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THE TRIBAL COLLEGE MOVEMENT: ENSURING THAT NATIVE AMERICAN STUDENTS SUCCESSFULLY COMPLETE AN ASSOCIATE DEGREE AND PERSIST TO EARN A FOUR-YEAR DEGREE

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ABSTRACT

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The Tribal College Movement: Ensuring that Native American students successfully complete an Associate Degree and Persist to earn a Four-Year Degree

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This mixed method study examined the utilization of educational resources available to 44 Native American students. One-half initially attended a tribal college, and one-half Native American students who initially attended a non-tribal college. The qualitative process involved face-to-face interviews with the participants at the seven Montana tribal colleges. The resources included: mentoring programs, library services, financial aid assistance, distance learning programs, disability services, scholarships' applications process assistance, assistance in use of computers and the skills needed, tutors, student organizations, and academic counselors.

The data from the first phase of the study were illustrated by the use of tables and descriptive narrative. The data were transcribed and subjected to data analyses as recommended by Strauss and Corbin (1990), Tesch (1990), and Creswell (1994). A grounded theory approach to produce a core category from the data yielded the following subcategories: (a) Barriers, (b) Success, (c) Challenges, (d) Clubs, (e) Family support, (f) Family member with college experience, and (g) Military experience. Further qualitative analyses of the data resulted in the following core category: "Native American Students Persisting in Higher Education."

The second phase of the study involved a satisfaction survey of the educational resources utilized by each individual. The data from the satisfaction survey were ordinal data and the frequencies for the College's Services Satisfaction Survey were compiled.

Tribal Colleges and Universities supported the students in acquiring financial aid and scholarships. All college experiences must include space and time for the re-creation of "family" in order for Native American students to persist and earn a baccalaureate year degree.

Dedicated by Dr. Cheri Kicking Woman (Old Time Medicine Pipe Woman – Aa Kai Tsa Ahm Aoh Koi Yin Nii Ma Kii) to the following:

To my beautiful, funny, and courageous mother Eula Kay Kicking Woman who always instilled in me the importance of education and always pushing me to exceed in anything I did. Thank you, my dear mother for demonstrating the courage, wisdom, and charisma you had as a single mother and laying the foundation for me in earning your four year degree. Now, we are both alumni from the University of Montana!!

To my grandparents George and Mollie Kicking Woman who were holders of our family's thunder pipe bundle for over sixty years. The both of you raised me with strong morals and values and with an exceptional, rich cultural upbringing. Thank you for my childhood memories and molding me to who I am today.

To my brother Leland Kicking Woman who I always wanted to be like; you had a gentle spirit and had a huge, long lasting impact on all the people you met. You were always my hero!! Thank you for being so inspirational to my success.

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CHAPTER ONE - STATEMENT OF THE PROBLEM

Introduction

Montana has seven Indian Reservations, each of which has a tribal college where Native American students can earn a two-year degree within their own culture. This two-year degree may serve as an end in itself or provide for the transition to a four-year college. Higher education has financial incentives and improves the overall life of a person.

In 2003, the federal government recognized 562 American Indian/Alaska Native tribes (U.S. Department of the Interior, 2004a). These federally recognized entities are eligible for funding and services from the Bureau of Indian Education (BIE). Furthermore, these tribes have "domestic dependent nation status," defined as the power of self-government, including the powers to form governments; make and enforce laws; tax; establish membership; license and regulate activities; zone; and exclude people from tribal territories (U.S. Department of Interior, 1999). As such, they maintain diplomatic relations with the federal government (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008; U.S. Department of the Interior, 2000).

The first Tribal College was established in 1968 in response to the unmet higher education needs of American Indians. Barriers to post-secondary education for American Indian students include geographic isolation of reservations, inadequate pre-college preparation, socioeconomic challenges, and family responsibilities (American Indian Higher Education Consortium, 2009).

Tribal Colleges and Universities (TCU's) are essential in providing educational opportunities for American Indian students. They offer higher education that is uniquely tribal

with culturally relevant curricula, extended family support, and community educational services. Most TCUs are located on federal trust territories and therefore receive little or no funding from state or local government, unlike other public colleges and universities. Instead, the TCU's special relationship with the federal government and the financial support it provides continue to be essential for their survival (American Indian Higher Education Consortium, 2009).

TCUs offer degrees and certificates in more than 600 majors (American Indian Higher Education Consortium, 2009). All TCUs offer Associate degrees; six tribal colleges offer Baccalaureate degrees; and two offer Master's degrees. Additionally, approximately 180 vocational certificate programs are available.

The American Indian Higher Education Consortium (AIHEC) is the collective spirit and unifying voice of the nation's Tribal Colleges and Universities. AIHEC provides leadership and influences public policy on American Indian higher education issues through advocacy, research, and program initiatives; promotes and strengthens indigenous languages, cultures, communities, and tribal nations; and through its unique position, serves member institutions and emerging TCUs.

Currently, 37 TCUs constitute AIHEC. The two newest member institutions, admitted in 2007, are College of Muscogee Nation in Okmulgee, Oklahoma and Ilisagvik College in Barrow, Alaska. TCUs are located primarily in the central and western parts of the United States, with one member in Canada (American Indian Higher Education Consortium, 2009).

Tribal College Enrollment

In fall 2006, the 36 TCUs represented in this report offer 635 different undergraduate majors/programs including: four master's degree programs, 55 bachelor degree programs, 387 associate's degree programs, and 178 certificate programs, five diploma programs, and six

apprenticeship programs. In addition, students may enroll without declaring a major while they decide which program they are most interested in pursuing. The 635 majors/programs are aggregated into 30 undergraduate major groups (excluding undeclared) and one master's program group. The undergraduate major groups are further aggregated into ten disciplines in this report as show in figure 1(American Indian Higher Education Consortium, 2009).

In that same year, the most popular discipline was Liberal Arts (23.5 percent), followed by Business (12.0 percent), Vocational/Career programs (10.1 percent), and Social Science (9.6 percent) (17 percent in Fall 2005) while they decide which program they are most interested in pursuing. The majors have been aggregated into 33 major groups and further aggregated into ten disciplines for reporting purposes. In Fall 2006, the most popular discipline was Liberal Arts (23.5 percent), followed by Business (12 percent), Vocational programs (10.1 percent), and Social Science (9.6 percent) (American Indian Higher Education Consortium, 2009). In Fall 2006, there were 15,795 certificate and degree seeking students enrolled in 35 reporting TCUs. The majority are American Indian female (55.4 percent) followed by American Indian male (30.8 percent).

In fall 2007, the enrollment at Salish Kootenai College 749, followed by Blackfeet Community College was (444), Chief Dull Knife College (393), Fort Peck Community College (322), and Stone Child College (290) Little Big Horn College (262), Fort Belknap College (185), (National Center for Education Statistics, 2009).

Tribal College Graduates

Twenty-seven TCUs offer programs leading to a certificate or diploma, every TCU offers associate degrees, seven TCUs offer bachelor's degrees and two TCUs offer master's degree programs. The total number of degrees, certificates, and diplomas conferred from AY 2003-04 to

AY 2005-06 was relatively unchanged; a total of 7,156 (annual average of 2,385) students graduated in AY 2003-04 and AY 2005-06. However, the percentage of associate and bachelor's degrees, compared to certificates and diplomas, has increased. The number of associate degrees has risen from 1,668 to 1,692 and the numbers of bachelor's degrees from 190 to 201 while the number of certificate and diplomas earned declined from 522 to 475.

By race and gender, 79 percent of the degrees, certificates, and diplomas conferred in AY 2005-06 were awarded to American Indians; 69 percent were awarded to females. In AY 2005-06, a total of 201 Bachelor's degrees were conferred in the seven TCUs with four year programs. Business (49, 24 percent) and Education (46, 23 percent) accounted for the majority, followed by Social Science (29, 14 percent) and Liberal Arts (24, 12 percent).

The largest number of Associate degrees conferred in AY 2005-06 were in Liberal Arts (494 out of 1,692, 29 percent), followed by Social Science (238, 15 percent), Education (223, 13 percent), and Business (222, 13 percent). Science, technology, engineering, and mathematics (STEM) degrees earned represented 13 percent (216) of the total. The largest percentage of certificates and diplomas were awarded in Vocational/Career programs (221 of 475, 47 percent), followed by Nursing and Health (96, 20 percent) and Social Science (66, 14 percent) (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006).

In 2007-08, the Salish Kootenai College conferred (30) bachelor's degrees followed by Blackfeet Community College who conferred (62) associate degrees, Little Big Horn (37), Salish Kootenai College (36), Stone Child College (34), Fort Peck Community College (31), Chief Dull Knife College (17), and Fort Belknap College (15) (National Center for Education Statistics, 2009). In 2007-08, a total of 8,849 associates degrees were conferred by degree-granting institutions compared to 2,498 associates degrees in 1976-77 to American Indian/Alaska Natives.

A total of 11,509 bachelor's degrees were conferred to American Indian/Alaska Natives in 2007-08 compared to 3,326 bachelor's degrees in 1976-77 (National Center for Education Statistics, 2009).

Tribal College Retention and Graduation Rates

Twenty TCUs reported Associate degree seeking students' retention and graduation data by first time entering student cohort. The student retention rate after the first year has increased from 49 percent (1,428 out of 2,955) to 52 percent (1,439 out of 2,794) from Entering Student Cohort 2003-04 to 2005-06. The cumulative graduation rate after the second year was above 7 percent in both of the Entering Student Cohort in 2003-04 and 2004-05. Entering Student Cohort AY 2003-04 experienced a 17 percent graduation rate after three years (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006).

