture supposing that such removal had no negative impact. Second, that in order to bring about the necessary assimilation, the dominant society had a right to unilaterally impose this separation for the sake of education--the instrument of change (Boyer, 1989, p. 39).

Because of the tremendous optimism resulting from self-determination, tribal colleges are succeeding where the independent colleges and public institutions have failed Indian populations in the past. The tribal colleges located in 11 western and midwestern states are basically autonomous. Although they receive federal funding, their success lies in the fact that the colleges are controlled by the Indian people who design the programs to meet the needs of the community. The programs are designed to be culturally relevant, and role models can be found on the campus. These colleges provide hope for the future not only for Indian people but also for the American nation (Stein, 1992a, p. 89).

Contemporary independent colleges share many of the characteristics which make the tribal colleges so successful. Therefore, they too are in an excellent position to positively

address the needs of Indian students. Because independent colleges are similar to privately owned businesses, the vision and direction of these institutions are flexible and adaptable. Since tuition provides much of their funding, funding sources do not determine the mission. Boards of Trustees of such institutions are chosen by the college and are less apt to be politically influenced than their public school counterparts. Therefore, within the independent college structure there is the ability to focus on American Indians with greater success than usually found at public institutions.

Independent colleges also share several other significant features. They serve fewer students than the public institutions so they are capable of providing more individual attention. Independent colleges and universities enroll only 21% of all college students, yet they award 33% of all bachelor's degrees and 42% of all master's degrees. In 1990, for example, 40% of all doctoral recipients in the United States received bachelor's degrees from independent institutions (National Institute of Independent Colleges and Universities, 1992).

The College of Great Falls (CGF) is one of three independent colleges in Montana. Founded in 1932 as a Catholic institution, its mission was designed to serve the needs of people in the Great Falls area with a special interest in serving the under-represented (CGF Mission



Statement, 1994). Because Great Falls has a high percentage of American Indian people within its population, Indian students have traditionally attended the college. Many of these students are attending college for the first time while others are transfer students. Because of its proximity to the Blackfeet and Rocky Boy Indian Reservations, the college also attracts a considerable number of students who have earned associate degrees from tribal colleges.

Because the College of Great Falls has an open admission policy and a dedication to serving the under-represented, providing higher education opportunities to American Indians could be one of its greatest strengths. Although many Indian students have attended CGF over the years, no institutional research traces their academic progress, and the college lacks a profile of the Academically Successful Indian students.

#### Statement of the Problem

CGF has the potential of becoming a leader in the field of educating American Indians because of its geographic location and its mission. Situated in a region with a high percentage of American Indians, it is only natural that the college should encourage these students to become an integral part of the campus.

The CGF traditions of service to under-represented populations and to individuals seeking to improve their career potential are further reasons to justify commitment to

American Indian education. Yet with an environment that could be highly supportive of American Indian students, the College of Great Falls has no research to determine if it is serving well the largest cultural minority on its campus and in its service region. Although the number of American Indian students who enroll at the College of Great Falls is available, little is known about drop-out, stop-out, transfer, and completion rate.

At the present time, an assumption has been made that non-traditional American Indian students who have completed a 2-year program at a tribal school and have transferred to CGF will likely be successful in completing a bachelor's degree. No data have been collected to support that assumption. Theory would suggest that these students have known success at a tribal school and therefore will tend to be more confident in their ability to complete a bachelor's degree than first time students. For the American Indian students who are not transfer students, the drop-out and stop-out rate is unknown. Statistical profiles have never been developed to identify the characteristics of either Academically Successful or At-Risk American Indian students. Also, the graduation rate for American Indian students is unknown.

Because small independent colleges tend to respond to needs of special groups more readily and easily than large public institutions, it is especially important that these institutions look to the tribal colleges as successful models.

A vital part of developing programs to better meet the needs of designated minority groups is accurate institutional data. Therefore, in order for private colleges to implement a program which is sensitive to the needs of American Indian students, knowledge is needed related to (a) tribal colleges and successes of self-determination, (b) independent colleges and student minorities, and (c) the importance of adequate and accurate institutional research in higher education.

#### Purpose

Indian people have distinct educational needs, but higher education has historically failed miserably in addressing these needs. Nevertheless, self-determination has provided a new hope for education among Indian people, and they see a way to relate education to their cultural needs. The purpose of this study is to determine if existing demographic data at CGF are adequate and useful in identifying success factors for American Indians who attend the school. The data which are available are the data gathered on all students by the Office of Admissions and Records.

#### Research Questions

1. What is the profile from available institutional data of American Indian students attending the College of Great Falls?
2. What is the profile of American Indian students attending the College of Great Falls who are defined as Academically Successful?

3. From the data available, is it possible to discriminate between those Indian students who are defined as Academically Successful and those defined as At-Risk?
4. Is available institutional information at the College of Great Falls adequate for future program planning?

#### Significance of the Study

The findings of this study will be far-reaching if CGF can utilize its institutional research to determine factors related to academic success among its American Indian students. The college will then be able to accurately and systematically analyze the unique needs of these students and how to better meet these needs.

Administrators in academic affairs and student services at the College of Great Falls can use results of this study to determine the future role of educational services to American Indian students. Retention can be enhanced through knowledge of the student profile most likely to be Academically Successful, and special attention can be given to those who are determined to exhibit At-Risk characteristics. Student Services programs can be developed to enhance the social life of these Indian students on a predominantly white campus. Similarly, academic programs might be launched to enhance the chance of Indian students for economic success both on or off the reservation. The college will be able to redirect its focus from trying to encourage Americans Indians from becoming

more fully integrated into the mainstream--the historical error of most prior formal educational ventures--to concentrating on helping faculty and staff to become more oriented to the particular learning needs of American Indian students.

By acknowledging the profile of the Academically Successful Indian student and by addressing the barriers faced by the At-Risk, instructors will have more opportunity to design their classes and programs to include elements that might enhance the chance for Indian students to perform well. This will make it possible for more sensitivity to emerge in how teaching and learning styles could be accommodated for all students.

The American Indian student population may profit immensely as CGF better understands and adapts programming to identified cultural differences and thereby provides better opportunities for them to succeed in higher education. This current lack of understanding is one of the key issues related to poor Indian student retention (Tierney, 1992, p. 153). By improving the continuity of American Indian presence, the college will also benefit immensely from the cultural diversity that native peoples have to offer.

In order to determine future educational directions, CGF needs to look to its past. This step is vital. Without the use of institutional research, any adjustments designed to meet the needs of current Indian students would be made

without recognition of factual, data-based patterns contributing to the academic success or failure of its largest minority population.

### Definition of Terms

Academically Successful student: For the purpose of this study, a student enrolled in college who has maintained at least an accumulated 2.0 grade point average on a 4.0 scale or has completed a degree program.

American Indian: A descendent of people native to America or anyone who claims that ethnic origin.

At-Risk student: For the purpose of this study, a student enrolled in college who is failing to maintain an accumulated grade point average of at least 2.0 or a previously enrolled student who did not earn at least a 2.0.

College: An institution of higher learning with educational programs leading to associate or bachelor degrees.

Graduation: Successful completion of all institutional requirements for an associate or a bachelor degree.

Higher education: Learning activities pursued at accredited institutions which offer programs leading to associate or bachelor degrees.

Independent college: An institution of higher education supported by an organized churches or private benefactors which does not rely upon public support.

Institutional research: The systematic, objective method of inquiry into the nature, meaning, and results of educational programming through the use of collected data.

Post-secondary education: Learning experience beyond high school that takes place in an institutional setting which leads to a professional certificate, an official license, or an academic degree.

Private college: An institution of higher education established and supported by independent benefactors

without financial assistance from state or local governments.

Public college/university: An institution of higher education established and supported by state authorities and funded by tax dollars.

Self-determination: A guiding principle for a group or organization that allows the membership to establish its own policies and procedures.

Tribal college: An institution of higher education established on an Indian reservation designed by the Indian community to preserve Indian culture and to provide academic programs leading to associate or bachelor degrees.

## CHAPTER 2

## REVIEW OF RELATED LITERATURE

Introduction

Historical research confirms the pledged commitment of independent colleges to educate American Indian students. Attempts to fulfill this pledge began with the first Europeans that settled in this country in the 17th Century. Throughout the next 300 years, however, colleges failed dismally in their efforts to assimilate American Indian students and further failed to recognize their own cultural misconceptions about tribal life. Looking toward the 21st Century, some independent colleges remain verbally committed to the education of American Indians. Yet, very little research has been conducted or published that details either the anticipated or achieved learning outcomes or even the graduation rates of this student population. In fact, few research studies even include American Indians in general comparisons with other racial/ethnic groups (Davis, 1992, p. 24).

Significant data concerning American Indian enrollment, matriculation, or graduation rates in higher education are sparse. Reliable numbers prior to 1900 are nearly impossible to locate. One of the earliest 20th century studies, a survey



conducted by the Higher Education Research Institute, indicates that in 1932 only 385 American Indians were enrolled in colleges and that only 52 Indian college graduates could be identified. Three years later a total of 515 Indians had entered college. According to the same historical survey, by 1965 Indian enrollment had grown to 1,718, and by 1972 it had jumped to a staggering 12,748--a 724% increase. This number then reportedly changed very little up to 1980 (Wright, 1985, p. 1). According to a similar study by the American Council on Education, 76,000 American Indian students were enrolled in higher education in 1976; this increased to 93,000 in 1988, and to 103,000 in 1990 (O'Brien, 1992, p. 1). Attempting to reconcile these statistics makes it readily apparent that accurate numbers, and accurate interpretations of such diverse figures, are hopelessly illusive.

One possible problem in assembling accurate data on American Indian participation is the interpretation of the words "college," "higher education," and "post-secondary education." Although these terms are usually used interchangeably, the discrepancies in the numbers cited provide reason to question the requisite interpretations. No foundation definitions are included in any of the studies.

Statistical surveys of the American Indians are very difficult to assess for three additional reasons. These reasons are as follows:

1. American Indians are a relatively small group so a researcher sometimes cannot generate a reliable sample from which to generalize.
2. Nearly half of the American Indian population is difficult to survey because they live in some of the most rural and isolated areas of the United States.
3. The diversity of tribal peoples and variety of educational programs defy simple categorization. (Tierney, 1992, p. 11)

American Indians account for less than 1% of all higher education students in the country. This extremely small percentage represents all tribes. Relating that number with the listed difficulties in surveying the Indian population further defines the limitations created for research concerning Indian students and post-secondary education.

American Indian students attending independent colleges are totally unrecognized as a research population. The 1990 census figures illustrate that 88% of the identified Indian students are attending public institutions. Exactly what type of institution the other 12% are attending is not clearly described, but certainly independent colleges are represented. It is further known that 53% of the total number of American Indian students in post-secondary education are enrolled in 2-year institutions (O'Brien, 1992, p. 1). Recent research suggests that between 75% and 93% of the Indian students attending post-secondary institutions drop out, most within their first year of enrollment (Hill, 1991, cited in Bowker, 1992, p. 6). This suggests that traditional post-secondary

educational systems are failing to adequately serve the needs of American Indians.

Disregarding the previous statistics and the miserable conditions they reveal, the last 25 years illustrate remarkable successes in American Indian education for which the Indians themselves are responsible. In the same year that the first tribal college opened, President Nixon decreed that "the right of self-determination of the Indian people will be respected and their participation in planning their own destiny will actively be encouraged" (Boyer, 1989, pp. xi, 21). Since that time, institutionalized self-determination has provided the opportunity for American Indians to demonstrate success on their terms. Ironically, the achievement has even more graphically demonstrated the reasons for the past educational failures.

#### Self-Determination

A common definition of self-determination involves the right of a community to decide its own form of government and political relations (Fuchs & Havighurst, 1973, pp. 19-22). On reservations throughout the United States, the term implies the right of the Indian people within the designated area to provide the government and leadership for its people without outside interference.

Historical events promoted adoption of the concept of self-determination, but realization of the importance of this

philosophy and practice was painfully slow in unfolding. American Indian students across the nation had suffered from cultural misunderstanding and from forced assimilation for three centuries before tribal colleges asserted the new principle of Indian self-worth and historical continuity. Examples of any other successful philosophical approaches to educating the American Indians are rare and non-existent in statistically documented format. An early example of self-determination existed in the Oklahoma region in the late 19th century when the Cherokee Nation established a Cherokee-controlled educational system. The result was that the Cherokee population became better educated than the surrounding white population. Predictably, when Oklahoma became a state in 1906, the Cherokee education system was abolished by law (NACIE, 1992, p. 44).

To demonstrate further the irony of their plight, not until an Act of Congress in 1924 were all American Indians allowed to become full citizens of the land which they had inhabited long before Europeans arrived. States such as Arizona and New Mexico, however, continued to deny Indians the right to vote in local, state, and national elections until forced to grant the franchise to them in 1948 by a Supreme Court decision (Fuchs & Havighurst, 1973, p. 10). Facing such legally enforced powerlessness, the ability of American Indians to resist total assimilation is genuinely remarkable.