In fall 2008, the Montana University System (2009) reported that enrollment counts at tribal colleges were 2,731 compared to 2,476 in fall 1998. The report also included the first time, full time freshman graduating within three years from the same institution they entered as freshman were: Chief Dull Knife (63 percent), followed by Salish Kootenai College (50 percent), Fort Peck Community College (27 percent), Fort Belknap College (25 percent), Stone Child College (19 percent), Blackfeet Community College (13 percent), and Little Big Horn College (7 percent) (Montana University System, 2009).

In fall 2009, the Montana University System reported the following number of students transferring from Montana tribal colleges to four year colleges: Blackfeet Community College (25), Salish Kootenai College (23), Fort Belknap College (16), Stone Child College (15), Little Big Horn (12), Chief Dull Knife (8), and Fort Peck Community College (7) (Montana University System, 2009). In fall 2008, the report also included the number of students transferring from

Montana tribal colleges to four year colleges: Blackfeet Community College (23), followed by Chief Dull Knife College (5), Fort Belknap College (12), Fort Peck Community College (15), Little Big Horn College (11), Salish Kootenai College (17), and Stone Child College (16) (Montana University System, 2009).

College Continuation Rates for High School Graduates

In 2006, a smaller percentage of American Indian/Alaska Natives reported receiving a high school diploma than Whites or Asian/Pacific Islander. Seventy-five percent of American Indian/Alaska Natives who had been sophomores in 2002 reported that they had received a high school diploma by 2006, compared to 91 percent of Whites and 93 percent of Asian/Pacific Islanders. In addition, a larger percentage of American Indian/Alaska Natives, 9 percent, than Asian/Pacific Islander, 2 percent, reported receiving a GED certificate.

A larger percentage of American Indian/Alaska Natives, 12 percent, than Whites, 3 percent, or Asian/Pacific Islander, 2 percent, reported they had not received a high school credential and were neither currently enrolled nor working toward one. No differences were detected among the percentages of students of different races/ethnicities who were still enrolled or working toward an equivalency certificate. Across all high school completion status categories, apparent differences between American Indian/Alaska Natives and Blacks and Hispanics were not significant (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008). Parents' educational attainment has been identified as one of several factors positively related to children's academic achievement and socioeconomic levels (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

In 2007, a larger percentage of American Indian/Alaska Native children ages 6-18 had mothers who had attained a high school education, 84 percent, than Hispanic children of the same age, 60 percent. On the other hand, the percentage of American Indian/Alaska Natives was lower than the percentage for White children of the same age, 95 percent. A higher percentage of American Indian/Alaska Native than Hispanic children had fathers who had attained at least a high school education, 90 percent compared to 59 percent (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

The college continuation rate for 2008 high school graduates was 68.6 percent, according to data released April 28 by the Bureau of Labor Statistics. Out of the near record class of 3,151,000 for 2007-08 high school graduates an all-time record number (2,161,000) were enrolled in a degree-granting college somewhere in the U.S. by October 2008. The 2008 rate of 68.6 percent first reached in 2005 (Postsecondary Education Opportunity, 2009).

The current economic recession was well underway by October of 2008. It began slowly in January, and accelerated downward at several points later in the year. So, if the recession were to affect college continuation rates then such effects should have been apparent in the data. In fact the effects were present and almost mind numbing in scale. Comparing 2008 to 2007 about 97,000 college freshman switched their initial enrollment from 4-year to 2-year colleges. This is part of a longer trend that began in 2002. Comparing 2008 to 2001, about 182,000 college freshman have shifted their initial enrollment from 4-year to 2-year colleges. The 2008 data indicate that the recession has hurt men but not women, hurt blacks but not whites and reduced high school attrition. But most dramatically the recession has cut sharply into student employment at both high school and collegiate levels (Postsecondary Education Opportunity, 2009).

The rate at which high school graduates have continued their educations in colleges and universities in the fall following high school is shown for the 50 years from 1959 through 2008 in a document in Postsecondary Education Opportunity, 2009. Between the end points the college continuation rate rose by 22.9 percentage points, from 45.7 to 68.6 percent. The 2008 rate of 68.6 percent ties the all-time high first reached in 2005.

Although the overall record is one of substantial growth in college continuation rates for recent high school graduates, there have also been periods of decline as well. The first occurred between 1968 and 1973, and the second from 1998 to 2001. The period from 1991 through 2003 was essentially a period of no growth. These aggregated data obscure many other more subtle shifts between groups within these totals. One of these shifts is indicated in Postsecondary Education Opportunity, 2009. The 4-year college continuation rate has been declining since 2005, from 44.6 to 40.9 percent. The 2008 4-year college continuation rate is the lowest since 1995.

At the same time, the 2-year college continuation rate for recent high school graduates has been rising. The 2008 rate of 27.6 percent is the highest on record by a substantial margin for data reported since 1991. This freshman shift from 4-year to 2-year is indicated in a study by Postsecondary Education Opportunity, 2009. The market share of all freshmen who were recent high school graduates entering 4-year colleges grew from 60.1 percent in 1991, to a peak of 68.1 percent in 2001. Then between 2001 and 2007 the 4-yer college share declined by 4.0 percentage points, or by about 0.7 percent per year.

For 2008, well into the current economic recession, the 4-year college market share of these freshmen declined by 4.4 percentage points in one year, or at a six times greater rate than during the six years between 2001 and 2007. This shift between 2007 and 2008 means that about

95,100 freshmen shifted their entry into college and university from 4-year to 2-year colleges in just one year. Compared to the 2001 shares, by 2008 181,500 freshmen had shifted their entry point into higher education from 4-year to 2-year colleges (Postsecondary Education Opportunity, 2009).

This trend should be very carefully monitored by 4-year colleges and universities concerned about preserving market share. However, the market signal for policy makers is that students entering higher education in this decade are rapidly losing their willingness or ability to pursue their higher education in 4-year institutions. Unless 2-year colleges substantially improve their success in getting their graduates into 4-year colleges and universities, the end result will be a substantial decline in baccalaureate degree attainment rates in future years at the same time that President Obama has challenged American higher education to regain world leadership (Postsecondary Education Opportunity, 2009).

The share of college freshmen who were recent high school graduates beginning their collegiate studies on a full-time basis (12 hours of classes or more) was 93.2 percent. This was the same share reported for 2007 and 2004. These shares are the highest recorded since 1976 when 94.1 percent of freshmen enrolled full-time. The all-time high was 96.7 percent in 1969. This high rate of full-time college enrollment is important. Although the share of freshmen entering 4-year colleges and universities has been declining since 2001, the share entering college full-time has been rising. This reflects both sharply declining student employment (reported later is this issue) as well as a serious student commitment to pursuit of and engagement in study in higher education. The community colleges will be tested to see if they can successfully prepare these new students for transfer to 4-year institutions to complete their

baccalaureate studies, or whatever baccalaureate ambitions will have been short-circuited (Postsecondary Education Opportunity, 2009).

Degree Seeking Students

First time entering degree seeking students include those who enroll in an Associate degree program at a TCU for the first time; they may be a first time college student or have previously enrolled in another institution of higher education. More than 5,000 first time entering students enrolled annually from AY 2003-04 to 2005-06 in the 29 reporting TCUs. About 82 percent of first time entering students are American Indian.

Seventy-two percent of entering first-time students in AY 2005-06 held a high school diploma and 15 percent had earned a GED. The majority (73 percent) were unmarried. Nineteen percent of all first-time entering students were single with children, and seven percent of the students were married with dependent children. Although most students were of traditional student age (55 percent aged 16-24 and 17 percent between 25 and 34 years old), 16 percent were over age 35. The average family income of first-time entering students in 12 reporting TCUs increased 14 percent from $14,335 in AY 2003-04 to $16,379 in AY 2005-06; U.S. median household income was $47,264 in AY 2005-06 (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006).

Remedial and Development Courses

Many first-time entering students in TCUs did not receive adequate pre-college preparation. Older students may be enrolling in college after an extended period of time out of the classroom and therefore need a refresher in basic academic skills. The results of skills assessment and placement tests given to first-time entering students in 14 reporting TCUs show that the majority of entering students are not fully prepared for college level work. Students were

most under-prepared in mathematics, with 73 percent of the test takers being placed in remedial/developmental mathematics courses as a result of their test scores in AY 2005-06 (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006).

Many TCU students take remedial/developmental courses as their first step success in college-level coursework. The most common remedial/developmental courses offered by TCUs are Reading, Writing/Composition, and Mathematics. Mathematics has the highest enrollment followed by Writing/Composition, and Reading. For all three subjects, the general trends for AY 2003-04 to 2005-06 show less students enrolling in remedial/developmental courses and the students have a lower successful completion (grade C or above) rate (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006).

Montana Trends

In 1999, The Montana Board of Regents of Higher Education developed a policy to promote multicultural diversity and achievement of American Indian and other minority students in Montana. The Board pledged its cooperation to enroll and graduate American Indians and other minorities in proportion to their representation in the state's population (Montana University System, 2005). Data from the 2000 census shows 6.2 percent of Montana's population is American Indian/Alaska Native (Montana University System, 2005). Yet, almost, six years later, the Montana University System (MUS) states in its latest diversity report that "clearly MUS has not achieved the goal of participation for American Indians in the same percentage as Montana's population" (Montana University System, 2005).

In 2005, MUS reported that in 2000-2003 an average of 3.5 percent of MUS student population was American Indian/Alaska Native. Although these figures show over the last six

years that Native American enrollment in Montana may be increasing slightly as a percentage of the total student population, the 2005 percentage is barely half the Montanan Board of Regents goal of 6.2 percent (Montana University System, 2005).

Parallel to the topic of enrollment is retention. In Montana, both the percentage and the total number of bachelor's degrees awarded to Native American students in 2003-2004 declined from 3 percent for the previous year to 2.7 percent (Montana University System, 2005). Using data from the same report, the average completion rate from 2000 to 2007 was 2.7 percent, which is not even half the MUS's proposed goal. Clearly, many Montana Native American students are not fulfilling their dream of a bachelor's degree (Montana University System, 2005).

Many Montana students cannot afford to attend college (Byrd, 2006; National Center for Public Policy and Higher Education, 2006). A recent report by the National Center for Public Policy and Higher Education (2006) stated concern that Montana's "underperformance in educating its young population could limit the state's access to a competitive workforce and weaken its economy over time" (p. 3). The report also noted that "college in Montana has become less affordable, particularly for low-income families" (p. 9). It added that "the state's investment in need-based financial aid is very low when compared with top-performing states, and Montana does not offer low-priced college opportunities" and that "undergraduate students borrowed an average of $3,471 in 2005" (p. 8).

Both Senator Baucus and Congressman Rehberg have expressed concern over the high cost of attending college in Montana, and both have responded by sponsoring legislation to address the problem (Baucus, 2006; Rehberg, 2003). Baucus (2006) also remarked that the average Montana student leaves college owing around $21,000. Rehberg (2003) noted that Montanans are paying a higher percentage of their incomes to attend college than are individuals

in other states, and he sympathized with parents and students in saying, “Paying for college is becoming increasingly difficult” (para. 7). In a press release in 2006, Governor Schweitzer announced: “Our Montana kids should have the opportunity to go to college—affordability is a barrier that we have to address…Montana’s families have been priced out of an education. Our most talented should have the opportunity to attend college in Montana and be the engines that drive our state’s future economic growth” (Schweitzer, 2006, para. 1 & 3).

Culture and Degree Completion

Native American students are among the least likely to graduate from non-Native American colleges, with only 15 percent of Native American students who enter college earning a bachelor’s degree within six years (Lundberg et al, 2007). This compares with 51 percent for Asian or Pacific Island students, 49 percent for White students, 31 percent African-American students, and 24 percent for Hispanic students (Lundberg et al, 2007).

In 2005-2006, the Blackfeet Community College had 92 graduates. Of those 92 graduates, 76 of the students earned an associate degree and 16 earned certificates. Chief Dull Knife College had 27 graduates and all earned an associate degree. Fort Belknap College had 25 associate degree graduates. Fort Peck Community College had 50 graduates; 36 students earned an associate degree and 14 earned certificates. Little Big Horn College had 49 graduates; 48 earned an associate degree and 1 earned a certificate. Salish Kootenai College had 194 graduates; 32 earned Bachelor degrees; 116 earned associate degrees; and 46 earned certificates. Stone Child College had 24 graduates; 23 earned associate degrees and 1 earned a certificate (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles, 2005-2006).

Native students with confidence, a strong belief in the importance of their cultures, strong study skills, parental support, a desire to succeed, and plans to work within their communities and reservations will more likely to complete their degrees (Abbot-Miheseuah & Cavender-Wilson, 2004). As with first-generation students who are the first in their family to attend college (London et al, 1992), many Native-American students report feeling torn between the culture of origin and the higher education culture (Brown & Robinson-Kurpius et al, 1997).

Native Americans have worked hard to preserve their language, culture, and values amidst colonizing attempts to destroy these elements (Garrett & Pichette, 2000). Groups have sought to civilize and convert Native Americans (Garrett & Pichette, 2000), resulting in death, destruction of native culture, and loss of native lands. Postsecondary education may be seen as another attempt to acculturate Native American students. However, Native Americans who choose to pursue postsecondary education often do so with the goal of returning to their communities to give back to them, rather than assimilate to the dominant culture (Braithwaite, 1997).

In an attempt to civilize Indians there was the creation of the boarding school; whether on or off the reservation, was the institutional manifestation of the government's determination to completely restructure the Indians' minds and personalities. To understand how it functioned in this regard one must attempt to understand how Indian students actually came to know and experience it. And this effort must necessarily begin at that point in time when Indian youths left behind the familiar world of tribal ways for the unfamiliar world of the white man's school. For philanthropists, of course, the journey of Indian children to boarding school was that first step out of the darkness of savagery into the light of civilization. For most Indian youths it meant

something entirely different. In any event, the day they left for boarding school could never be forgotten (Wallace-Adams, 1995).

The military atmosphere of schools was reinforced by a stern discipline policy, and central to that policy was the threat of corporal punishment. In this connection, it should be emphasized that often there was very little congruence between actual school practice and official Indian Office policy. By 1890, the official position of the government was that corporal punishment should be resorted to "only in cases of grave violation of rules" and even then it was to be administered or supervised by the superintendent. For students twelve years and older, however, who were "guilty of persistently using profane or obscene language; of lewd conduct; stubborn insubordination; lying, fighting, wanton destruction of property; theft; or similar misbehavior" – in other words, just about everything – superintendents were permitted to inflict corporal punishment and even to imprison students in the guardhouse. But even then, no "unusual or cruel or degrading punishment" was to be exercised (Wallace-Adams, 1995).

Why such opposition to the school? Actually, there appear to have been several reasons. Surely a major factor was the threat that white education posed to tradition ways and the school's poor health record. In 1890, scarlet fever had swept through the dormitories, striking down sixty-eight children. During the next two month, eight children died in school and another thirty, removed from the school by their parents, died at home, dropping the enrollment at Fort Hall from 105 to 68. There is also a third possibility: parents were holding children back in protest of white encroachment and treaty violations. Finally, the Fort Hall Boarding School was hardly a smooth-running educational machine. Staff turnover was the major problem, and as early as 1885, the agent complained that he was having "great difficulty" obtaining teachers "adapted to the work" of teaching Indians (Wallace-Adams, 1995).

Despite the potential damage to Native American culture by assimilating to the dominant culture, engagement in university social groups is a consistent predictor of college success in a non-Native college. Administrators and faculty who recognize the desire on the part of these students to retain strong tribal identities in lieu of assimilating into the mainstream university culture can use this factor as a resource of motivation in degree attainment (Belgarde et al, 1992).

Brown and Robinson-Kurpius (1997) found higher levels of social integration among Native American students who persisted to the senior year. That integration measured engagement in student organizations, so part of the integration may have been in supportive advocacy organizations for Native American students. In a study of social integration among Native American and Hispanic students, Murguia, Padilla, and Pavel (1991) argued that social integration should be studied in terms of enclaves, or smaller social units, such as student organizations, clubs, and small social groups. They found that engagement with other students of the same ethnicity were an important source of support for Native American and Hispanic students at a predominantly white university. They described such groups as giving these students “a sense of place in the world” (p. 435). In their proposed model, social integration refers to integration with a small enclave of students who are similar to each other, rather than to the general notion that one is integrated into the mainstream of the university. Tanaka (2002) argued that students’ perceptions of the university’s value of diversity may be a better predictor of success than involvement for students of color, although this has been overlooked in extant studies. Such institutions are likely places where students can more readily find social groups that are supportive and do not require them to assimilate to dominant cultural norms at the expense of their home cultures (Lundberg et al, 2007).

A major reason Natives leave school is they do not find a course of study that meets their needs as indigenous peoples with strong concerns about their families, communities, and tribes (Abbott-Mihesuah & Cavender-Wilson, 2004). Cultural identity is so important to American Indian students that is has been identified as a primary indicator of college success (Huffman et al, 1987). Most American Indian college students experience constant conflict, either consciously or unconsciously, between their value system and that of the educational system. Some researchers have described this conflict as "oppositional identity" which emerges in situations of minority/majority contact, such as a college environment (Pottinger et al, 1990).

Primary cultural differences include cognitive, language, relational, and stylistic differences between cultures. Secondary differences arise from cultural contact, particularly between dominant and subordinate groups, and are a product of that contact. American Indian students who have completed years of education are generally proficient in the primary attributes of the majority culture and are essentially bicultural. If these students have difficulty in their college experience, it is possible that they are experiencing "oppositional identity"—i.e. a significant cultural barrier of some type—and must find a way to overcome this barrier to be successful (Pottinger et al, 1990). Minority students experience frustration when they are recruited by institutions on the strength of previous achievements and cultural affiliations, and then are expected to behave like Caucasian students with whom they may have little in common (Richardson & Skinner, 1991). Colleges and universities should not ignore the opportunities for American Indian students to experience oppositional identity. They should, instead, appreciate and value the necessity of culture in the college experience of American Indian students and should provide support in transcending the cultural conflict to facilitate the acquisition of

knowledge and skills needed by American Indian students to function effectively in a multicultural environment (Ness, 2001).

The spiritual aspect of the American Indian culture is significant. Spirituality is one of the four essential dimensions of the American Indian's world-view philosophy, often reflected in the medicine wheel. The other three dimensions are mental, emotional, and physical aspects. All four must be in balance for resilience to occur. Spirituality is a fundamental continuous part of the life of an American Indian. Embodied in American spirituality is the concept of interconnectedness. The spirit nature of all living things is respected and recognized. This spirituality is at the core of the American Indian's survival (Heavy Runner & Morris, 1997). Many spiritual values are held in common by Indian peoples. Many of these same values are present within the majority culture, but are not emphasized as they are within Indian culture. The American Indian culture is rich with ways to teach these dimensions. Some of these ways include traditional language, dance, ceremonies, blood/clan systems, music, art, medicine, foods, and clothing. When an emphasis is placed on the dimensions and values which constitute the value systems of American Indians, resilience and retention is much more likely to be achieved (Heavy Runner & Morris, 1997; Indian Nations At Risk Task Force, 1991). Being Indian does not just mean being part of an ethnic group—being Indian is a way of life (Ness, 2001).