The Meriam Report on "The Problem of Indian Administration" was made public in 1928. It was an investigation of Indian affairs conducted on behalf of the federal government by Lewis Meriam under the guidance of the Brookings Institute. This report, written by Swarthout College education professor W. Carson Ryan, Jr., argued for "individualistic, nonauthoritarian, decentralized education in which the focus would be on the whole child and his relationship to his family and community" (Fuchs & Havighurst, 1973, p. 226). Two major findings of the report were that (a) Indians were being excluded from the management of their own affairs and (b) Indians were receiving a poor quality of social services--especially in respect to health care and formal education (NACIE, 1992, p. 41). The report discouraged the government from focusing on financial economy and, in part, encouraged making available scholarships and loans for Indians in higher education (Fuchs & Havighurst, 1973, p. 11).

As a result of the Meriam Report, the Indian Reorganization Act of 1934, also known as the Wheeler-Howard Act, was passed and eventually became known as "The Indian Bill of Rights." This legislation sought economic stabilization for American Indians on tribal lands, a discontinuation of forced assimilation, and recognition of civil and cultural freedom for all Indians (NACIE, 1992, p. 41). This act and other related legislation also provided \$250,000 in direct loans for college expenses to encourage

American Indian enrollment. These ideals were strongly supported by John Collier, who became Commissioner of Indian Affairs under Franklin D. Roosevelt in the early 1930s and served in that post until 1945 (Fuchs & Havighurst, 1973, p. 13). The Johnson-O'Malley Act of 1936 was passed to provide state reimbursement for educating American Indian children in public schools. Under Commissioner Collier's innovative and sensitive leadership, programs were begun in bilingual education, adult basic education, and the training of American Indian teachers. For the first time Indian culture was being emphasized rather than degraded within the formal education setting (Lankford & Riley, 1986, p. 30).

With the outbreak of World War II, the progress toward Indian self-determination not only stopped, but the pendulum of national patriotism and social conformity swung toward a renewed effort to force all Indians into the American cultural mainstream. According to the report of the 1944 House Select Committee on Indian Affairs, the goal of Indian education needed to be directed toward making all Indians into better Americans, rather than equipping them to become better Indians. This assimilationist approach was described as the final solution to the Indian problem (NACIE, 1992, p. 41). It was not unlike the philosophy of Captain Richard Pratt, founder of Carlisle Indian School in 1879, who fervently believed that it was necessary to take away the "Indian-ness"

of the American Indian in order to save the human being (Wescott, 1991, p. 45; also see Pratt, 1987).

Termination became the new governmental policy with the stated intention to get rid of Indians as a special group by discontinuing both federal recognition and government-sponsored services. Efforts were made to eliminate financial assistance by separating Indians from their tribes and their reservations. A 1951 policy featured a program designed to relocate Indians from traditional reservations into cities. Federal officials familiar with Indian problems and the Indian people themselves were neither consulted nor given opportunities to challenge this relocation mandate (NACIE, 1992, p. 42). Termination policies instituted between 1951 and 1958 resulted in numerous Indian groups losing federal aid and legal protection. In 1954 alone, ten termination bills were introduced, six of which resulted in the demise of six tribes. Although Secretary of the Interior Fred Seaton proclaimed a formal end of termination practices in 1958, the fear of legalized extinction lingered for another decade (Lankford & Riley, 1986, p. 30).

Despite the fear of termination policies and the reversal of political progress during the 1950s, the 1960s brought several positive changes for the American Indian people. By the end of the 1950s, an estimated 2,000 American Indian students were enrolled in some type of post-secondary education. That enrollment expanded to 7,000 by 1965.

Sixty-six American Indians graduated from 4-year institutions in 1961, and that number nearly tripled by 1968. Yet, only 1% of the total Indian population was enrolled in college during the sixties (Wright & Tierney, 1991, p. 17).

In 1961, Indian leaders at the American Indian Chicago Conference designed "The Declaration of Indian Purpose." In part it read:

In order to give recognition to certain basic philosophies by which the Indian People live, we, the Indian People, must be governed by principles in a democratic manner with a right to choose our way of life. Since our Indian culture is threatened by presumption of being absorbed by the American society, we believe we have the responsibility of preserving our precious heritage. We believe that the Indians must provide the adjustment and thus freely advance with dignity to a better life. (p. 4)

The Economic Opportunity Act of 1965 became the American Indians' first authorized chance to plan and operate their own programs. Tribal councils were elected, and funds were granted directly to each council for the entire reservation. The new Head Start Program was of particular significance because of its philosophy of assisting disadvantaged children within the framework of their own cultures. This approach contrasted dramatically with previous practices of placing minority children in a "foreign" culture in an attempt to provide them with greater socialization (NACIE, 1992, p. 42). Other programs developed at this time with Indian participation were Upward Bound, Job Corps, VISTA, and the Indian Community Action Program. The Elementary and Secondary



Education Act of 1965 also provided funds for improving educational opportunities of disadvantaged children. Title I and Title III of the 1965 Act were later amended to include Bureau of Indian Affairs schools. By 1966, the first modern day school funded by the federal government had opened on the Navajo Reservation (Lankford & Riley, 1986, p. 31).

A Special Senate Subcommittee on Indian Education was established in 1967. It released a study entitled Indian Education: A National Tragedy--A National Challenge in 1969. This subcommittee had determined: (a) Indian education was of poor quality; (b) Indians needed to have their latent fear of politically motivated tribal termination alleviated; and (c) Indians needed to control their own social destinies. This study provided much information which supported President Richard M. Nixon's eventual move to further empower the American Indian people (Lankford & Riley, 1986, p. 31).

Additional federal assistance was promised by the U.S. Congress through the Indian Education Act of 1972. This action was followed by the most important piece of Indian legislation since the 1934 Indian Reorganization Act--the Indian Self-Determination and Education Assistance Act of 1974. On January 4, 1975, President Gerald Ford signed this act into law, giving Indian people greater potential for the control of Indian education than ever before (Lankford & Riley, 1986, p. 31).

The emergence of the tribal college system coincided with the federal government's recognition of the need for Indian involvement in all Indian affairs. Following the 1968 opening of Navajo Community College, the first tribal college, several more reservations initiated colleges. Montana with seven tribal colleges, boasts the greatest number. Other tribal colleges are located in Arizona, New Mexico, California, Washington, Nebraska, Minnesota, Wisconsin and Michigan. These institutions serve nearly 14,000 American Indian students and feature a full-time equivalent enrollment of more than 6,000 students (O'Brien, 1992, p. 3).

Tribal colleges demonstrate the success of the self-determination ethic by responding directly to the needs of American Indians. They recognize, for example, that the percentage of American Indians who live below the poverty level is three times the national average. Thus, tribal college tuition is kept as low as possible. They also acknowledge that many American Indians will not leave their reservations for a formal education. Therefore, the educational opportunities are provided on the reservations. Finally, the tribal colleges note that 50% of the total American Indian population above 30 years of age has not yet completed high school. For that reason, many tribal colleges have developed special adult basic education courses to assist students in earning a GED (Wright & Tierney, 1991, p. 18).

American Indian students attend tribal colleges for many of the same reasons that non-Indians attend non-tribal colleges. They desire to better themselves intellectually, to improve their chances of securing meaningful and rewarding employment, to provide better standard of living for their families, and to strengthen their abilities to manage their own futures. Many students are older, have failed at non-Indian higher education institutions, and have family responsibilities. Nearly 90% are the first in their families to enroll for higher education classes (Stein, 1992a, p. 90).

Each tribal college's mission statement vows to preserve, enhance, and promote both the language and the culture of its particular tribe as a tenet of existence. This unifying purpose builds the core of identity and pride which helps the Indian students overcome lack of self-esteem, the struggle with poverty, and the lack of positive educational experiences. Tribal colleges also strive to provide 2-year academic programs for students seeking vocational or technical training. The goal of this practice is to ensure better jobs within their own community. In addition, some of these programs will transfer to non-tribal 4-year institutions as partial requirements for completion of bachelor's degrees. Upon completion of a degree many of these students can assume positions currently held by non-Indians to further the economic self-determination of the reservations (Hill, 1991, p. 25).

Tribal colleges are dedicated to the success of American Indian students. Because most of these colleges are located in rural, isolated parts of the United States, transportation must sometimes be provided by the colleges. In addition, child care is offered to reduce absenteeism, to increase time to study, and to overcome insufficient family funding for such a service (Stein, 1992a, p. 90). Child care needs are especially significant since more than half of the students attending tribal colleges are women (O'Brien, 1992, p. 5). Other supplementary programming includes special support groups, adult basic education programs, personalized instruction, tutoring, counseling, and community education.

Results of this targeted programming have been impressive. Retention rates at tribal colleges are in the 75% to 80% range. Tribal college graduates who elect to go on to complete baccalaureate degrees have a 75% greater likelihood of academic success than Indian students who bypass the tribal colleges and go directly to 4-year institutions (Stein, 1992a, p. 93).

The average expenditure per student for all publicly-supported 2-year colleges in 1992 was \$5,129. Federal expenditures per American Indian student declined from \$3,000 in 1980 to \$2,672 in 1991 due to increases in tribal college enrollments. Although total federal appropriations demonstrate sizeable dollar increases, the funding rate has

not kept pace with the growth in tribal colleges (O'Brien, 1992, p. 8).

Independent colleges need to look to the methods and philosophies of tribal colleges to formulate a more positive model for serving minority students. In spite of insufficient funding, low paid employees, and inadequate buildings, tribal colleges are achieving success. Without the severity of these fiscal limitations, independent colleges should be able to emulate these helpful practices and to attain similarly constructive retention levels and graduation rates.

#### Independent Colleges

Between the arrival of the first European settlers in the New England colonies and the end of the War for Independence, nine colleges were founded within the English-controlled portion of the North American continent. These colleges were established by various Christian denominations to fulfill sectarian educational needs in respect to pastoral care and missionary service. Harvard, founded in 1636, was a Puritan institution. Anglicans established the College of William and Mary in 1693. Yale, originally named the Collegiate School of Connecticut, was created by Congregationalists in 1701. Princeton, formerly the College of New Jersey, was founded by Presbyterians in 1746. King's College, also instituted by Anglicans, was launched in 1754 and later became Columbia University. Brown University, originally the College of Rhode

Island, was founded by Baptists in 1764. Congregationalists established Dartmouth in 1769. Queens College, later renamed Rutgers College, was founded by members of the Dutch Reformed Church in 1766. The only college established during this period that did not have sectarian ties was The College and Academy of Philadelphia as chartered in 1755. This institution later became the University of Pennsylvania (Domonkos, 1977, p. 2033).

Financial support for colonial independent colleges was established through endowments and sustained by annual tuition and fee assessments. Funding was a serious challenge. It is easy to imagine frequent pleas for donations to help support the fledgling institutions of higher learning from the colonists to those British subjects who had remained in England. It is also easy to imagine how tales of educating the "savages" of North America became a key marketing point for those concerned with fund raising (Wright, 1988, p. 12).

Following the American Revolution and the establishment of an independent political system, the creation of a national university was discussed. However, this idea was never implemented. Instead, in addition to the previously cited nine sectarian institutions, a new type of state-based university system emerged. The first of these state-supported schools was the University of Virginia. Under the leadership of Thomas Jefferson, this post-secondary institution opened its doors in 1825. It offered students a broad curriculum in

both the humanities and several professional fields (Wagoner, 1986, p. 155).

The model for most American state-supported schools came from Germany, a nation that boasted the most successful and widely copied system of national higher education in Europe. During the late 17th century the University of Halle, often referred to as the "first modern university," was founded. This university differed from other colleges in that lectures were delivered in German rather than in Latin, separation between theology and philosophy was allowed, and the study of mathematics along with scientific investigation was broadly promoted. In 1779 Halle was the first university to establish a chair of pedagogy and promote the training of teachers. The greatest intellectual contribution of the University of Halle, though, was the concept of academic freedom. Prior to this time, sectarian affiliation usually determined the nature of "truth" being taught at a given institution, and professors rarely encouraged genuine freedom of thought (Domonkos, 1977, p. 2032).

Following the advent of state-supported schools, two other major educational developments occurred. First, the Morrill Act of 1862 provided public lands to states for the specific purpose of increasing the number of state-supported institutions of higher education. This law encouraged the founding of nearly 70 public universities and colleges which

became known as "land grant" institutions (Johnson, 1981, pp. 333-334).