According to Rousey and Longie (2001), compared to mainstream institutions, the tribal college has one advantage, its position of respecting the tribal families and culture. A tribal college's mission is connected to the Indian families that they serve. The tribal college serves as a family support system in multiple ways. It provides the coordinated system of social services that many students need. A college incorporates culture throughout every facet of its operation and perhaps more importantly, it enables many individuals to pursue their education while

remaining on the reservation in the context of a strong family network available for social support.

Tribal college participants not only want to educate their students so they would reap the economic advantages of a college degree, they also sought to provide an education that reinforced tribal culture and identity. One step in that direction is to have American Indians in positions of authority (Tierney, 1992). Increasing the number of graduates is not only important to the individual students and their families, but also to their communities. College graduates have a profound effect on the reservation economy. A recent study compared economic indicators for reservations with and without tribal colleges. This particular study found a positive correlation between tribal colleges and lower poverty rates. Median incomes grew at faster rates on reservations with tribal colleges. Between 1980 and 1990, the growth in female median income was 49 percent greater on reservations with tribal colleges. In contrast, during the same period, reservations without tribal colleges showed an overall increase of 22 percent in poverty rates (AIHEC as cited in http://www.fpcc.edu/fem/tribal_college.htm, 2004).

The success rates for students attending tribal colleges are much higher than the success rate of Native American students at non-Indian institutions. American Indian students who attend a tribal college before transferring to a four-year institution are four times as likely to complete four-year degrees as those who enter mainstream institutions as freshman (Boyer as cited in http://www.fpcc.edu/fem/tribal_college.htm, 2004). Tribal college graduates have a tremendous influence on agencies and institutions on reservations. The tribal colleges have been largely responsible for increasing the number of Native American teachers on reservation schools. Thirty years ago, one almost never found a Native American teacher in reservation schools. Today, on some reservations, 90 percent of the elementary teachers are Native American. For the

most part, these teachers are graduates of the tribal college teacher education programs (http://www.fpcc.edu/fem/tribal_college.htm, 2004).

Students who attend two-year colleges are ethnically, culturally, and economically diverse. The diversity has come rapidly to two-year colleges. Many international students, immigrants, and many undocumented aliens have contributed to this diversity. Immigrants view the two-year college as the ideal starting point in a new country for learning English, redeveloping or updating skills, or for developing technical skills to achieve employment in the U.S., skills that they were unable to acquire prior to immigration. Two-year colleges and the services provided to all students with differing academic, social, and economic backgrounds can have a positive impact and lasting effect on the nation's future (Seidman, 1995).

Statement of the Problem

Native American students are behind most other groups in successfully completing postsecondary education. Native American students are among the least likely to graduate from non-Native American colleges, with only 15 percent of Native American students who enter college earning a bachelor's degree within six years. This compares with 51 percent for Asian or Pacific Island students, 49 percent for White students, 31 percent African American students, and 24 percent for Hispanic students (Lundberg et al, 2007; Freeman & Fox, 2005).

The under-representation of American Indian students is further exacerbated by attrition. In recent year, American Indians have been admitted to college at a rate higher than that of other ethnic/racial groups; however, far fewer American Indians graduate (Jackson, Smith, & Hill, 2003). The high attrition rate at the undergraduate level leads to only 0.67 percent of all undergraduate degrees being awarded to American Indians (Silas, 2006). Nine percent of American Indians/Alaska Natives completed bachelor degrees as their highest level of education

attainment than all other racial/ethnic groups, with the exception of Hispanics. In addition, 5 percent of American Indians/Alaska Natives obtained graduate degrees than their White (11 percent) or Asian (21 percent) peers. No measurable differences were detected among American Indian/Alaska Natives and Blacks, Hispanics, and Native Hawaiians/Pacific Islanders at this level (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Reasons for this appear to include pre-college preparation, family support, supportive and involved faculty, institutional commitment, and maintaining an active presence in home communities. Cultural ceremonies are crucial elements that impact these students' ability and/or desire to persist in college (Guillory & Wolverton, 2008). Maintaining connections to home communities in many instances, on federally designated Indian reservation lands and attending tribal ceremonies seem to be particularly important (Barnhardt, 1994; Huffman et al, 1986).

One group of Native Americans does have a higher postsecondary education completion rate, namely those who attend a tribal college. The difference in completion, not only of degrees offered at tribal colleges but also at other postsecondary institutions as transfer students from tribal colleges, is a 75 percent greater completion rate than those Native students who went directly into the four-year university system (Pavel et al, 1998). This difference is a promising indicator which reveals that tribal college education can be a key factor in Native American students to receive degrees of all kinds. However, even tribal colleges have relatively low enrollments (with a few exceptions) and attrition rates at these institutions are still high.

Therefore, it is important to understand what works at tribal colleges and what does not, in order to build on the former and eliminate, or at least substantially confront, the latter. This study intends to do so by investigating the educational services and programs that tribal colleges

provide for Native American learners who are at a disadvantage in higher education. The services include financial aid, student services, mentors, tutors, disability services, student organizations, and computer services that Native American students seek out to assist them to be persistent throughout their college experience.

Positive Outcomes for Native American People

In 2004, some 69 percent of high school seniors expected to attain a bachelor's degree or higher as their highest level of education; while 33 percent expected to graduate from college and 35 percent expected to continue on to graduate or professional school. Another 18 percent expected some postsecondary education, but less than a bachelor's. The rest either expected to not go beyond high school, 5 percent, or did not know, 8 percent (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

American Indian/Alaska Native enrollment in public and private degree-granting institutions more than doubled between 1976 and 2006. In 1976, about 76,100 American Indians/Alaska Natives were enrolled in colleges and universities. Enrollment grew steadily from 1976, reaching 102,800 in 1990 and 151,200 in 2000. Enrollments continued to increase after 2000, and by 2006, 181,100 American Indian/Alaska Native students were enrolled in higher education (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

In 2005-2006 school year business, education, and social sciences were the most popular majors among American Indian/Alaska Natives early bachelor's degrees. In the field of business, 19 percent of the college and university graduates were American Indian/Alaska Native, while 12 percent studies social science or history and 8 percent studied education. Compared with

2005-2006 graduates in general, American Indian/Alaska Natives earned a smaller percentage of business and communications degrees and a larger percentage of education and social science degrees. There was a difference of less than 0.5 percent between the percentage of American Indian/Alaska Natives and the percentage of the total population earning degrees in visual and performing arts, health professions, and related clinical sciences, biological, and biomedical sciences, and psychology (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Between the 1976-77 and 2005-06 school years, the number of degrees awarded by colleges and universities to American Indians/Alaska Natives more than doubled for each level of degree. For example, 3,300 bachelor's degrees were awarded to American Indians/Alaska Natives in 1976-77, compared to 10,900 awarded in 2005-06. In 2005-06, 52 percent of the master's degrees awarded to American Indians/Alaska Natives were in the fields of education or business. Forty-eight percent of the doctoral degrees awarded to American Indians/Alaska Natives were in the fields of education, psychology, social sciences, and history (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Negative Outcomes for Native American People

Poverty rates are especially high among American Indian/Alaska Native families who live in American Indian/Alaska Native areas. In 1989, the poverty rate among all American Indian/Alaska Native families living on reservations and on off-reservation trust lands was more than one and a half times higher than the poverty rate for families in the total American Indian/Alaska Native population of 47 percent compared to 27 percent. By 1999, although both percentages had decreased and the gap had narrowed to 14 percentage points, a larger percentage

of families on reservations lived in poverty (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

In 2006, the median earnings for young adult full-time, full-year wage and salary workers ages 25-34, $34,800. The median earnings of Asian, $45,700, and White, $36,600, young adults were greater than the median earnings of their American Indian/Alaska Native peers, $28,400 (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

There were no significant differences in earnings among American Indian/Alaska Native young adults with lower levels of educational attainment. Those who were not high school completers earned $25,400; high school graduates earned $26,400; those with some college, experience earned $27,400; those with an associate degrees earned $26,400. However, among American Indian/Alaska Native young adults, those with bachelor degree earned $35,500, and those with postsecondary degree earned $44,700 (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

For example, American Indians/Alaska Natives with bachelor degrees as their highest level of education earned 26 percent more than those whose highest level of education was high school completion (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

The Importance of Education to Native Americans

The under-representation of American Indian students in institutions of higher education in the United States is a longstanding problem. Although official figures indicate that American Indian college student enrollment nationwide has more than doubled over the last 25 years (U.S. Department of Education, 2005), American Indian students continue to remain among the most

underrepresented groups in academe (Tierney, 1992a; U.S. Department of Education, 1998). Education is important to Native America people because living a productive life, having a good job, and having a healthy family contribute to a Native American person's longevity.

If all the tribal colleges eventually transition into four-year institutions; most of the employees, staff, and faculty will need to obtain higher education in order to be in accordance with the Northwest Commission on Colleges and Universities. Most four-year institutions require at least master's degrees but prefer doctorates for faculty positions.

With the growing understanding that higher education is not only beneficial to individuals but also to society as a whole, policymakers, accrediting agencies, and the general public have placed an emphasis on ensuring that institutions of higher education are held accountable for the learning experiences of students. As the country becomes racially and ethnically diverse, it is imperative that institutions of higher education continually work to strengthen the academic success of students of color. By the year 2020, 39 percent of the total U.S. population is projected to be people of color; the proportion will increase to 50 percent by 2050 (Del Rios & Leegwater, 2008; U.S. Census Bureau, 2004).