Following the American Civil War, a third type of educational institution was initiated--independent schools established and generally supported by wealthy benefactors. These colleges and universities were commonly referred to as private colleges, although this same terminology eventually also included those institutions of higher education initially linked to sectarian affiliation. Among the most famous private colleges and universities are Cornell, John Hopkins, the University of Chicago, Tulane, and Stanford. The influence of German universities on these and other institutions of higher education in the United States was profound. Many 19th century American professors had studied in Germany. They returned from the Continent with ideas that were revolutionary in U.S. education, including the seminar system, graduate programs, and German methods of scholarly investigation. Although a few church-affiliated schools retained their original parochial outlooks, the move toward freedom of thought throughout American higher education enabled the United States to become the undisputed world leader in a number of scientific disciplines by the 20th century (Domonkos, 1977, p. 2036).

State-supported, sectarian-affiliated, and private colleges and universities all experienced dramatic increases in numbers of students after 1900. This growth trend was



interrupted by World War I, but the most far-ranging transformation in American higher education followed World War II. The G.I. Bill introduced a new population of non-elite, non-traditional students to campuses throughout the United States. Needs for the expansion of scientific education and technical knowledge also prompted a new drive toward mass education in many post-secondary schools. Institutions of higher education were forced to acknowledge and respond to the demands of an increasingly complex urban, industrial society. In addition, 2-year technical institutes and vocationally-oriented junior colleges and community colleges were established to meet specialized job training demands beyond the secondary school. Vocational orientations even became more evident at the baccalaureate degree level. This alienated more than a few traditional professors who believed that the pursuit of vocations invariably diluted academic standards (Domonkos, 1977, p. 2038).

Today higher education institutions are challenged as never before by the diversity of their student population and by the complexity of their learning needs. People of all ages are enrolling in post-secondary education with great optimism, believing that higher learning will provide a better standard of living for them and their families.

This research project focuses on the higher education pursuits of American Indians as a minority population. However, American Indians' experiences in higher education

parallel that of another much more sizeable minority group in many respects: American women in college and university settings were also misunderstood, required to become more like the white male majority in order to be considered "successful," and often achieved their greatest learning gains only by attending separate institutions designed to meet specific needs neither recognized by nor addressed in traditional institutions. It is undeniable, of course, that women's issues have received much more attention during the past four decades than the concerns of American Indians. This shifting higher education agenda may result from the economic fact that women have been considered better risks than other minorities as tuition-paying students.

Puritan culture was generally suspicious of women, especially intelligent, independent women. They were considered "evil." Since formal education was ostensibly designed to produce male lawyers, doctors, and ministers, women were effectively barred from formal learning in the 17th and 18th centuries. But women's cultural roles slowly began to evolve in the 1820s. A new national philosophy idealized women's capacities to be pure, moral, and sentimental. In addition, this belief posited that women were best equipped for roles of passiveness, domesticity, and political innocence. These traits, plus blatant emotionalism, were viewed by college faculty as universally anti-intellectual characteristics. Although the new image appears on the

surface to be intellectually stifling, it did allow women to be viewed as potential school teachers, language translators, or social reformers. Young women were also less likely to be needed on farms in most rural areas, so while awaiting marriage many of them taught school. This occupation pursuit eventually dictated a need for a limited normal school education. During the Civil War, women served an additional role outside the home. They provided care as nurses, which also later resulted in the need for specialized college preparation (Palmieri, 1987, pp. 51-53).

Women's first opportunity to become college students was realized just 25 years before the outbreak of the Civil War. Oberlin, the first college to permit women to enroll, accepted female undergraduate students in 1837. This practice was soon followed by a limited number of other colleges and universities. By the end of the Civil War, women so far outnumbered men in the total U.S. population that most college administrators finally viewed women as viable students who would pay tuition. Soon a number of colleges designed strictly for women were springing up, often adjacent to men's colleges that continued to refuse to admit women (Graham, 1978, p. 764). In 1865, Vassar became the first women's college, followed by Smith and Wellesley in 1875 (Church, 1976, p. 25).

Doctors and professional educators were among the most outspoken opponents of women's involvement in higher

education. Dr. Edward Clarke of Harvard University published Sex in Education: A Fair Chance for the Girls in 1873. Professor Clarke asserted that higher education damaged women's health and negatively affected their reproductive capacities. Within a year his book went through 12 printings, illustrating its popularity and public influence. Several women's colleges responded to Clarke's report by compromising their curricula and reinforcing the accepted image of "genteel domesticity," thus upholding (rather than revolutionizing) the traditional roles for which women were being culturally groomed (Palmieri, 1987, p. 52).

By the end of the 19th century, women's participation in higher education was not uncommon. In fact, several women students flourished academically. These early pioneers, driven by the challenge to prove their intellectual abilities, were staunch scholars. As ever greater numbers of women became educated, however, their relative academic stature of females as scholars naturally diminished. To some this became additional evidence that most women were not well-suited for higher learning. In addition, some critics proclaimed that a university education prepared women for frustrated spinsterhood rather than a satisfying marriage (Hall, 1908, p. 314). In a 1905 Congressional Address, President Theodore Roosevelt expressed the fear of potential "race suicide" as he reflected on women's involvement as university students. His argument ran that if fewer and fewer educated women married, fewer

American children would be produced (Gordon, 1976, p. 48). In a 1914 American Statistical Association report entitled "Education and Fecundity," Nellie Seeds Nearing even asserted that a college-bound woman already knew, or privately at least feared, her lack of popularity among men because of personal unattractiveness. The notion also circulated that a woman holding a doctoral degree could be hired for a lower salary than a man with the same academic credentials and that college teaching positions traditionally occupied by men would be threatened by recently educated women (Palmieri, 1987, pp. 61-63). In 1904, Harvard philosopher Hugo Munsterberg had strongly affirmed that department chairmanships ought to be specifically reserved for men (p. 5).

Philosophical trepidations about college-educated women not marrying became a statistical reality in 1922 when economics professor Mabel Newcomer surveyed Vassar alumnae. She found that of 4,424 women graduates, only 55.6% had married compared with a national marital rate of nearly 90% (Newcomer, 1923-24, p. 431). Women who elected to pursue professional careers rather than marriage were depicted by one angry male observer as a race of "warped, dry creatures" (Howes, 1922, p. 453).

Female faculty members did not fair any better than their non-married professional women counterparts. Until well after World War II, women were not even considered for full-time faculty positions at most prestigious higher education

institutions. Alice Hamilton, an internationally respected industrial toxicologist, was allowed to join the Harvard Medical School faculty in 1919 only after agreeing that she would not robe and march in any of Harvard's ceremonial processions (Graham, 1978, p. 765). The first woman to serve as a tenured professor at Harvard was astronomer Cecelia Payne-Gaposhkin. This status was attained as recently as 1956. Yale appointed Chinese History specialist Mary Wright to the faculty in 1959. At Princeton, sociologist Suzanne Keller gained a faculty appointment in 1969. Columbia appointed Marjorie Nicolson to the English faculty in 1941. Prestigious independent colleges such as Yale and Princeton did not even allow female students to attend until 1969 (Graham, 1978, p. 766).

The quality of formal education that women have received throughout American history has also been challenged by many feminist authors. In Revolution from Within (1992), Gloria Steinem contends that the biased post-secondary education which women receive is a major roadblock. To Steinem, women are insidiously undermined through traditional education for the following reasons:

1. Being taught to revere "the classics" of Western civilization, most of which patronize, distort, denigrate, or express hatred for the female half of the human race.
2. Learning systems of philosophy that depend on gender dualisms at best and female inferiority at worst; surveying a tradition of art in which women are rarely artists and often objects;

studying biology that focuses more on human differences than on human possibilities; absorbing ethical standards that assume masculine values; and learning theologies that assume all-male deities.

3. Reading history books in which almost all power and agency is assigned to men and being graded for memorizing male accomplishments--with the deep message that we can learn what others do, but never do it ourselves.
4. Seeing fewer and fewer females in authority as we climb the educational ladder: fewer as faculty, fewer still as deans and presidents, and fewest of all in the fields of science, engineering, politics, business, foreign policy, or other specialties valued by the world at large. And if we are of the "wrong" race or class or sexuality, perhaps seeing no one we identify at all.
5. Being told we are "subjective" if we cite our own experience; that the "objective" truth always lies within the group--and the group is never us.
6. Finally, being isolated from other women--perhaps resented by them--because we are educated like men. (p. 115)

There are several distinct parallels between Steinem's six reasons for women's difficulties in higher education settings and the problems faced by American Indians in their college and university experiences. A similar listing of Indian complaints might read as follows:

1. Being taught to consider the entire Anglo-American culture to be superior, humanistic, and Christian, despite the historical reality of military barbarisms, the longstanding unwillingness to either acknowledge or tolerate tribal spiritualism, and the blatant practices of isolationism, hatred, disrespect, and racism toward innumerable indigenous peoples of North America.

2. Learning philosophies that ignore the eternal truths of nature and engender ideas of cut-throat competition, the work ethic, and materialism rather than cooperation, contemplation, and spiritualism; learning theologies that assume Judeo-Christian morality to be a universal absolute and that condemn non-Christians to eternal damnation.
3. Reading history books that glorify barbarity by cavalry units, that justify hypocrisies of slavery, racism, and even termination policies, that either stereotype or totally ignore American Indian leaders, and that omit the achievements of Indians in respect to art and dance.
4. Seeing fewer and fewer American Indians in positions of authority as one ascends the educational ladder, with fewer faculty, fewer still deans and presidents, and fewest of all in the fields of science, engineering, politics, business, foreign policy, or other academic specialties valued by the world at large.
5. Being told that attention to conformity of Anglo-American dress (coats and ties, skirts and blouses), promptness, long-range planning, objectivity, and rejection of spirituality is required for intellectual credibility, while subjective experience, tribal myths, and family traditions are totally unreliable sources of truth and knowledge.
6. Once graduated from an institution of higher education, an American Indian may be rejected by reservation Indians as becoming too westernized, too Anglo-like in thinking and speaking, and too much of an "apple" (red on the outside, white on the inside). At the same time well-educated American Indians are often rejected by the Anglo-Americans for not being "white" enough.

It is also interesting to note that many of the negative experiences identified by women and American Indians were also visited upon young upper class males during the 18th century.



Alexander Astin (1977) tends to support Steinem's perspective by stating:

Even though men and women are presumably exposed to common liberal arts curriculum and other educational programs during the undergraduate years, it would seem that these programs serve more to preserve, rather than to reduce, stereotypic differences between men and women in behavior, personality, aspirations, and achievement. (p. 216)

The ability of American families to adequately discipline sons was publicly questioned during the 18th century. Princeton president Aaron Burr noted that corruption was brought about by "want of proper government and instruction in families." One of Burr's successors, John Witherspoon, demanded that young men seeking university training be removed from their families. During a fund-raising trip to the West Indies in the 1770s, Witherspoon asserted that "those who come from the greatest distance have in general behaved with the most regularity." This contention meant that without either the support or comfort of a family close by, students could be forced to behave more directly as the college prescribed. It was also understood that at a greater distance parents were less likely to ask for special considerations for their sons (Vine, 1976, p. 411). Weak leadership was thought to be brought about by too much parental indulgence. All-male faculties, most often ordained ministers, were expected to become male mentors of irreproachable character, replacing misdirected, fawning family influence. Parents were often willing to turn their sons over to institutions of higher

education for stricter discipline and social training, rather than just intellectual enlightenment (Vine, 1976, p. 413).

The liberal arts institutions that most young men attended were sectarian schools designed to perpetuate theological doctrine, physical discipline, and an elite social class of educated gentlemen. Developing mental faculties--reason, memory, imagination, judgment, and attention--was to be achieved primarily through drill in classics of Western civilization. Attendance in class and at chapel services was compulsory. Discipline was paramount. Faculty members and students were ideally isolated from the real world throughout the rigorous educational experience of higher learning (Church, 1976, pp. 84-95).

What has been presented above demonstrates the progress which has been made in the education of males and females over the last two centuries. During the 17th and 18th centuries the formal educational system was narrowly defined, rigid, and male-dominated. Even though education was offered only to the males, they too were often treated with social rigidity and intellectual objectivity. The changes that have occurred during the 19th and 20th centuries create hope and optimism for the future. The evolvement of education from its early elitist, sexist, and racist posture toward a system no longer dependent on a narrow, fixed curricula, externally enforced discipline, or limited career choices following graduation is truly amazing. Institutions of higher education now feature

"women's studies" and "ethnic studies" rather than ignoring gender and race differences. Most institutions are striving for greater awareness of "cultural diversity" and the need to celebrate differences rather than to promote conformity. Several small independent colleges were established specifically to meet the learning needs of women and Afro-Americans. These colleges have been highly successful in fulfilling their missions and have even influenced many all-male schools to become more flexible in their educational approaches. Small, independent colleges have the capacity to adapt to the needs of minority groups with greater ease than the larger, public supported institutions. This is a key element in the expectation that the College of Great Falls might become a model institution for serving the education needs of American Indian students.

#### Institutional Research

Institutions of higher learning are continually improving methods for evaluating student services programs and curricula. Most investigations involve data collected within the campus system. However, data by themselves are useless. To be of value, data must be organized, analyzed, and interpreted. Only then does useful information emerge.

As an institution of higher learning evolves, practices designed to meet the needs of students are altered. To understand what dictates the direction of such change, one

must be cognizant of the values, the history, and other relevant philosophical dimensions of an institution (Dunn, 1990, p. 37). Institutional research offers a systematic, objective method of inquiry into the nature, meaning, and results of educational programming. It is a method of assessing institutional structure, functions, and effectiveness (Peterson, 1987, p. 286). Primary data collected as a part of institutional research are usually data related to the regular operation of the institution. These accumulated data results from standard transactions associated with (a) student recruitment, admission, and enrollment; (b) course registrations and the distribution of grades; and (c) daily business operations in the financial office, student services departments, academic administration, personnel offices, the physical plant and maintenance offices, and the purchasing department. This quantitative information is regularly collected for internal use; however, it may also be employed for external reports required for professional accreditation or for securing and maintaining federal funding (Sheehan, 1980, p. 513).

During the 1960s and early 1970s, most institutional research focused on enrollment data and faculty workloads. During the late 1970s and into the early 1980s, however, institutional research expanded to include campus management techniques, student advocacy issues, and institutional policy research. This shift in emphasis required institutional

research to move beyond relatively simple arithmetic operations and into comprehensive and systematic analytical reporting--including integrated data on individual program costs, space utilization, faculty and student loads, and credit hours generated. During the 1990s institutions are relying even more heavily upon institutional research for forecasting and planning (Dooris & Lozier, 1990, p. 19). Clearly, the demographic demand on higher education to move away from planning models designed primarily on traditional age students attending traditionally scheduled classes and to contract programs for more diverse student body operating in a variety of learning settings is shaping contemporary institutional research.

Data analysis conducted within the institutional research paradigm differs from other research methods. Generally, a researcher is not dealing with a small selected sample but rather with an entire student population. Another difference is that the researcher has little control over the initial data collection process since it is being accumulated for general internal purposes. As a result, institutional research is more often used to provide background information for immediate decision-making rather than for testing hypotheses related to long-range program planning (Yancey, 1988, pp. 7, 8).

A researcher utilizing the classic experimental paradigm follows several specific sequential steps. When pursuing institutional research though, a far more flexible, adaptable approach is necessary. Nevertheless, the following basic steps still adhere:

1. Identify a specific research question or institutional problem.
2. Design the study.
3. Collect the data.
4. Analyze the data.
5. Determine whether or not the analysis reveals an answer or solution. (Yancey, 1988, p. 8)

If a solution is not revealed by step five, then any or all of the steps between two and four may be repeated. One of the distinctive strengths of institutional research is that the data include the entire student population, which eliminates the need to identify a sample.

Use of institutional data is not limited to highly complex institutional research designs. Sometimes a single set of institutional data will signal that a problem exists. Information may also be used to set the context for decision making, or to measure the difference between what was ideally expected and what actually resulted. Once a decision has been made and action has been taken, subsequently gathered data can be used to sustain, promote, legitimize, revise, or overturn the original decision (Ewell, 1989, pp. 11-12).

The use of institutional data may be constrained in many ways. Constraints may be imposed by either incomplete information or missing components. One must remember that data are routinely collected by various offices in response to particular needs at a given time. Reconstruction of the collection process is often not possible, so additional related data are inaccessible. Constraints may also be imposed by campus politics. If there is little support on campus for either the assessment personnel or necessary technology to conduct institutional research, data accumulation will be limited. Finally, there may be constraints imposed by an institution's organizational culture. If administrators or staff members are unwilling to recognize the need to acquire information to support internal decision making, then little effort will be made to collect or share data (Ewell, 1989, p. 10).

All faculty members, administrators, and support staff should be involved in institutional planning. Unfortunately, much higher education decision making is reactive in nature. It attempts to immediately fix that which obviously does not work well or has failed completely. For this type of universally acknowledged change, extensive research is unnecessary. Remedies are simply responses to evident problems. However, genuine institutional planning must be proactive. For an institution to move forward in a constructive direction, decision makers must understand the

organizational culture within which they operate. Every effort must be made to have institutional data that are accurate, comprehensive, and easily accessible (Ewell, 1989, p. 9).

Institutional research provides data that either support or negate the success of a particular program. Once appropriate institutional data have been identified, organized, and analyzed, information gleaned from the process can be extremely useful to a management team. Planning and programming can be carried out with much greater success if institutional research is used to inform and guide decision making. Without data to plan, monitor, and evaluate, programmatic activities are likely to be either continued or discontinued for unsubstantiated reasons (Delworth & Hanson, 1985, p. 118).

Much that has been written about institutional research focuses on program planning. The term "program" is widely used across college campuses, yet the term is rarely defined with clarity. A program can be identified as a "planned response toward an identified need for action" (Wirtz & Magrath, 1979, p. 29). Morrill says that it is a "planned, structured learning experience designed to meet the needs of students" (1980, p. 332). Either definition is appropriate for an institution of higher learning that is serving a specified group of students who need more than a random number of classes that will ultimately lead to a bachelor's degree.



Data and program planning are directly related. Institutional research is at one time a source of quantitative information and a process by which qualitative judgments can be made. This dualistic nature can best be illustrated by noting the kinds of generic questions which accompany the consideration of launching a new program. Among the fundamental management inquiries are:

Is there a genuine campus need for this program?

Which campus group will benefit most from this program?

When is this program needed?

What specific elements must be included in this program?

Who should deliver this program?

How should this program be delivered?

Will additional data be needed to determine if this programming is effective? (Delworth & Hanson, 1985, p. 138)

In order to determine if an existing program is achieving the desired results, managers employ institutional research to monitor ongoing activities as the next step in respect to data collection and analysis. General questions that are appropriate for gathering institutional data to monitor in-process program activity include:

Are all students for whom this program was designed participating?

Does the timing of this program seem appropriate?

Are the most appropriate, skilled personnel involved in implementing this program?

Is current staffing adequate for this programming?

What additional data need to be collected to more fully monitor this program? (Delworth & Hanson, 1985, p. 142)

Post-implementation program evaluation is the final step in the institutional research process. An institution uses accumulated data to determine whether a program has accomplished what it was originally designed to do. Examples of questions that are appropriate at this concluding stage of data gathering include:

Were the original goals and objectives of this program fully achieved?

How many students were assisted through this program?

Did all students in the targeted group know about and have access to this program?

What was the total cost of implementing this program?

What was the cost per student to participate in this program?

Were all participants in this program equally satisfied?

How could this program be improved?

Do major or minor parts of this program need specific improvement?

What additional data are needed to fully evaluate this program? (Delworth & Hanson, 1985, p. 142)

As demonstrated in the three data collection stages outlined above, the journey from program planning to program implementation to program evaluation is made on a river of flowing institutional research data. The constant

accumulation of information must be monitored and analyzed with great care and creative thought. From initial program objectives to the final data defining actual results, a researcher must be as alert to the process of program review as to the implementation of the program itself. There are many potential distractions. Numerous incidents where more or better data could have been provided but are not available can prove frustrating. Nevertheless, institutional research is an ongoing process of change and improvement. It is through careful planning, monitoring, analysis, evaluation, and re-design that appropriate higher education programs will be created to serve various groups of students including American Indians.

#### Summary

There are several sources of potential optimism concerning the ability of American Indians to be successful at institutions of higher education. Modifications in federal policies, encouraging tribal practices of self-determination, have provided Indian people with opportunities to shape their own destinies through empowerment. Tribal colleges, where staff and students alike seek to preserve Indian culture while promoting the vocation of American Indian people, constitute legitimate successes. Meanwhile, independent institutions of higher education like the College of Great Falls can begin to explore many tribal college practices as models for developing

and planning programs specifically designed for American Indian students. Without such illustrations of success, each independent college might continue to struggle blindly with the complicated facets of educating a minority population of which some intend to return to reservation life while others plan to live and work in the "white" majority culture.

Application of relevant institutional research is a key element to establishing campus programming for American Indian students in higher education. Institutional research can produce accurate, accessible data for appropriate program planning, monitoring, and evaluation. By identifying the profiles of Academically Successful and of At-Risk American Indian students, both groups can receive the necessary academic and student services program support to make their graduations a stronger probability (DuBay, 1990, p. 1).

## CHAPTER 3

## METHODOLOGY

Design

This study of factors contributing to the academic success of American Indian students at the College of Great Falls will utilize an educational case study design with historical data. Such a design is conducive to the investigation of a situation involving several variables to determine the factors and relationships among the factors that have resulted in the current behavior or status of the subject of the study (Gay, 1992, p. 236). Merriam (1988) further defines the case study by describing the four characteristics which are essential properties as follows:

1. Particularistic--case studies focus on a particular situation, event, program, or phenomenon.
2. Descriptive--the end product of a case study is a rich, "thick" description of the phenomenon under study.
3. Heuristic--the case studies illuminate the reader's understanding of the phenomenon under study.
4. Inductive--generalizations, concepts or hypotheses generally emerge from an examination of data--data grounded in the context itself.  
(p. 12)

When preparing to research a subject such as American Indians in higher education, the first question that needs to be asked concerns whether the research is the testing of a hypothesis or if the result will be a holistic description or explanation. Next, the researcher needs to determine the amount of control that is exercised over the subjects. In this study, the important data involve the least amount of control because it is historical in nature. Lastly, because a study such as this is the examination of a specific phenomenon, it becomes "the examination of an instance in action" (Merriam, 1988, p. 11) and fits the description of a bounded system. Kenny and Grotelueschen encourage researchers to consider the case study when "the desired or projected objectives of an educational effort focus on humanistic outcomes or cultural differences, as opposed to behavioral outcomes or individual differences" (cited in Merriam, 1988, p. 30).

The study of American Indian students at the College of Great Falls is a bounded system which lends itself well to the case study. The data that are needed for the study were drawn from the previous history of American Indian students at CGF. The results were descriptive and were designed to illuminate the reader's understanding of the phenomenon under study. Therefore, the most appropriate design for this research is the educational case study using historical data.

Setting

The College of Great Falls is a private, independent Catholic college sponsored by the Sisters of Providence. It is open to qualified men and women of every race and creed. Its academic programs are designed to educate students through curricula featuring traditional liberal arts classes and contemporary career and professional preparation courses.

The CGF campus is located in the city of Great Falls, the second largest metropolitan area in Montana. Situated near the scenic quintuple falls of the Missouri River, the city occupies a key location between the Rocky Mountains and the Great Plains in north central Montana, 90 miles north of Helena and 350 miles south of Calgary, Alberta, Canada. CGF is within 450 miles of seven reservations and seven tribal colleges.

The College of Great Falls was founded in 1932 by Bishop Edwin V. O'Hara. His desire was to fill the need for a Catholic institution of higher education in Great Falls and the north central Montana area. The present campus site was built in 1960. Providence Tower, the main campus landmark, was constructed in 1964, and the McLaughlin Memorial Center, a spacious physical education and recreation facility, was added in 1965 (College of Great Falls Catalog, 1994-95, p. 2). The total CGF campus consists of a dozen modern buildings including the classroom building, a spacious faculty office

and computer/telecommunications complex in Emily Hall, the library, the DiRocco-Peressini Science Center, a theater/music auditorium, an art building, the Student Center, the McLaughlin Memorial Center, College Chapel and Galerie Trinitas, Providence Hall, plus 55 college operated off-campus apartments, a maintenance building and power plant, and an administrative offices building.

The College of Great Falls features nearly 50 full-time faculty members and over 60 part-time teachers who affirm personal philosophies compatible with a Catholic learning environment. These experienced teachers are not only highly competent in their academic fields, but they are also persons of integrity to whom students can look for example and inspiration as well as information. Since a faculty member's influence is of paramount significance in undergraduate education, ability and willingness to counsel students about classroom concerns are traits manifested in each teacher.

The College of Great Falls provides a friendly campus atmosphere and a favorable student-instructor ratio of 15:1. The distinctive ethic of the CGF campus is an attitude of helpfulness and caring shared among students, staff, and faculty based on Christian morality and good will toward all people. It is a small college which affords each student a personal, individualized educational opportunity.

The College of Great Falls offers bachelor degrees in 33 majors, associate degrees in 14 fields, teacher certification



training in both elementary and secondary education, a chemical dependency counseling certificate program, and master of human services (MHS) and master of professional counseling (MPC). Through planned integration of liberal arts and professional studies, the college helps students prepare for useful and fulfilling lives. There are two part-time American Indian faculty members who, along with several full-time sociologists and anthropologists, teach classes in the Native American Studies minor program. The college curricula contains thirteen different courses directly related to Native American studies, including classes in history (Survey of Native American History), sociology (Culture and Traditions of Montana Native Americans), English (Literature of Native Americans), religious studies (Native American Religious Traditions), political science (Native American Government and Law), education (Practicum in Native American Education), and psychology (Chemical Dependency Counseling in Native American Populations) (College of Great Falls Catalog, 1994-95).