According to National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives (2008), in 2006, a 15 percent of American Indian/Alaska Native young adults were status dropouts than were their White (7 percent), Black (11 percent), Asian (3 percent) and Native Hawaiian/Pacific Islander (7 percent) peers. The dropout rate for American Indian/Alaska Native males, 16 percent, was higher than that for White, 7 percent, Black, 12 percent, Asian, 3 percent, and Native Hawaiian/Pacific Islander, 7 percent, males, but lower than that for Hispanic, 25 percent males.

In 2006, the dropout rate for American Indian/Alaska Native females was 13 percent. This also was higher than the rate for White, 6 percent, Black, 9 percent, Asian, 3 percent, and Native Hawaiian/Pacific Islander, 7 percent, females, but lower than the rate for Hispanic, 17 percent, females (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Research Questions

The research design will be guided by the following question: how can Native American students better utilize all the educational resources such as a mentoring programs, financial aid, library service, distance learning programs, disability services, and knowledge in the scholarship application process, gain good computer skills, tutors, student organizations, and academic counselors that are available at Montana Tribal Colleges in order to make a thriving transition to a four-year college?

Is there any similarity between the responses of students who completed an Associate Degree at the tribal college and a Bachelor's Degree at a four year institution and those students who went directly to a four-year college and obtained a Bachelor Degree?

Is there any difference between the responses for students who completed an Associate Degree at the tribal college and a Bachelor Degree at a four year institution and those students who went directly to a four-year college and obtained a Bachelor Degree?

Purpose of the Research

The purpose of this study has demonstrated how tribal colleges can find ways to help American Indian students better utilize the educational resources designed to meet the unique challenges of Native American students. The tribal college movement was established to meet the needs of Native American students so that they may learn culturally relevant curriculum,

continue to have family support, and earn a two-year degree. Identifying these strategies will serve Native American students, tribal colleges, and four-year colleges in developing the appropriate tactics and strategies to mitigate possible causes of low Native American participation and completion of degrees in higher education.

Importance of the Research

The importance of this study has identified how to better utilize tribal colleges in order to provide native people with the education necessary to meet the challenges of poverty, crime, and the many other factors inherent in an under educated society. Higher education is important to Native American people to strengthen the culture and welfare of each tribal member. Poverty is a longstanding problem for Native American people and breaking this cycle depends on earning higher education that can lead to a healthier and prosperous life of an individual and the society in which that individual participates because if a Native American student transfers from a tribal college; that student has a 75 percent greater completion rate than those native students who went directly into the four-year university system (Pavel et al, 1998).

Limitations

For the purposes of this study the following applies:

1. The study results 44 participants from seven tribal colleges in Montana.
2. There were eleven (11/44) Native American men in this study. Although it is an appropriate proportion of the number of Native American women to Native American men educated at tribal and non-tribal colleges, it could be considered a limitation.
3. The sampling techniques used for the study will not be random. The researcher will select students who fit the criteria. Thus it will be a purposeful sample.

Delimitations

This study will be delimited to:

1. American Indian students from seven tribal colleges in Montana who transitioned successfully to a four-year college or university and completed a baccalaureate degree, and
2. American Indian students who went directly to a four-year college or university and completed a baccalaureate degree.

Definitions

For the purposes of this study the following definitions will apply:

American Indian. Today there are many terms that are commonly used to describe the indigenous peoples or any of the original peoples of North American who maintain cultural identification through tribal affiliation or community recognition (Pavel et al, 1998). Politically, in many cases the term Native American is used. There is gradual shift back toward a simpler term, Indians. However, the preference by many tribal leaders and others reflects the legal language of treaties and other documents securing Indian rights. These documents use the term American Indians (Pavel et al, 1998).

Tribal College. A tribally controlled college located on a reservation.

Persistence. To go on to complete a baccalaureate degree in spite of difficulties or challenges.

Culture. While non-Indian schools and colleges have long ignored Indian culture, tribal Colleges view it as their curricular center. They argue that is through reconnection to these long-standing cultural skills and beliefs that Indians can build a strong self-image and participate, with confidence, in the dominate society. Each of these tribal colleges offers

courses, sometimes taught by tribal elders, in native languages, history, philosophy, and the arts, botany, astronomy, and more (Boyer, 1997).

In a study conducted by Jenkins (2009), the participants defined culture as a toolkit that included family bonds, life survival strategies, the practical and social functions of art and religion, a value for education, and a sense of legacy.

Descendent. Most tribes require an enrolled member to be ¼ or quarter Indian to be officially enrolled by the tribe. A person may not have enough quantum of blood of ¼ or quarter Indian to be officially enrolled so this person may be considered a descendent of this particular tribe.

Tribal Enrollment Policy/Self Identification. Most Indian tribe's require a tribal member to be at least ¼ or quarter Indian to be issued a tribal enrollment card and/or quantum of blood certificate from their particular tribe.

Summary

Native Americans are challenged in many ways as they strive to retain their native cultures and values, while living in or near a dominant culture that frequently does not share the same cultural norms or values. Native American students who succeed in higher education make many important contributions to the rest of the Native American populations that can serve as a bridge between the two cultures. Both cultures highly value the importance of education and both cultures understand the negative consequences of an inadequate education. The essence of the Tribal College movement is to meet the needs of Native American students who seek to improve themselves by additional education. The Tribal Colleges in Montana are committed to providing students with an opportunity to gain additional education while still immersed in their native cultures, a critical bridge between multiple cultures. Unfortunately, there is an abundance

of evidence, as briefly introduced above, to substantiate educational resources on reservations are being underutilized.

Education is a privilege for anyone to take advantage of, but especially Native American students who face greater challenges in higher education. The Native American student is being encouraged to begin their education journey at their local tribal college. These tribal colleges were developed because of the low success rate of Native American students in mainstream colleges. Seven tribal colleges exist in Montana which provides an opportunity for Native American students to earn a two-year degree and acquire the proper skills and attitude to make a thriving and persistent transition to a four-year college. This experience will enhance a Native American student's ability to gain additional education and overcome adversity to make positive contributions to all Native American people.

CHAPTER TWO - REVIEW OF LITERATURE

Introduction

Multiple studies concluded that Native American students have a better chance of succeeding at a mainstream higher education institution if they attend a tribal college (American Indian Higher Education Consortium, 2000). In fact, Boyer (1997) found that Native American students who had attended a tribal college before transferring to a 4-year institution were four times likely to complete a 4-year degree than those who entered a mainstream institution as freshmen. In addition, Boyer reported: “Students at tribal colleges expressed high satisfaction with the staff, instructors, and curriculum. Furthermore, these students indicated that job training, affordability, personal interactions with faculty and staff, and support services were important factors in the satisfaction they felt with their college experience” (1997a, p. 20).

According to Boyer (2008), one of the earliest and most important manifestations of self-determination was the founding of tribally controlled colleges, institutions of higher education chartered by tribes and governed by Indians. At first, these institutions had little visibility and most struggled to survive. Although modeled on the growing community college movement, the typical tribal college “campus” was nothing more than a once-abandoned government building, storefront, or mismatched collection of single-wide trailers. Few observers believed that Indians were even capable of running a college, and many people Indians and non-Indians alike waited for the experiment to fail.

However, critics grew silent as the tribal college movement not only survived but thrived. Even when resources were limited, tribal colleges succeeded because they provided what students wanted most: access to training for work available locally. With a certificate, graduates could work as classroom aides in public schools or find jobs as carpenters, plumbers, or in other

trades. With an associate degree, graduates were entering hospitals as nurses, and finding work as secretaries and entry level administrators in the federal Indian bureaucracy (Boyer, 2008).

In addition, tribal colleges were the first institutions to integrate tribal culture and values fully into their mission statements and day-to-day work. For the first time, tribal members could learn about their past, study their language, and practice their ceremonies with pride and a sense of purpose. Many instructors found ways to incorporate Native knowledge into the curriculum. Students reported their preference for studying at an institution that understood and validated their native identities (Boyer, 2008).

Since then, the movement has continued to grow and mature. After the founding of the first tribal college by the Navajo Nation in 1968, the number of colleges quickly grew to two dozen by the 1980s and now number over thirty-five institutions. Most of the first colleges were in the Southwest and northern Plains. Today, they cover much of the country, from the Upper Peninsula of Michigan to Barrow, Alaska and from the southern border of Arizona to the top of the North Dakota. Collectively, they enroll over 24,000 students. Many tribal colleges now occupy state-of-the-art campuses, and all but the very youngest colleges are fully accredited (Boyer, 2008).

Traditionally, most tribal college students were adult learners who would not otherwise leave home to attend a distant non-Indian institution. In fact the “typical” tribal college student in the 1980s and early 1990s was often said to be a single mother in her thirties. Most colleges focused on vocational certificates and two-year degrees. Like their community college counterparts, they provided a degree needed for entry level work while also serving students who planned to transfer to four-year colleges and universities (Boyer, 2008).

Tribal Colleges

Roksa and Calcagno (2008) found that community colleges can indeed serve as an alternative road of access to four-year institutions, even for academically unprepared students; almost 20 percent of students in the study who entered community colleges unprepared for college-level work made the transition to four-year institutions within 15 terms (5 years). However, academically unprepared students lagged behind their more academically prepared counterparts, 34 percent of who transferred within 5 years.