Beyond the Great Falls campus, the CGF School of Education offers an elementary education certification program in cooperation with Blackfeet Community College, and the School of Human Services sponsors several classes at Stone Child Community College. In 1994, CGF opened a distance learning Telecom site in Browning, Montana to present a selected number of degree programs to Blackfeet reservation residents.

In addition to these academic programs, the College of Great Falls offers a variety of student services and co-curricular activities that focus on the concerns of American Indian students. A minority counselor of American Indian descent has been added to the student services staff within the past year. The United Tribes Club is fully funded by the Student Government and recognized as the official representative body for American Indian students by the Vice President for Academic Affairs. CGF regularly invites American Indian speakers such as Blackfeet Community College President Carol Murray and Olympic Gold Medalist Billy Mills to address campus-wide forums. Each year since 1990 the college has provided without charge physical space and administrative guidance in support of the Annual Celebration of Unity and Sobriety that has become known as the College of Great Falls PowWow. American Indian artistry has also been highlighted through various campus events, including demonstrations of singing and hoop dancing by Jackie Bird and Indian art displays by King Kuka. In 1995 CGF became the site of the Metis Studies Center, housing the director of this program in the graduate office area of Providence Hall.

Clearly, the College of Great Falls has demonstrated a greater than average commitment to providing education for and promoting the culture of American Indians. It is for this reason that CGF is a reasonable setting for developing a

longitudinal program to enhance persistence and achievement in Indian education.

### Procedures

A total of 429 American Indian students enrolled at the College of Great Falls between 1986 and 1994. Sources of information on these students include their admission files and transcripts. Admission files contain application forms, GED certificates or high school transcripts, and post-secondary transcripts. Information from these sources was compiled to form a profile of the American Indian student at the College of Great Falls.

The American Indian students were then separated into two groups. Academically Successful Indian students were described as those who had completed their programs or as those who had not completed programs but were in good academic standing and able to continue at the College of Great Falls or were eligible to transfer to another college. At-Risk Indian students were described as those who had failed to maintain a 2.00 grade point average. Discriminant analysis was used to determine if the existing institutional data could be used to describe the differences between these groups.

Discriminant analysis is a statistical technique which allows the researcher to examine simultaneously several variables which may divide samples into meaningful groups that reflect real-life situations and determine group placement.

For that reason, it is particularly appropriate for social science research of this type. Rather than beginning with a set of hypotheses, the relevant research questions can simply reflect whether it is possible to discriminate among the groups on the basis of a determined set of characteristics. The most significant research question relates to what factors can account for a person's placement in a group. The study of Indian students at CGF focused on factors such as earning a high school diploma, age, gender, and whether their parents graduated from college to analyze if these variables could be used in determining what elements inter-relate to contribute to successes for Indian students. The data which were analyzed were taken from the College's admissions files.

## CHAPTER 4

## FINDINGS

Introduction

The purpose of this study was to investigate whether present College of Great Falls (CGF) institutional data provide sufficient information about American Indian students to determine which ones are likely to be Academically Successful and which ones are apt to be At-Risk. To accomplish this, a profile of American Indian students at CGF was constructed from existing institutional data. Similarly, a profile was developed for those Indian students who were Academically Successful. A discriminant analysis was calculated to determine if existing institutional data could be used to distinguish between the Academically Successful and the At-Risk students. Finally, all the data were used to make a judgment regarding whether the existing institutional data are adequate for effective program planning at CGF. The data were assessed in regard to potential usefulness for future CGF program planning with respect to the academic development and persistence to graduation of American Indian students.

The data for this analysis were obtained from the college's institutional files. Because student files prior to

the summer semester of 1986 had been purged, the only institutional records available which identified American Indian students individually and contained useful data were enrollment and transcript information filed in the Office of Admissions and Records since that date. These data included: Name; Current street address and county of residence; Social security number; Current telephone number; Gender; Age; Marital status; Religious preference; Ethnic origin; Citizenship; Immunization code; Handicapped status; First generation to attend college; Year of high school graduation; Name and location of high school; Applicant status; Initial source of contact with CGF; Date admitted to CGF; Site of attendance--campus/telecom/extended campus; First semester and year enrolled; Last semester and year enrolled; and Accumulated grade point average.

#### American Indian Student Profile

Because this study utilized campus-wide institutional research rather than a small selected student sample, it was possible to collect data on all 429 American Indian students who enrolled at CGF from the 1986 summer semester through the 1994 summer semester. These students identified themselves as American Indians students on their applications for admission. All other data, except for the accumulated grade point average, were also taken from admission applications. Of the 429 American Indian students, 173 were males and 256 were

females; 183 were married, 204 were single, and 42 were divorced. Ages for the 407 American Indian students for whom the data were available were distributed as shown in Table 1. The majority of the Indian students who enroll at CGF are less than 40 years of age, which is fairly typical of the non-traditional white population.

Table 1. Age distribution of American Indian students enrolled at College of Great Falls 1986-1994.

Ages	Number of students	Percentage of students
18-29	114	28.0
30-39	136	33.4
40-49	113	27.8
50-59	40	9.8
60-75	4	1.0

One hundred eighty-five of the American Indian students reported that they are Catholic. Sixteen declared themselves as citizens of Canada, while the remaining 413 were U.S. citizens.

Montana high schools graduated 239 of these Indian students, although college attendance was delayed so that 372 were admitted as non-traditional students (meaning that they were more than 21 years of age when they first enrolled at CGF). The majority of these students reported that they were the first in their family to attend college (281 of 343) and

148 indicated they had attended another college prior to enrolling at CGF.

A campus visit was made by 134 of these students before enrolling while 141 initially came to campus to register for classes. This means that admissions counseling and academic advising may have been inadequate. These students are typical of all students in that the majority (194) first enrolled for classes for a fall semester. The majority (187) who discontinued attendance left after a spring semester which is also a typical pattern. Data are unavailable to determine how many of these students left because they had completed an associate, a bachelors, or a masters degree. It is also unknown if some students simply transferred to another college.

Grade point averages covered the entire range from 0.00 to 4.00. Twenty-five students achieved the 4.00. Seventy students were identified with no (0.00) grade point average, which could mean either that they received all failing grades or that they withdrew before the end of the semester. Data were not available which would explain either of these events. The average GPA for all 429 American Indian students was 2.05. This cumulative figure includes the 70 who were at 0.00 grade points.

A particularly startling revelation in the data is that for 154 American Indian students, their first semester of attendance at CGF was also their last. In other words, 36% of



the American Indian students chose not to return to college after a single semester. Because a student is neither suspended academically nor denied federal financial aid at CGF as a result of grades earned during an initial semester of attendance, these students left for non-institutionally mandated reasons.

A general profile of the American Indian student attending the College of Great Falls is identifiable from the data collected. The student is most likely to be female, unmarried, less than 40 years of age, from Montana, a United States citizen, and a first generation college student.

#### Discriminating Student Characteristics

From the limited profile information, it was possible to predict neither success nor lack of success. In order to determine what factors were apt to predict success, all available variables needed to be considered. For this type of research, discriminant analysis has proven to be a powerful procedure since it considers all available variables at once.

Discriminant analysis is a "statistical technique which allows the researcher to study the differences between two or more groups of objects with respect to several variables simultaneously" (Klecka, 1980, p. 7). The two major purposes for using discriminant analysis are to predict group membership and to describe ways in which the two or more groups differ (Huberty & Barton, 1989, p. 22).

The first step in discriminant analysis is to identify mutually exclusive groups (Klecka, 1980, p. 8) which impose sense upon the data (Conti, 1993, p. 90). For the American Indian students, it was decided that the group termed Academically Successful should be those who received a 2.00 grade point average or better because those are the students who are academically qualified to continue at CGF or transfer to another college. Those in the other group, which was termed At-Risk, had a grade point average of less than 2.00. They were students who had been or would be placed on academic probation or who had been academically suspended.

The two groups were clearly identifiable. Students could fall into only one group or the other. Discriminant analysis was then used to examine all of the demographic variables available in the students' files to determine if they could be used to differentiate those students who were Academically Successful from those who were At-Risk. If it is possible to identify which variables placed students into either group, that information can be used by CGF in recruitment, placement, academic advising, and future program planning.

Thus, the two established groups for this research were the students who were Academically Successful and those considered to be At-Risk. Like most colleges, CGF uses a 4-point system for generating GPAs. In this system, the letter grade and number value correlate as follows: A = 4 points, B = 3 points, C = 2 points, D = 1 point and F = 0.

Most colleges suspend students academically who do not maintain a C or a 2.00 GPA. However, many colleges allow students a slightly lower GPA during the first semester or two, which permits the student to become familiar with an academic environment. As a warning, a student is placed on academic probation before being subjected to academic suspension.

Two criteria were identified to judge the usability of the institutional data. The first criterion was that the discriminant function produced by the analysis had to be describable using structure coefficients with a value of .3 or greater. The discriminant function had to correctly classify at least 75% of the students in the study in order to meet the second criterion. Since the analysis in this data identified two groups, the expected percentage of correct classification was 50% if assignment was made randomly (Klecka, 1980, p. 50). Therefore, by designating a 75% criterion level, prediction has increased 25% over chance. Thus, in order for the institutional data to be usable, the discriminant function had to be clearly definable and the accuracy of classification ability had to be increased 25% over chance.

In an effort to eliminate all weak or redundant variables from the analysis, discriminant analysis utilizes a stepwise selection. Stepwise procedures determine which discriminating variables are most useful and most accurate in describing the differences between the groups. The Wilks's lambda was used

as the stepwise selection criteria. The Wilks's lambda is a statistic which takes into consideration both the differences between groups and the similarities within groups. In this study, determination of whether variables were entered or removed from stepwise analysis was based on their diminutive Wilks's lambda.

Discriminant analysis is used to discern the grouping of people and to analyze the interrelationship of multiple variables to determine if these factors can explain a person's placement within a specific group (Conti, 1993, p. 91). These variables are not examined separately, which may allow them to be disassociated from the total person, but rather are analyzed as an interaction of combinations of variables that can explain the person's placement in the group (p. 91).

In this study, discriminant analysis was used to determine if the demographic variables could be identified that contributed significantly in distinguishing the Academically Successful from those who were At-Risk. Discriminant analysis tested for an interaction between these variables. Two hundred sixty-three students were in the group identified as Academically Successful (GPAs of 2.00 and above) and 166 made up the group identified as At-Risk (GPA of below 2.00).

The pooled within-groups correlation matrix of predictor variables was examined because of the effect interdependencies among variables have on most multivariate analysis (Norusis,

1988, p. B-5). The within-groups coefficients reveal how the discriminant function is related to the variables within each of the groups in the analysis (Klecka, 1980, pp. 31-32). A pooled within-groups correlation matrix is the average of the separate covariance matrices for all groups followed by the computing of the correlation matrix (Norusis, 1988, p. B-5). This examination revealed that no strong correlation existed within the groups on the discriminating variables. Only two correlations of the possible 120 were above .3. Therefore, the variables in this discriminant analysis did not demonstrate a strong relationship to one another and consequently were not sharing a common variance.

Stepwise selection was used to establish which variables most positively affected the discrimination between the Academically Successful and the At-Risk students. Because Wilks's lambda is an inverse statistic (Klecka, 1980, p. 54), the variable with the smallest Wilks's lambda is selected first in stepwise analysis. In this study, this process included nine variables in the discriminant function. The selection included the following discriminating variables with corresponding Wilks's lambda values: Age (.96), Immunization status (.95), Year enrolled (.94), High school (.94), Gender (.93), Last year attended (.93), Semester enrolled (.93), Last semester attended (.92), and Religion (.92). None of the other variables accounted for sufficient variance to be included in the discriminant function.

Standardized discriminant coefficients were used to determine which variables were contributing most to the discrimination between the Academically Successful and the At-Risk students. By examining the standardized coefficients, the relative importance of each variable to the overall discriminant function can be determined (Klecka, 1980, p. 29). In this study, the coefficients obtained were Gender (.28), Semester enrolled (.36), Year enrolled, (-.66), Last semester attended (-.27), Last year attended (.28), High school (-.28), Immunization status (.32), Religion (.20) and Age (.74).

The structure matrix contains the coefficients which show the similarity between each individual variable and the total discriminant function. The variables with the highest coefficients have the strongest relationship with the discriminant function. These coefficients are used to name the discriminant function by demonstrating the closeness of the relation between the variable and the function (Klecka, 1980, p. 31). Variables with coefficients of .30 and above are generally considered as significant in this interpreting process. The only variable with correlation above this criterion level was Age (.71).

Based on the strength of the variable Age, this discriminant function was named Maturity. This title addresses the fact that the only variable with any significance recognized American Indian students returning to school as non-traditional students as those who could be

identified as more likely to be Academically Successful than any other variables would point out. The mean age for the Academically Successful group was 38.3 and the mean age for the At-Risk group was 34.3. The mean age for all 407 students for whom the data were available was 36.8.

The percent of cases correctly classified shows how accurate the discriminate function was in grouping the sample. This discriminant function was 63.17% accurate in classifying cases. It correctly placed 122 (65.7%) in the At-Risk group and 149 (62.0%) in the Academically Successful group. The discriminant function is a 13.4% improvement over chance in predicting group placement. It showed that Academically Successful and At-Risk students could be distinguished on the following basis:

$$D = .56 (\text{Gender}) + .47 (\text{Semester enrolled}) - .033 (\text{Year enrolled}) - .38 (\text{Last semester attended}) + .054 (\text{Last year attended}) - .57 (\text{High school attended}) + .12 (\text{Immunization}) + .078 (\text{Religion}), + .088 (\text{Age}) - 6.19.$$

The group centroid for the At-Risk group was  $-.37$ , and it was  $.23$  for the Academically Successful group. These groups explained only 8% of the variation in the discriminant function.

An additional discriminant analysis was conducted to determine if greater distance between the two groups would be beneficial in identifying the significant variables in each group. Instead of using the separation point of a 2.00 GPA, the students in the top 25% as determined by GPA were

contrasted with the lowest 25%. The results were only very slightly different from the analysis using a GPA of 2.00 for the grouping. The overall percent of grouped cases classified rose from 63.4% to 65.9%. The Academically Successful classification improved from 65.7% to 66.2%, and the At-Risk prediction accuracy changed from 62.0% to 65.7%. Although the percentages increased slightly, the prediction value still placed only 16% more students in the appropriate group than chance.

Thus, several analyses were conducted in an attempt to discriminate between the Academically Successful and At-Risk groups. However, all failed the criterion of accounting for enough variance to be meaningful. As a result the institutional data which the College of Great Falls routinely accumulates as students enroll and attend is not sufficient for use in discriminating among successful and At-Risk students. While the data collected provide a profile of the American Indian students, the data are inadequate in determining variables which profile the American Indian students described as Academically Successful or At-Risk when further analyzed. Therefore, CGF currently does not have adequate information for program planning to better meet the needs of American Indian students. Chapter 5 outlines what additional data must be collected for effective program development.



## CHAPTER 5

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Study

Little change has occurred in graduation rates of American Indian students enrolled in post-secondary schools over the past two decades. According to a 1992 American Council on Education Research Brief, the percentage of American Indian adults who had completed 4 years of college increased from 8% in 1980 to only 9% in 1990. During that same decade, the total number of American adults having completed 4 years of college increased by a total of 4% (O'Brien, 1992, p. 2). With tribal college programs being implemented relatively recently, rising levels of Indian participation in post-secondary education should be anticipated by the year 2000. Because of these growing numbers, it is necessary for traditional institutions of higher education to look critically at their programs to see why they are failing these minority students. Enrollment data gathered from across the country clearly illustrates that minorities want to pursue education beyond high school (O'Brien, 1992, p. 1). Attrition data across the country similarly demonstrates the lack of success for these

minorities at nearly all non-tribal post-secondary institutions (Tierney & Kidwell, 1991, p. 5).

Despite the implementation of the most carefully designed and well-staffed system of institutional accommodations, one fact cannot be overlooked. The history of American Indian education in the United States from Benjamin Franklin's time to the present is unique. The final solution to providing higher education experiences for American Indian students that are intellectually challenging, individually relevant, socially beneficial, and integrated with both career goals and cultural traditions remains an enigma for most campuses. The purpose of this study is to determine if existing demographic data at the College of Great Falls (CGF) is adequate and useful in identifying success factors for American Indian students who attend the school. CGF has welcomed Indian students since its inception but has no institutional research to ascertain success or lack of success with this minority population. Since the College of Great Falls is a private college, it can readily respond to the unique learning needs of students. For this reason and because of its geographic location, CGF has the opportunity of becoming a leader in the field of American Indian education.

This study has yielded the following findings to the key research questions.

1. What is the profile from available institutional data of American Indian students attending the College of Great Falls?

The profile of American Indian students who enrolled at the College of Great Falls between 1986 and 1994 depicts a first generation college student who is a female, unmarried, less than 40 years of age, from Montana, and a U.S. citizen.

2. What is the profile of American Indian students attending the College of Great Falls who are defined as Academically Successful?

There is no set of characteristics that can be drawn from the available data on American Indian students who enrolled at the College of Great Falls from 1986 to 1994 that can identify specific attributes that will contribute to academic success. At best, the identification of an age group (non-traditional) suggests those who are most likely to be academically successful--no other finding is statistically significant.

3. From the data available, is it possible to discriminate between those Indian students who are defined as Academically Successful and those defined as At-Risk?

The multi-variant analysis that was performed on the institutional data drawn from admissions applications and academic transcripts of American Indian students who enrolled at the College of Great Falls from 1986 to 1994 yielded no statistically significant relationship that would clearly discriminate between the Academically Successful and At-Risk Indian student. Therefore, it is not possible to use the present information base to predict either educational success or failure for any single member of the sample.

4. Is the available institutional information at the College of Great Falls adequate for future program planning?

The current available institutional data at the College of Great Falls is insufficient to permit a researcher to enlarge the information window to gain additional insight into predictable success rates of American Indian students.

### Conclusion

Using multi-variate analysis of institutional data drawn from admissions applications and academic transcripts of 429 American Indian students who enrolled at the College of Great Falls between 1986 and 1994, this study found that there is no identifiable profile of characteristics to determine either success or failure in higher education pursuits. Therefore, the major conclusion for this study is that the present sources of data and the Eurocentric perspectives from which they were collected are inadequate for conducting institutional research which will create a multicultural climate supportive of the needs of American Indian students attending the college. However, a review of formal research reports, anecdotal information, and historical literature about American Indian involvement in post-secondary study suggests that a pre-planned network of campus-wide accommodations designed to assist American Indian students to deal with inherent cultural, social, financial, and personal issues could dramatically improve individual persistence

toward graduation. Similarly, examination by non-Indian academic administrators, faculty members, and student services personnel of the policies and procedures developed in tribal colleges might yield improved models for addressing American Indian attrition problems.

A central challenge facing higher education today is to determine the most appropriate ways to meet the learning needs of an increasingly diverse student population on college campuses that are steeped in elitist European traditions. The search for new principles and practices will involve exploring elements of history, political science, psychology, philosophy, anthropology, and spirituality. This search must also take into account the past, the present, and the future. No place is more appropriate for this challenge than college campuses because as people learn about other people, they also learn about themselves.

Change within any educational organization is usually a slow, painful process. For that reason, most institutions of higher education have determined that it is easier to change students to fit their own educational perspective rather than modifying institutional policies and practices to better meet the diverse learning needs of students. Arguments against wholesale curriculum change are many. The most common roadblock is widespread faculty concern that educational standards will be lowered. Direct interaction with students or the empowerment of students strikes fear into the hearts of

many faculty members who believe the classroom to be their personal domain. Those teachers who favor lecture situations where knowledge is simply imparted to the passive students are particularly reticent about adopting interactive teaching styles. Alternate methods of instruction are difficult for an unimaginative instructor to conceive. Encouraging faculty members to openly exchange ideas with or to learn from students may seem incongruous if not insulting to many professors (Tierney, 1992, p. 153). Acknowledging the existence of multiple realities rather than condoning and championing a single truth may seem intellectually foreign to those who have been culturally dominant. College administrators are also often equally inflexible in their approaches to working with diverse students.

Resistance to curricular change arises from threats to traditional norms in American society in general and on college campuses in particular. Traditional ways of thinking are entrenched in educational styles based upon authority and control (Senge, 1990, p. 88). As Edward T. Hall (1976) points out, Western man has become comfortable with using only part of his intellectual capabilities and has found it synonymous with his truth (p. 9). Only when the world views of other cultures are recognized and people think in global terms will differences be minimized and similarities maximized.

What is called for is a massive cultural literacy movement that is not imposed but springs from within. Man can benefit from more as well as

deeper knowledge of what an incredible organism he is. He can grow, swell with pride, and breathe better for having many remarkable talents. To do so, however, he must stop ranking either people or talents and accept the fact that there are many roads to truth and no culture has a corner on the path or is better equipped than others to search for it. What is more, no man can tell another how to conduct that search. (Hall, 1976, p. 7)

### Recommendations

In 1990 nearly 88% of all Indian students enrolled in post-secondary schools were attending publicly funded educational institutions. These public universities are often numerically large, impersonal institutions which have little ability to respond to the special needs of minority students. In sharp contrast to this situation, the mission statement of CGF declares a firm commitment to provide special attention to under-represented student populations. Therefore, CGF has a goal-driven responsibility to develop programs that will benefit not only minority students but also all other non-traditional students.

The following pages outline several specific recommendations for generating the institutional change needed to create a total learning environment appropriate to stimulate academic success among American Indian students. These recommendations are based upon findings documented in widely published research projects throughout the United States (Astin, 1982; Beaulieu, 1991; Cibik & Chambers, 1991; Davis, 1992; Hornett, 1989; Richardson & Skinner, 1992; Scott,

1986; Steward, 1993; Tierney, 1991, 1992) as well as from less publicized reports of successful programs undertaken within the state of Montana (Bowker, 1992; DuBay, 1990; Haviland, Horswill, O'Connell, & Dynneson, 1983; LaCounte, 1987; Lin, LaCounte, & Eder, 1988; Rowland, 1990; Stein, 1992a; Wright, 1985).

Mission, Purpose, and Commitment. It is insufficient for the College of Great Falls to claim a central mission to serve the learning needs of American Indian students without providing a significant set of well-organized programs to implement that stated institutional goal. Faculty play a key role in carrying out a school's mission, and they help in this task by clearly demonstrating that they have an abiding interest in the day-to-day educational success of this minority population. To do this requires that they commit themselves not only to educating American Indian students but also to preserving, enhancing, and promoting their many tribal cultures. Academic programs must be developed and implemented which do not expect Indian students to become uncritically, cheerfully "white" (Scott, 1986, p. 393). Hence, all educational programs should be critically examined to determine how they might better adapt teaching practices to acknowledge the diversity of their students rather than assuming that all students should adapt to the tradition-bound academe (Tierney, 1992, p. 153). Moreover, these efforts



include the need for campus-wide awareness and should involve all departments and campus offices. An institution's mission to serve a minority population must be dramatically demonstrated throughout the entire campus via renewed purpose and programmatic commitment.

Staff Incentives. The President of the College of Great Falls must mandate that the institution is firmly dedicated to the pursuit of multi-cultural learning. Institutional programming then needs to be correlated with this intention. For example, the College of Great Falls should provide specific financial incentives for staff and faculty who devote time to pursuing this complex endeavor. In-service educational activities and released-time professional incentives, in addition to direct individual financial rewards, need to be budgeted and made available by CGF deans and personnel supervisors.

Establishment of Indian Advisory Board. The success of self-determination programming at tribal colleges suggests that non-Indian institutions seeking to educate American Indian students should establish Indian Advisory Boards. The purpose of such a board at the College of Great Falls would be to make specific recommendations concerning instructional programs and student services activities designed to meet the distinctive needs of American Indian students. The board should consist of Indian students, Indian faculty, Indian

community members, and especially local persons with connections to elementary and secondary schools. Such broad representation would allow for a fuller recognition of the educational needs of American Indian students at all educational levels. It would also enhance opportunities for cross-generational Indian leaders to interact. This Indian Advisory Board would provide the formal mechanism so that the needs of the American Indian students are articulated and heard. At CGF such a board could include American Indian faculty members, the Minority Services counselor, the director of the Great Falls Public Schools Indian Program, the president of Blackfeet Community College or Stone Child College, and American Indian students.

Focus Groups. A less formal method for soliciting suggestions from the American Indian students would be the use of focus groups. In addition to the Indian students themselves, elders of the Indian communities from which CGF draws students could be invited to share their ideas and concerns with the campus officials. This would also provide additional information for dealing with issues the faculty members, administrators, and others in CGF leadership positions might overlook.

Enhanced Data Collection. Collectively, the findings from this study demonstrate that the College of Great Falls does not have adequate institutional data on its largest

minority--American Indian students. Therefore, an initial goal of campus planning must be to improve the quality and the quantity of institutional research. CGF must further identify educational backgrounds, academic challenges, social needs, economic circumstances, and goals and aspirations of all students. To better understand the needs of students, additional institutional data need to be collected and made readily available to appropriate staff and faculty. These data might include high school grade point average, standing in high school class, GED recipients, ACT or SAT scores, associate degree completion, type of college(s) previously attended, types of financial assistance, reasons for withdrawals, parental education completion level, tribal affiliation for American Indians, number of dependents, and learning styles. The application for admission might be an appropriate form to expand to gather much of the additional information. In conjunction with enhancing institutional data through forms, the use of personal interviews, focus groups, student surveys, and other forms of qualitative information needs to be encouraged.