In 1999, the American Indian Higher Education Consortium (AIHEC) conducted a Tribal College Alumni Survey that was mailed to 965 students who graduated from a Tribal College. The survey population was derived from a list of names and addresses of all graduates that were provided to AIHEC by 17 of the Tribal Colleges. They included:

1. Bay Mills Community College
2. Blackfeet Community College
3. Cankdeska Cikana Community College
4. College of the Menominee Nation
5. Crownpoint Institute of Technology
6. Dull Knife Memorial College
7. Fort Peck Community College
8. Haskell Indian Nations University
9. Northwest Indian College
10. Salish Kootenai College
11. Si Tanka College
12. Sinte Gleska University

13. Sisseton Wahpeton Community College
14. Sitting Bull College
15. Stone Child College
16. Turtle Mountain Community College
17. United Tribes Technical College

Most of the survey respondents noted that the Tribal College they attended was located near their home communities. For more than three-quarters of the survey respondents, the distance from their permanent homes to the Tribal Colleges was 50 miles or less. This is consistent with the 1995 study of enrolled students (Boyer, 1995), which found that for almost 85 percent of the students, the Tribal College was 50 miles or less from their permanent homes. Furthermore, approximately one year after receiving their degrees or certificates, the overwhelming majority of the Tribal College graduates, 91 percent were either working or attending college (Table 3 and 4). More than half, 52 percent, were working only; an additional 22 percent were both working and attending college; 17 percent were attending college only; and only 9 percent were neither working nor attending school (AIHEC, 2000).

In 1997, the unemployment rate of American Indian residents of Tribal College reservations was 55 percent, on average, and was 50 percent for all American Indians living on reservations (Bureau of Indian Affairs, 1999). Average unemployment rates are lower when all residents of all Tribal College communities are considered; in 1990, for example, the unemployment rate for Tribal College reservation and cities averaged 18 percent (Census Bureau, 1992). Nevertheless, unemployment rates are clearly high for most of the communities served by Tribal Colleges. It is therefore encouraging that the majority of Tribal College graduates in this study reported being employed (AIHEC, 2000).

In 2006, there were 32 tribally controlled colleges and universities. They were located in 12 states; the majority were scattered across the West and Midwest, and one was located in Alaska. Seven of these college and universities were 4-year institutions, and 25 were 2-year institutions. Tribally controlled colleges and universities share many characteristics with each other that differentiate them from most other colleges and universities. Tribally controlled colleges and universities are designed to foster environments focused on American Indian culture in order to preserve, enhance, and promote American Indian languages and traditions (Cahalan et al, 1998). They are intended to create learning opportunities for students with unique needs. For example, students at these institutions are generally older than 24 years of age. In addition, tribally controlled colleges may function as community resources, providing social services to reservations in isolated areas (American Indian Higher Education Consortium, 2005).

The total enrollment in tribally controlled colleges and universities increased by 23 percent; from 14,100 in Fall of 2001 to 17,300 in Fall 2006. In 2006, some 13,600 students in tribally controlled colleges and universities were American Indian/Alaska Native, representing 79 percent of total enrollment. American Indian/Alaska Native enrollment in tribally controlled colleges and universities increased at a faster rate between 2001 and 2006 than did American Indian/Alaska Native college and university enrollment (17 percent compared to 15 percent) (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives; 2008).

American Indian students who attend tribal college differ from other minority students, as well as from students in general. Tribal colleges are institutions of higher learning, usually two-year colleges, founded and run by American Indians and, in most cases, located on Indian reservations (Boyer, 1997). Of all minority populations in postsecondary education, American

Indians are the most underrepresented. Wells' (1989) findings as described in Padilla et al (1997) indicate that persistence or degree completion rates in four-year colleges are estimated at 40 percent for African American students, 47 percent for Hispanic students, and 25 percent for American Indian students. Since 1976, the majority (51 percent) of American Indian and Alaskan Native students have primarily attended two-year institutions, while the majority of the overall population has attended four-year institutions (Pavel et al, 1998).

Very few postsecondary education and training programs effectively reach American Indian students. Major barriers such as poor preparation, high drop-out rates from high school, and living in poverty within poor communities (85 percent of tribal college students it is estimated live below the poverty level), commonly exist. Students are often very involved with family responsibilities (Boyer, 1997). At the very least, in most cases, families do not support or encourage family members to pursue postsecondary education (Garrod & Larimore, 1997). Because of these issues, what is typically thought of as a simple problem—i.e. no child care, no gas for the car, the car will not start—quickly becomes an insurmountable one because there is no back-up support plan. Some of the major obstacles in attending postsecondary school for American Indians are psychological in nature. The college experience is foreign and intimidating and consequently, enormous fear is attached to attending postsecondary school (Boyer, 1997; Garrod & Larimore, 1997).

Tribal colleges serve both Native American students and non-Native students. Turtle Mountain College was established to serve Chippewa Indians, but, in any given year, roughly 10 percent of its students are not members of any federally recognized tribe. Many of the 34 other public tribal colleges and universities in the United States have similar make up. In all, such institutions educate about 5,000 non-Indian students each year, most of them white, accounting

for more than 15 percent of their total enrollment (Ashburn, 2007). The seven Montana tribal colleges reported a total of 493 non-Native students for the AY 2005-2006. There were a total of 339 females and 154 males enrolled at the tribal colleges (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2006-2006).

Three of the colleges are federally chartered. These are Haskell Indian Nations University in Lawrence, Kansas; Institute of American Indians Arts in Sante Fe, New Mexico; and South Western Indian Polytechnic Institute in Albuquerque, New Mexico (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2006-2006). The others are chartered by individual tribes, which usually provide some money for their operation. The U.S. government, through the Tribally Controlled Community Colleges Act, provided $5,001 per student this year for the colleges' Indian students but does not provide money for the other students they serve. Tribal colleges, which are in largely rural, impoverished areas, cannot rely on tuition to cover the full cost of educating non-Indian students. Most of their students cannot afford to pay more than $1000 or $2000 a year in tuition and fees (Ashburn, 2007).

"One president said to me, 'I can charge what a Pell Grant will cover plus some or I can charge $2 million. It doesn't make a difference, because either way, students won't be able to afford it," says Meg Goetz, director of Congressional relations for the American Indian Higher Education Consortium, an advocacy group of tribal colleges. Rather than raise tuition, tribal colleges have turned to state legislatures for money to cover the costs of serving non-Indian students, these attempts have met with mixed success. Although some lawmakers believe that states should support tribal colleges as providers of higher education to people who otherwise would not have a chance at it, other legislators argue that they should support only state

institutions. The two sides often end up at an impasse, leaving the colleges to scrape by for another year (Ashburn, 2007).

"The emergence of tribal colleges reflects a growing movement towards self-determination and sovereignty by tribes" says Carrie Billy, Navajo, Deputy Director of the American Indians in Higher Education Consortium (AIHEC, 2008). Dr. Henrietta Mann, President of the Cheyenne and Arapaho Tribal College, agrees and points out that the tribal membership is directed by its leaders to create a tribal college. As the tribe began looking at social problems in the tribal community such as drug and alcohol abuse, it noted that these problems often went hand in hand with low self-esteem and lack of tribal pride and identity. To address this, the Cheyenne and Arapaho tribes in Oklahoma began searching for ways to teach culture and language to their young people, eventually creating a very successful language curriculum. "Thus the genesis of the college was related to language preservation efforts by the tribe," states Lawrence Hart, who is a chief of the Cheyenne and Arapaho tribe (Pember, 2008).

Montana Tribal Colleges

Blackfeet Community College

The Blackfeet Community College is located in Browning, Montana, on the Blackfeet Indian Reservation on the eastern side of the Rocky Mountains. The reservation occupies an area of approximately 1.5 million acres adjacent to Glacier National Park, Lewis and Clark National Forest, and the province of Alberta, Canada. In the year of 2005-2006 the College enrolled 487 students. Eighteen students were enrolled in American Indian Studies, 42 students were enrolled in Business, 24 students in Computer Science and Technology, 46 in Education, 134 in Liberal Arts, 43 in Nursing and Health, 32 in Science, 66 in Social Science, 73 in Vocational/Career Programs, and 9 were undeclared/not declared. Of the 487 students enrolled; 10 non-native

female and 6 non-native male students were enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In Fall 2007, the College enrolled 150 Native American males, 256 Native American females, 9 non-native males, and 15 non-native females (AIHEC, 2008).

Chief Dull Knife College

Chief Dull Knife College is located on the Northern Cheyenne Indian Reservation in southeastern Montana. The reservation is approximately 44 miles long and 23 miles wide encompassing 450,000 acres. The College in 2005-2006 enrolled 554 students and all of the students were enrolled in Liberal Arts. Of the 554 students enrolled; 61 non-native female and 33 non-native male students were enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In Fall 2007, the College enrolled 183 Native Americans males, 208 Native American females, 13 non-native males, and 33 non-native females (AIHEC, 2008).

Fort Belknap College

The Fort Belknap College is located on the Fort Belknap Indian Reservation located in north-central Montana. The Fort Belknap Indian Reservation encompasses an area consisting of 675,147 acres which extends approximately 28 miles east and west and 35 miles north and south. The College was founded in 1984 and the highest degree offered is an associate degree. In the year of 2005-2006 the college enrolled 175 students. During this school year, 158 students were American Indian students. Four of the students were enrolled in American Indian Studies, 9 in Business, 23 in Computer Technology, 18 in Education, 34 in Environmental Science/Natural Resources, 26 in Health Careers, 6 in Human Services, 10 in Liberal Arts/General Studies, 1 in Social Science, and 44 undeclared/not declared. Of the 158 students enrolled; 10 non-native

female and 7 non-native male students were enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In Fall 2007, the College enrolled 70 Native American males, 84 Native American females, 23 non-native males, and 35 non-native females (AIHEC, 2008).