Shared Data Base Information. Another source of useful information would be a computer data base designed so that American Indian student contacts could be coordinated with all institutional personnel including admissions counselors, financial aid officers, student services personnel, faculty

members, and other campus personnel who are assigned retention responsibilities with Indian students. Each contact with an Indian student would be entered into the data base to record specific problems and the services rendered in anecdotal fashion. The hypothesis behind this high accommodation approach to improving persistence toward graduation is that frequent instances of campus contact will produce a support system to help American Indian students overcome the idiosyncratic behavioral, cultural, social, and financial problems which have traditionally undermined their educational pursuits. This new system of institutional data could be very helpful in defining in a functional format precisely what specific challenges persisting Indian students encounter and how these challenges can be overcome. Of course, those American Indians who do not interact with the campus-wide support system and fail in classroom work will remain beyond the realm of predictable assertion. The same will be true for those American Indian students who avoid contact with the campus support system but who still succeed academically. What is obvious from the research in this study though is that the relevant data collected by the College of Great Falls is insufficient to allow any form of program planning or evaluation of specific efforts designed to improve American Indian academic success. Until this additional information is accumulated, program planning is not likely to be highly successful.

Awareness of Cultural Differences. Although the United States has a long and colorful Indian history, most Anglo-Americans prefer to ignore the culture of the American Indian minority. Anglo-Americans may even live adjacent to a reservation for years but have virtually no knowledge of Indian cultures or activities. Among staff and faculty in institutions of higher learning, prejudice toward Indian people is sustained and punctuated through the lack of understanding of American Indian beliefs and traits.

The behavioral traits listed in Table 2 demonstrate why individuals from American Indian and Anglo-American cultures often misperceive or misunderstand one another. Although this list focuses on differences, it is important to remember that similarities between the two groups by far supersede differences.

Table 2. Characteristic behavioral traits of American Indian and Anglo-American cultures.

American Indian Traits	Anglo-American Traits
- speak softly, at a slow rate	- speak loudly, at a fast rate
- avoid addressing a listener directly by name	- address a listener directly by name
- interject seldom	- interrupt frequently
- use few "encouraging signs" during conversation	- use verbal and physical encouragement during conversation
- auditory messages treated with delayed conversation	- response to auditory messages is usually immediate

Table 2. Continued.

American Indian Traits	Anglo-American Traits
- nonverbal communication prized	- verbal skills highly prized
- cooperation assumed	- competition assumed
- group needs more important than individual needs	- personal goals more important than group needs
- present goals considered important; future situations accepted as they come	- planning for the future as important as present activities
- live in harmony with nature	- assert power over nature
- control of self, but not of others	- control of others
- discipline distributed among many; no one person takes blame	- blame placed on one person
- present orientation	- future orientation
- encourage sharing and keeping enough to only satisfy present needs	- secure large amounts of material goods and save for the future
- participation only after lengthy observation and only when certain of ability	- trial and error form of learning, new skills practiced until mastered
- privacy and non-interference valued	- need to control and affect the behavior of others
- self-discipline both in both and in mind	- self-expression valued
- emotional relationships valued	- concerned mostly with facts and observable behaviors
- physical punishment rare	- physical punishment accepted
- patient, allowing others to act first	- aggressive, competitive, assertive, selfish

(Sanders, 1987, p. 83-84)

College staff and faculty need to recognize key contrasting cultural traits in order to respond to American Indian students in ways which the Indians will appreciate and understand. Recognizing differences in communication styles is especially important. Because an Indian student does not look a teacher directly in the eye during a conversation or make a request in an assertive voice does not mean the issue being discussed is unimportant. Indian students often feel totally misunderstood when Anglo-Americans respond to their comparatively passive approaches by denying the validity of their requests. Workshops scheduled for faculty and staff members may heighten awareness of the cultural diversity between Indian and Anglo-American communications.

Self-Determined Assimilation. For some Indian students, success in formal education means mastering Anglo-American ways. However, the idea of "success" for other American Indian students means maintaining a significant commitment to Indian values and traditions (Scott, 1986, p. 393). Expectations concerning assimilation exist in varying degrees among different American Indians. Indian students need to determine how much, how fast, and under whose direction they desire their higher education to alter their attitudes and values (Scott, 1986, p. 393). As Hornett (1989) notes:

For the institution, this means striving to provide for student success by creating the best possible academic atmosphere. For Indian students, it means adopting an attitude of "cultural counterpoise."

That is, to counter-balance two strong, opposing forces in an attempt to balance two identities: one which utilizes strategies employed by non-minority students to be successful in the Anglo community, including but not limited to, academia; the second, which attempts to retain cultural values and traditions and maintain a sense of community. (p. 12)

Learning/Teaching Styles Distinctions. Much discussion in the adult education literature focuses on adapting instructional practices to the learning styles of adults. Since most Indian college students are chronologically categorized as adult learners, it is important that research be continued to determine whether American Indian students differ from other non-traditional students in respect to learning styles and the teaching models that serve them best. Learning styles of American Indian students and teaching styles of faculty were the objects of a study conducted at Montana's seven tribal colleges (Conti & Fellenz, 1988b). This study found that there was no single distinct learning style among the American Indians sampled. When teaching style was analyzed in this same investigation, it was found that consistency in instructional delivery produced the best results. Neither extremes of highly teacher-centered or highly learner-centered approaches nor an eclectic approach produced improved levels of Indian student achievement. Therefore, it would appear that adult Indian students should do very well with CGF faculty members who understand and are comfortable with responding to the needs of adult learners in



general and who have a professional understanding of what they do in the classroom and why they do it. Part of energizing adult learning patterns among Indian students is lessening the authority of the teacher in order to allow the voice of the student to become heard (Tierney, 1992, p. 160).

Tribal College Exchanges. Another useful suggestion for enhancing the educational understanding of Indian students would be to encourage interested Anglo-American faculty and staff from the College of Great Falls to visit their institutional counterparts on tribal college campuses. This type of professional interchange can yield beneficial experiences and encourage cultural sensitivity.

Understanding of Both Urban and Reservation Indians. Anglo-American staff and faculty may be unaware of the distinguishing characteristics between urban and reservation Indians. Conventional wisdom might lead to the assumption that there are no differences; yet, in working with these two groups, differences become apparent. Urban Indian students are often "survivors"; they may be accustomed to fighting for what they want in the competitive, materialistic Anglo-American culture. After spending several years in the standard public schools, they may know how to make their own way around rules, regulations, and other systemic practices. This adaptive behavior is far different from what is seen when a reservation Indian who has experienced only tribal

socialization patterns comes to campus. Instead of viewing these reservation-based Indian students as being "fortunate" to attend traditional campuses where they can learn how to do things "right," Anglo-American educators ~~may want to~~ encourage American Indian learners to bring their cultural heritage with them so that the parochial white majority population may also benefit from their diverse experiences. The campus must provide the support services for these activities.

Cultural Activities and Ceremonies. By supporting diversity through the sharing of cultural activities and ceremonies, creative campuses can diminish the insidious "culture of power" notion (Tierney, 1992, p. 153). As a result, the unique identity of the Indian students collectively and individually will be strengthened, and their self-images will emerge more positively within the learning environment (Wright, 1985, p. 5).

Financial Assistance. Obtaining funding for College of Great Falls tuition, room, and board involves a series of bureaucratic steps and an avalanche of paperwork that can be intimidating to any student. For many American Indian students who are applying for federal financial assistance for the first time, the process may be overwhelming. In addition, American Indian students usually need to apply to the Bureau of Indian Affairs (BIA) for additional financial assistance. Many Montanans believe the myth that BIA funding is available

to all Indian students and that a college education is virtually "free" to any Indian who wishes to take advantage of post-secondary learning opportunities. In reality, BIA funding is extremely limited. It often does not cover expenses remaining after tuition, and there are not enough dollars to provide full tuition funding for all applicants.

One result of the complexity of financial aid procedures is that American Indian students often arrive at the College of Great Falls campus without full funding in place. This often means that the meager amount of personal money these students bring with them is quickly dissipated, and the students are then left in a strange place with few resources. Because many come from backgrounds with limited economic resources, CGF like other colleges must acknowledge that most American Indian students do not have relatives or friends to turn to for supplementary financial assistance. For the College of Great Falls to be functionally concerned about the real financial needs of Indian students, loanable money must be available when emergencies arise. Otherwise, long-range academic concerns are overridden by more immediate financial concerns.

The College of Great Falls might learn a great deal about financial problems of American Indians by following a Minnesota funding format. In recognition of the special financial concerns of Indians, the state of Minnesota established the Minnesota State Indian Scholarship Program in

1955 (Beaulieu, 1991, p. 33). This program is need-based. It provides direct funding assistance to American Indian students who still have financial needs after all other aid sources are exhausted. More than 6,500 American Indian students who were assisted by the Minnesota scholarship program eventually graduated. Twenty-five percent of all Indians in Minnesota between the ages of 25 and 44 have had some college-level education. For these reasons, the scholarship program is regarded as highly successful and suggests a model for other states.

Scholarships. Scholarships specifically distributed for American Indian students need to be encouraged. Indian students are frequently at a disadvantage in competition for unspecified scholarship dollars since typical qualifications are culturally based. These qualifications likely include grade point average, ACT or SAT scores, and demonstrated leadership in high school or community activities; all of these favor the majority population. If an institution such as the College of Great Falls truly wants to improve its ability to meet the needs of Indian students, then a specific commitment must be made through the budgetary process and through encouraging donors to support scholarships for American Indian students.

Academic Support. As reported by Astin (1982), the Commission on the Higher Education of Minorities made the following recommendation:

That colleges and universities strengthen their efforts to help underprepared minority students improve their study habits and develop their basic skills by offering tutoring, developmental courses, and academic counseling. Such efforts will not only benefit the individual student but will also help institutions financially by reducing student attrition rates. (p. 192)

Countless articles assert that typical American Indian students go to campuses without adequate academic preparation (Bowker, 1992; Hill, 1991; Lin, LaCounte, & Eder, 1988; Scott, 1986; St. Pierre & Rowland, 1990; Stein, 1992a; Tierney, 1991; Wright, 1985). Many enter college with a GED rather than a high school diploma. In Minnesota, for example, the typical Indian student in post-secondary education is 35-years old, is likely to be a female with at least two children, and is more likely to have a GED than a high school diploma (Beaulieu, 1991, p.33). The profile of American Indian students at the College of Great Falls is very similar to the Minnesota experience. If Indian students like many other non-traditional students did not plan to attend college while in elementary or secondary school, it is not surprising that their academic backgrounds are weak. A minority student's academic preparation at the time of college entry is a better predictor of educational outcome than any other variable (Astin, 1992, pp. 91-92). The lack of appropriate academic

preparation in high school is the greatest obstacle to successful college completion (Falk & Aitken, 1984, p. 28). Two of the three most accurate predictors of success in college for American Indian students are their ACT composite score and their high school GPA (Scott, 1985, p. 392). Previous education experiences do contribute to the success or failure of these students. Orientation counselors and freshman faculty advisors at CGF must be aware of these facts.

Remedial Assistance. Most research references stress the obligation to provide readily available remedial assistance for Indian students who are academically unprepared. Remedial coursework must be offered by CGF to compensate for lack of formal educational preparation. In addition, CGF academic personnel and student support services staff members need to be especially sensitive to cultural differences which determine how Indian students may react in a learning center or a classroom.

Remedial assistance needs to be offered at a level where students can obtain federal financial aid funding. If financial assistance is not available for remediation, students may need to attend Adult Basic Education classes prior to matriculating to a 4-year campus (Rowland, 1990, pp. 2-10). Standardized tests can be utilized for all students to best determine which ones are unprepared (Astin, 1982, p. 188). The results of such universal testing could

then be used by CGF for placement, evaluation, and counseling. Indian students also recognize a need for better academic guidance in high school, for more culturally relevant academic programming and personal counseling, and for more faculty and staff role models on campus (Wright & Tierney, 1991). If American Indian students are not receiving necessary guidance before leaving high school, colleges must determine what can be done to compensate for this omission. At CGF these needs might be addressed by increasing the initial orientation time that faculty and student services staff make available to incoming Indian students.

Learning Center Support. Remedial coursework at the College of Great Falls usually consists of assistance in the basic skills of mathematics, reading, and writing. A positive relationship exists between the persistence of American Indian students and the remedial assistance they receive in reading and composition (Astin, 1982, p. 93). When students lack productive study skills or fail to take advantage of the opportunity to develop such skills, a college needs to provide assistance through a designated learning center or within an integrated student services program of counseling and assistance. Tutoring and supplemental instruction are also vitally important. All of these resources have proven particularly necessary and useful for the success of American Indian students (Wright, 1985, p. 31).