Fort Peck Community College

The Fort Peck Community College is located in northeastern Montana on the Fort Peck Indian Reservation, which encompasses over two million acres. Chartered by the Fort Peck Assiniboine and Sioux Tribes in 1978, the College's mission is to serve the people of the reservation by providing educational opportunities and community service. The College in 2005-2006 enrolled 411 students. Sixteen students were enrolled in Accounting, 21 in American Indian Studies, 4 in Art, 20 in Automotive Technology, 22 in Building Trades, 44 in Business, 27 in Computer Technology, 53 in Education-Paraprofessional, 4 in Health Careers, 3 in Human Services, 69 in Liberal Arts/General Studies, 22 in Nursing, 2 in Science, 15 in Social Science, 38 in Vocational/Career Programs, and 51 undeclared/not declared. Of the 411 students enrolled; 61 non-native female and 29 non-native male students were enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In the Fall 2007, the College enrolled 140 American Indian males, 182 Native American females, 29 non-native males, and 74 non-native females (AIHEC, 2008).

Little Big Horn College

The Little Big Horn College is a public two-year community college chartered by the Crow Tribe in 1980. The college campus is located in the town of Crow Agency on the banks of the Little Big Horn River, in the heart of the Crow Indian Reservation in south-central Montana. The reservation is bordered by Wyoming on the south; with its northwestern boundary about 10

miles from Billings and the land area consists about 3206.3 square miles. In the year of 2005-2006 the college enrolled 262 students. Eight students were enrolled in American Indian Studies, 19 in Biology, 24 in Business, 17 in Computer Science, 3 in Computer Technology, 32 in Education-Paraprofessional, 11 in Environmental Science/Natural Resources, 1 in Health Careers, 15 in Human Services, 81 in Liberal Arts/General Studies, 28 in Life Sciences, 5 in Mathematics, 0 in Pre-Engineering, 12 undeclared/not declared, and 6 not reported. Of the 262 students enrolled; 9 non-native female and 1 non-native male students enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In the Fall 2007, the College enrolled 79 Native American males, 131 Native American females, 1 non-native male, and 3 non-native females (AIHEC, 2008).

Salish Kootenai College

Salish Kootenai College is a tribally controlled college chartered in 1977 under the sovereign governmental authority of the Confederated Salish and Kootenai Tribes. The peoples of these tribes originally lived in the areas of Montana, parts of Idaho, British Columbia and Wyoming. The original territory comprised about 22 million acres at the time of the 1855 Hellgate Treaty. The Flathead Reservation in northwest Montana is over 1.3 million acres in size. The College started in 1977 in an abandoned public school building, and was moved several times prior to locating to its present site east of Pablo, Montana, ten miles south of the Flathead Lake. In the year of 2005-2006 the college enrolled 1,087 students. Twenty-four students were enrolled in American Indian Studies, 103 in Business, 66 in Computer Science, 76 in Environmental Science/Natural Resources, 23 in Health Careers, 51 in Human Services, 128 in Liberal Arts/General Studies, 179 in Nursing, 35 in Office Administration/Technology, 272 in Vocational/Career Programs, 87 in Education-Paraprofessional, and 43 undeclared/not declared.

Of the 1,087 students enrolled; 155 non-native female and 60 non-native male students were enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In the Fall 2007, the College enrolled 340 American Indian males, 433 Native American females, 110 non-native males, and 200 non-native females (AIHEC, 2008).

Stone Child College

Stone Child College is a tribally controlled community college of the Chippewa Cree Tribe. Through recent land acquisitions, the Chippewa Cree Reservation land base is approaching 130,000 acres. Chartered in 1984 by the Chippewa Cree Business Committee, the College was established to preserve and maintain the Chippewa Cree culture and to better educate its tribal members. In the year of 2005-2006 the college enrolled 344 students. Seven were enrolled in American Indian Studies, 25 in Business, 19 in Computer Science, 15 in Human Services, 41 in Liberal Arts/General Studies, 6 in Office Administration/Technology, 51 in Education-Paraprofessional, 14 in Science, 7 in Natural Science, 0 in Accounting, and 159 undeclared/not declared. Of the 344 students enrolled; 33 non-native female and 18 non-native male students were enrolled at the College (Sustaining Tribal Colleges and Universities and The Tribal College Movement: Profiles 2005-2006). In the Fall 2007, the College enrolled 112 American Indian males, 167 American Indian females, 9 non-native males, and 8 non-native females (AIHEC, 2008).

Naming Tribal Colleges

Of the 37 tribal colleges and universities in the American Indian Higher Education Consortium, most are named after their tribes or tribal communities. Seven are named after a tribal hero: Chief Dull Knife, Cankdeska Cikana, Little Priest, Red Crow, Sinte Gleska, Sitting

Bull, and Stone Child. Six of the names are in the Native language: Ilisagvik (A Place to Learn), Sinte Gleska (Chief Spotted Tail), Cankdeska Cikana (Little Hoop aka Paul Yankton, Sr.), Tohono O'odham (People of the Desert) College, and Dine (The People) College. The name communicates to students, staff, and visitors a strong sense of tribal distinctiveness (Braun, 2008).

In choosing their names, tribal colleges have tried to inspire their students far beyond the usual academic institutions. A name means more in Indian Country. The name often signifies some deed, mannerism, something that happened when that person was born, or some value or moral that the family wishes to encourage in the child. The same can be said when tribal colleges choose names for themselves. For students, attending a tribal college helps to solidify what they already know and to resolve conflicts between their traditional teachings and values and those of the outside, modern world (Braun, 2008).

> Tribal college faculties appear more than merely dedicated; they emerge as heroic figures. Certainly, for many students who arrive in college more accustomed to failure and disapproval, their teachers are, indeed, heroes. They build confidence and become trusted advisors and true friends (Boyer, no date).

Evolving Mission at Tribal Colleges

Tribal colleges still offer two-year degrees and serve older, part time students. As the self-determination movement grows and matures, however, many college leaders believe they must do even more. In the past, it was a significant step forward for Indians to find work as support staff in government offices run by non-Indians. Today, however, Indians are often the ones in the corner offices and tribal governments, not federal bureaucrats, are looking after the day-to-day work of running tribal nations. They are the ones making laws, overseeing education

systems, managing natural resources, starting businesses, and investing earnings in new ventures (Boyer, 2008).

In this new era, tribal colleges believe they must train leaders, as well as workers. A growing number of colleges now offer four-year degrees in selected areas of study and several also offer graduate degrees in education, business and other professional and academic fields. A few are eyeing doctoral programs. Likewise, the student body is growing more diverse as older, part-time learners are joined by younger students straight out of high school. These students view tribal colleges as institutions of first choice, not last chance, and expect them to provide the variety and depth of academic training available at selective four-year colleges and state universities (Boyer, 2008).

Tribal colleges make college education more accessible in three ways. First, they are geographically accessible because they are located on reservations. Second, they are educationally accessible because many of the course contents reflect cultural relevance. Finally, they are accessible emotionally to American Indian students because tribal colleges offer strong support services as well as American Indian faculty/staff. The opportunity for American Indians to receive education and training at tribal colleges has created the hope that more American Indians would become prepared to participate fully in American society. Tribal colleges create a bridge between the Indian and non-Indian worlds, making the Western model of higher education more accessible and useful to American Indian communities. With the development of tribal colleges, going to college is no longer synonymous with assimilation. Since their inception, tribal colleges are strengthening reservations and tribal culture. The mission of tribal colleges means that higher education can serve the practical needs of tribes. Although most tribal colleges are two-year colleges and some call themselves community colleges, they do not have the

community college philosophy of local control and dedication to local needs. Instead they are uniquely Indian institutions. The experience of attending a tribal college better prepares American Indian students to live in two worlds—the majority culture, and their own culture. A study in 1994 indicated that about 8 percent of all American Indians and Alaska Native college students attended tribal college (Pavel et al, 1998). Boyer (1997) found that:

> If education is considered the key to social renewal among American Indians, then the most significant development in the American Indian community since World War II was the development of tribally controlled colleges, institutions of higher learning founded by tribes and governed by Indians (p. 1).

Minority Serving Institutions

As a higher education community and as a society we need to find ways to meet the needs of these students and to help them succeed in their collegiate efforts for several reasons. The composite population of Native Americans is economically poorer, experiences more unemployment, and is less formally educated than the rest of the nation (Wright, 1991). High suicide rates, high infant mortality rates, lower life expectancy, high rates of diabetes and alcoholism, and poor nutrition attest to the fact that the quality of life enjoyed by much of our nation is not shared by many in the Native American community (Taylor, 2000).

In a study conducted by Taylor (2000), Native American students on white campuses are made to feel isolated, lonely, discomfort because of looks and stares, lack of respect, thoughtless comments and stereotypes, the omission of their people from the curriculum, a need for role models, a lack of institutional support, and both overt and covert hostility.

Minority Serving Institutions (MSIs) help provide access to college and prepare students for success in a variety of ways. Although African American, Hispanic, and American Indian

students attend all types of postsecondary institutions, MSIs provide access and a cultural and supportive environment to many students who may be less prepared for the challenges of obtaining a college degree. MSIs are often relatively small institutions, so opportunities that help students garner satisfaction from their education efforts, such as taking on a leadership role in a campus organization, may be more available to a broader range of students. For example, research indicates that many Hispanic Serving Institutions (HSIs) although they were not originally founded with a mission of educating Hispanics "offer variety of academic and student support programs and holistic approaches that are specifically designed to raise Latino student aspirations and enhance their retention and completion rates" (Laden, 2004). MSIs also help the communities that surround them by addressing local issues and educating members of the future workforce in the area (Del Rios & Leegwater, 2008).