Enhanced Admission Counseling and Orientation. Half of all American Indian students either drop out or stop out during their first year of college (Bowker, 1992, p. 9). The results of the College of Great Falls experience with American Indian students parallels this finding. Enhancing programs that specifically target American Indian students within the first semester at CGF is essential and might dramatically improve student chances of remaining in college and experiencing academic success. It also reinforces the need for enlightened admission counseling. Many times American Indian students do not have sufficient information concerning CGF degree programs, financial aid, available housing, counseling services, and a host of other support activities which are part of a the college environment. Through the recruitment and admission process, all prospective students need to openly address potential social and academic challenges they may face on the campus. This is often in response to placement test results or a review of former academic work and scores of tests such as the ACT or SAT.

Intensified Academic Advising. Academic advisors at CGF need to be culturally sensitive to American Indian students. For the American Indian student, approaching a faculty member for academic advising may be quite difficult. In addition, if faculty advisors are unknowledgeable about or uncomfortable with Indian culture, the advising interaction may be a dismal



experience for both parties. Advisors need to become more directly involved in the lives of Indian students. Advisors need not necessarily become personal friends or companions to the Indian students, but the student life and cultural practices beyond the classroom must be both accepted and understood (Tierney, 1992, p. 164). American Indian students often have no other informational resources on the campus and desperately need formal and informal advising. "Informal" advising includes friendly suggestions concerning how to schedule classes to avoid additional child-care costs, where to buy used textbooks, and how to locate short-term loan sources. Many of these non-academic concerns could be facilitated during a freshmen orientation program. The College of Great Falls should establish an Orientation Program for new faculty and new American Indian students to stimulate discussion concerning advising expectations.

Continued Native American Studies Programming. In an effort to improve the retention of American Indian students, several colleges have developed general ethnic studies or specific Native American Studies programs. The College of Great Falls sponsors such a program within the Human Services Division. American Indian students have stated in interviews that the existence of such specialized programs and the presence of knowledgeable faculty members have been crucial to stimulating their general academic success (Kidwell, 1991,

p. 23). They feel it is a positive institutional response to their cultural interests. Not only does it allow Indian students to learn more about their own distinctive cultures, but it also encourages non-Indians to participate in the exploration of authentic cultural diversity.

Native American Studies programs may benefit Indian students who return to the reservation for employment in much the same way that experiences at tribal colleges do. Along with obtaining a degrees in majors of their choice, these students also gain a much better understanding of their own people. Indian students come to recognize that the college curriculum is truly responding to their needs.

Recognition of Indian Languages. Indian languages should also be accepted in transfer from tribal colleges as equivalent to other non-English foreign languages. Indian people genuinely appreciate the need to promote the preservation of their native languages as a key part of preserving their cultures. At this date, however, the College of Great Falls does not accept Native American languages as credit-bearing options.

Culturally Representative Curricula and Textbooks. Assisting American Indian students in academic areas must include encouraging work on curricula and textbook development that incorporates American Indian perspectives (Indian Nations at Risk, 1991). Until the 1960s, the exclusive focus of

higher education curricula was on western culture, and the traditional liberal arts were largely devoid of minority culture representation (Wright, 1985, p. 4). Therefore, CGF must strive to secure the adoption of literature and history texts that stress cultural diversity.

Opportunities for Educational Networking. A network is a "system of information and resource sharing among a defined constituency or group" (Washington, 1985, p. 103). Similarly, a coalition is "a temporary alliance of individuals, groups, or organizations which may be mobilized for a specific purpose" (p. 106). Historically, colleges and universities were established to serve Anglo-Americans from elite social classes and not those from non-traditional minority groups. It is clear that American Indian students must begin to act collectively in order to offset the tremendous challenge related to overcoming cultural, historical, and educational problems. At colleges and universities where such networking systems do not exist, high attrition rates will invariably result. Therefore, it is of paramount importance that institutions of higher education assist Indian students to establish and maintain a functional collaborative educational system (pp. 103-105).

Designated Space. The College of Great Falls must acknowledge that an effective networking system on a campus begins with a designated space for American Indian students to

congregate and exchange concerns (Washington, 1985, p. 104). Such a center can promote a sense of community, help freshmen students learn about the academic system, and foster positive cultural identity, personal pride, and cohesive strength in such a way that American Indian students will be able to comprehend the traditional values of an institution (Astin, 1982, p. 193). When Indian students first arrive on campus, it is extremely difficult for them to be comfortable in typical areas of Anglo-American social contact such as study lounges, cafeterias, or snack bars. A designated space for American Indian students is not only useful as a gathering spot for formal and informal meetings, but it is also essential for accumulation and storage of class-related information which should be available to them.

American Indian Peer Counselors. One of the most valuable retention resources available to incoming Indian students is the current student body. Students who have persisted on campus for at least a year can be wonderful peer counselors for students who are new to campus. Experienced sophomores, juniors, and seniors know many instructors and staff members. After participating in training programs, peer counselors could be asked to serve as support persons for three to five other Indian students. The peer counselor system at CGF can facilitate transition from reservation

existence to college life and can help combat isolation and homesickness.

American Indian Mentors and Role Models. Mentoring programs have been found to be extremely important for minority students at predominantly white institutions (Akins, 1994, p. 4). This service may be provided by an advanced student; however, the best mentoring can be done by those already working in the career field that the American Indian student hopes to enter (Akins, 1994, p. 4). A mentor must demonstrate interest in the growth and development of the student. A role model may be one of the Indian student's instructors (Davis, 1992, p. 29) or someone who the Indian student does not know well but who he or she can learn from through personal or impersonal contact. Colleges should seek mentors and role models by contacting American Indian community members who are successful in careers such as lawyers, engineers, social workers, or teachers to talk formally or informally with the Indian students (LaCounte, 1987, p. 71). This could be accomplished through a CGF Indian Advisory Board.

American Indian people hired by institutions of higher education automatically become the mentors and role models for others of similar cultural backgrounds. Institutions must make it a policy to hire American Indian employees in all areas. It is a hollow promise for institutions to educate

Indian people for professional careers if they themselves do not hire minorities. As noted earlier, CGF has a good record for hiring American Indian teachers and student services personnel as well as promoting Indian ceremonies and welcoming American Indian speakers on campus.

American Indian Staff Counselors. In addition to peer counseling, it is important for American Indian students to have staff counselors of their own ethnic background. CGF currently retains an American Indian on the Student Services staff as a Minorities Counselor. Several studies have indicated that successful interracial counseling is highly improbable primarily because of the inherent cultural/racial barriers involved (Wright, 1985, p. 3). One study reported that Indian students strongly prefer American Indian counselors and are more likely to use counseling services if they can be assured of seeing such a counselor (Haviland, Horswill, O'Connell, & Dynneson, 1983, p. 269). Indian counselors should be in a location where American Indian students freely come and go. Indian students should not have to make appointments to see their counselor if the campus is truly interested in serving these students. An open door policy is essential (LaCounte, 1987, p. 70) and is currently practiced at CGF.

Clubs. Intertribal clubs such as the American Indian Student Association at the University of Pennsylvania, the

Keepers of the Fire at the University of Wyoming (O'Brien, 1992, p. 12), and the Kyi Yo Indian Club at the University of Montana are strong retention factors for American Indian students (LaCounte, 1987, p. 75). CGF currently supports the United Tribes Club. When these clubs are active and have an established meeting area on campus, they serve as social centers, study halls, meeting rooms, and career/guidance centers (Wright, 1985, p. 5). In addition to supporting Indian students, these organizations help increase general campus awareness of American Indian issues and offer concrete opportunities for improving the campus climate toward all minority students (O'Brien, 1992, p. 12). Indian clubs provide opportunities for American Indian students to interact with one another in supportive roles. However, it is also important for Indian students to participate in other general campus organizations such as student government, clubs related to academic programs, and volunteer groups (LaCounte, 1987, p. 5). American Indian and Anglo-American students working together for the benefit of all students is another reminder to the campus that their similarities far surpass their differences.

Support Groups. Support groups can be as simple as unstructured opportunities to bring American Indian families together or as structured as Alcoholics Anonymous, which assists those with drug and alcohol addictions. One highly

successful support group at Blackfeet Community College has been the Women's Support Group (Stein, 1992a, p. 91). This group meets regularly to discuss personal problems and to develop strategies to help members cope with the burdens of filling the demanding roles of student, mother, wife, single head of household, and major provider (Stein, 1992a, p. 91). These groups are vital and need to be promoted. The College of Great Falls should utilize its Student Services staff to promote greater American Indian family involvement in campus support groups.

Recognition of American Indian Spirituality. Most American Indians need the opportunity to exercise their spiritual base. Spirituality remains a vital part of the Indian culture and of their way of learning (Rowland, 1994). The values of an individual American Indian student are likely to be defined in terms of spirituality. The need to strengthen the physical, mental, and spiritual health of Indian students must be acknowledged as institutions work toward improving American Indian's educational status (Boyer, 1989, p. 44). The College of Great Falls openly explores Native American spirituality in several sociology and religious studies courses.



Summary

Throughout the literature concerning the success or failure of American Indian students in education at every level, a common theme occurs. Research suggests that within the Anglo-American school system American Indian students may experience difficulties because cultural differences do not allow Indian students to prepare for success in a system designed for Anglo-Americans. Teachers are sometimes not supportive of Indian students and hold low expectations for them. Classrooms and teaching methods may not be conducive to a comfortable learning environment. In addition, other issues which are often viewed as creating hardship for these students are unplanned pregnancies; substance abuse within the family system; physical, psychological and sexual abuse; negative involvement with the law; lack of self-identity; low self-esteem; and a limited number of "successful" role models. Many of the students are single parents who have probably also experienced growing up in a single-parent home. These students are often challenged by the attitudes of others resulting in racism, stereotyping, and discrimination. They share with other minorities a likelihood of being from a low socio-economic background where English may be the second language, and they are probably first generation college students.

To adequately address these situations, colleges need to move beyond rehashing the same old issues to asking what could be done on campus not to correct the problems of this minority but rather to accommodate these problems. In reaching out to American Indian students in this way, institutions may recognize that several other groups can benefit from similar accommodations. The At-Risk American Indian student is very much like an At-Risk Anglo-American student. In response to the educational and social issues American Indians face on Anglo-American campuses, much can be done to reasonably accommodate them. Provision of additional funding, child care at a convenient location, support group meetings on campus, recognition from faculty and staff of cultural differences, counseling services, academic advising, remedial coursework, recognition of GEDs, networking opportunities for Indian students, and direct opportunities for input into the educational system are powerful support notions. As the College of Great Falls moves to implement the various organizational elements listed above, there will be a continuing need to utilize program planning, implementation, and evaluation models for each element. Institutional research must gather data that will determine the success of each discreet element of the American Indian student support network. The Academically Successful Indian student may in fact be that American Indian student who is most thoroughly served by the CGF integrated accommodations system.

A learning environment needs to be seen as welcoming and receptive for all students. As education moves further from its historical starkness, it becomes not only a source of enlightenment but also a source of empowerment.

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APPENDIX

## COLLEGE OF GREAT FALLS MISSION STATEMENT

As an expression of the teaching mission of Jesus Christ, the mission of the College of Great Falls is to provide students with the opportunity to obtain a liberal education, for living and for making a living. Liberal Education, a term denoting cultural richness and technical excellence, was used by Bishop O'Hara, founder of the college, in preference to the term "liberal arts education."

## PHILOSOPHY AND PURPOSE

The College of Great Falls was founded through the collaborative efforts of the Sisters of Providence, the Ursuline Nuns, the Catholic Bishop of Great Falls, and members of the civic community, all of whom recognized a societal need for higher education. Its educational mission, sponsored by the Sisters of Providence continues to be the shared endeavor of dedicated people.

The college cooperates with both private and public institutions to attain goals consistent with its educational purpose and values.

The college continually and responsibly evaluates its operation and programs. It develops professional/career programs and continuing education courses designed in view of society's present and future needs, as well as traditional academic degrees in appropriate fields.

The college offers students a foundation for actively implementing Gospel values and the teachings of Jesus within the Catholic tradition; it serves students of all beliefs who wish to take advantage of its programs.

The faculty and staff of the college join with students in a cooperative and enthusiastic search for truth, so that students may develop:

**CHARACTER** -- have a positive impact on the world and on the communities in which they live and work, particularly by recognizing and accepting personal accountability to themselves, to society and to God;

**COMPETENCE** -- further their ability to live full and rewarding lives by becoming competent working members of society who know the basics of their professional field and have access to future learning;

**COMMITMENT** -- find meaning in life which enables them to participate effectively in society while transcending its limitations, by living according to their own moral and religious convictions, as well as respecting the dignity and beliefs of other people.

(College of Great Falls Catalog, 1994-95, p. 2)

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