However, while making significant contributions to the success of the emerging majority, MSIs face significant challenges. Minority-Serving Institutions, when compared with predominantly White institutions, are more likely to have students who have low income, are the first in their family to attend college, or need development courses. For example, in the academic year 2003-2004, 44 percent of undergraduate students enrolled at a Historically Black College and University (HBCU) or an HSI were first-generation college students, compared with 35 percent of students enrolled in all institutions (U.S. Department of Education, National Center for Education Statistics [NCES], 2004). Serving this population creates its own hardships for MSIs, especially financial ones, but this does not prevent them from developing innovative practices and improving educational attainment for students of color across the country (Del Rios & Leegwater, 2008).

College and University

Tierny (1992) reported that for every 20 American Indian students who enter a four-year institution, three will receive a college degree. American Indian and Alaskan Native retention and persistence rates in NCAA institutions remain consistently lower than retention and persistence rates for all other students (Pavel et al, 1998). At the tribal college in this study, the 1997-98 school year figures showed that 24 percent of the student body dropped out during the course of the year. Sixteen percent graduated with an Associate of Science (A.S.) degree within three years of entrance at the tribal college in this study. The remainder of the students is described by administrators at this tribal college as those who drift in and out of school from time to time, with no record of completion of degree or certificate program requirements (Ness, 2001).

Statistics and percentages vary from study to study about the completion rate of American Indian students in postsecondary education. Recently, the trend in the past ten years seem to indicate that more American Indians are attending postsecondary and getting degrees at some point in their lives (Pavel et al, 1998). How and why American Indians do or do not complete their postsecondary programs nonetheless remain largely unknown (Ness, 2001).

American Indian/Alaska Native comprised 1.1 percent of the total college and university enrollment in 2006, an increase from 0.7 percent in 1976. College and university enrollment became much more diverse over these years. Minorities, including American Indian/Alaska Natives, represented 16 percent of the total enrollment in 1976, whereas they represented 33 percent of the total enrollment in 2006 (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

In 2006, a smaller percentage of American Indian/Alaska Natives between the ages of 18 and 24 were enrolled in colleges or universities than their White and Asian peers. A 26 percent American Indian/Alaska Native 18 to 24-year olds was enrolled in college or universities, compared to 41 percent of Whites, 33 percent of Blacks, 27 percent of Hispanics, and 58 percent of Asians. Although the percentages of American Indian/Alaska Natives enrolled in colleges or universities appear to fluctuate between 1996 and 2006, the differences in these percentages are not measurably different.

Between 1976 and 2006, college and university enrollment of male and female American Indian/Alaska Natives grew at different rates. In 1976, there was near parity in the number of American Indian/Alaska Native males and females enrolled in degree-granting colleges and universities, 38,500 and 37,600, respectively. By 1978, the number of American Indian/Alaska Native females enrolled in colleges and universities exceeded the number of American Indian/Alaska Native females, 61 percent, and 71,200 males, 39 percent, were enrolled in colleges and universities, a difference of 21 percentage points. Only among Blacks was there a gender gap larger than that among Native American/Alaska Natives: 30 percentage points separated the percentage of enrollment for Black females, 65 percent, and males, 35 percent, in 2006 (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

In 1961, only 66 American Indians graduated from four-year institutions nationwide (Boyer, 1997). By 1976, American Indians represented 0.2 percent of the total postsecondary education enrollment (Bailey & Hafner, 1979). Attrition rates for American Indian students have remained notoriously high over the years. According to research done by the National Center for Educational Statistics, Office of Research and Improvement (1998), over the past two decades

the percentage of American Indian and Alaska Native students enrolling in college increased 64 percent from 76,000 in 1976 to 127,000 in 1998. This is compared to a 30 percent enrollment increase of all other students. Since 1976 there has been a 98 percent increase in the number of American Indian women entering college, this is the single greatest cause for the 64 percent enrollment increase. But enrollment does not mean graduation or completion of programs (Ness, 2001).

Community Colleges

Community colleges originated as transfer institutions, providing the first two years of college education and preparing students for transition to four-year institutions. Although they have adopted a growing number of missions over the course of the 20th century, community colleges continue to serve as an avenue of access to four-year institutions (Roksa & Calcagno, 2008). Transfer has always been an important component of community college education. Although most modern community colleges have comprehensive missions, performing numerous functions from terminal vocational to community service (Roksa & Calcagno, 2008) they are still committed to their original mission of preparing students for transfer to four-year institutions (Roksa & Calcagno, 2008).

Dual enrollment gives high school students the opportunity to earn college credit by completing courses at local two-year institutions. Indications are that even though dual enrollment students comprise a very small percentage of the community college population, their numbers are on the rise (Bryant et al, 2001). Boswell (2000) anticipates significant increases in the number of high school graduates pursuing higher education and suggests that state policymakers seriously consider funding dual enrollment programs for upper division high school students in order to encourage faster progression through college. Supporters of dual

enrollment point to the benefits for seniors of enrolling in college-level courses. The general assumption that high school seniors are academically disengaged while they await graduation leads many to conclude that enrolling in community college courses will curb that tendency and help students maintain an academic focus (Bryant et al, 2001).

The performance of community college transfer students at four-year institutions is an important issue because of the large number of undergraduates in America served by the former. Nationally, approximately 5.3 million students attended community colleges in 1990, constituting 43 percent of American undergraduates (Harrison et al, 1999). By 1996 this number had increased to 5.6 million, or 45 percent of American undergraduates (Chronicle of Higher Education Almanac, 1998). This same source predicted that by 2008 community colleges would enroll 6.1 million students. Of community college students, it has been estimated by the American Association of Community and Junior Colleges that approximately 29 percent transfer to four-year institutions (Harrison, 1999). The Transfer Assembly, a project coordinated by the Center for the Study of Community Colleges, estimated the national transfer rate as 22.6 percent (Cohen, 1994).

According to the California Community Colleges Chancellor's Office (2009) the statewide headcount for 2009 spring term enrolled 14,334 American Indian/Alaska Natives compared to 555,466 White students. In addition, statewide for the AY 2008-09, the enrollment for American Indian/Alaska Natives was 24,565 compared to 969,231 White students. The statewide success rate for non-transferable American Indian/Alaska Native students was 61.09 percent with an enrollment of 9,850 compared to White students with a success rate of 71.38 percent and enrollment of 290,525; transferable American Indian/Alaska Native students was 62.06 percent with an enrollment of 31,612 compared to White students with a success rate of

71.22 percent with an enrollment of 1,178,879. For the statewide enrollment for spring term 2009, the continuing student headcount for American Indian/Alaska Natives was 8,220 compared to White students, 330,449; the first-time student headcount for American Indian/Alaska Natives was 1,392 compared to Whites students, 39,756; the first-time transfer student headcount for American Indian/Alaska Native was 1,322 compared to White students, 52,002; and returning student headcount for American Indian/Alaska Native was 2,315 compared to White students, 81,474.

Despite the differences in these figures, it is clear that significant number of students transfer from community colleges to four-year institutions each year. According to Cohen (1994), these figures demonstrate that the community college serves as an important "point of entry toward a baccalaureate degree for a sizable percentage of undergraduates, many of whom would not have been able to matriculate in a freshman class" at a four-year institution. It is thus important, to ensure that these students are able to achieve their goal of earning a baccalaureate degree (Cohen 1994).

Community colleges serve a wide variety of students, but they are especially noted for serving students who, as Cohen noted, might not otherwise have the opportunity to participate in higher education. Vaughan and Templin (1987) noted that community colleges, "serve as a major avenue for upward mobility for minorities, members of lower socioeconomic groups, older adults, and women who wish to enter or reenter the workforce" (p. 244). This function is especially important for minorities because community colleges enroll almost half of all non-Caucasian students participating in higher education; they enroll 47 percent of black undergraduates, 55 percent of Hispanic undergraduates, and 57 percent of American Indian undergraduates (Cohen & Brawer, 1996; Watkins, 1990). In all, minorities constitute

approximately 30 percent of the community college student population (Chronicle of Higher Education Almanac, 1998; Watkins, 1990). The gateway function of community colleges is also important for nontraditional students (typically defined as 25 years of age or older) who are either entering higher education for the first time or returning to higher education to update skills that have become obsolete (Harrison, 1999).

In addition to serving minority and nontraditional students, community colleges are expecting an increase in the number of traditional-aged students, because of both rising education costs and space shortages at public universities. A number of recent high school graduates are electing to pursue their first two years of higher education at a community college before transferring to a more expensive four-year institution. Collison (1991) noted that escalating tuition rates of "four-year institutions have made many high school graduates look to community colleges where they can complete the first two years of their education for a fraction of the cost of most four-year colleges" (p. A29). Collison also noted that in some states, such as California and Florida, students are attending community college after being turned away from public universities because of space shortages. In response to these space shortages, Florida established a 2+2 program, whereby "community college students who follow a prescribed two-year program and earn an associate degree are guaranteed transfer admission into state universities" (p. A30). Thus, community colleges are seeing an increase in traditional-aged students, who, while they might be academically well-prepared, will still experience a period of transition in moving from the culture of a community college to that of a four-year institution (Harrison, 1999).

Understanding the difficulties that community college transfer student experience upon matriculation to a four-year institution will help administrators, both in academic and student

services, development programs and services to help ease the transition process and to reduce the drop in GPA that usually accompanies this transition. For example, Keely and House (1993) described an orientation sessions on such topics as dealing with large lecture courses and living on one's own. Rice (1990) reported of an orientation course developed at Oregon State University to help transfer students with their academic and social adjustment to the university. Finally, Florida State University has developed a Transfer Student Orientation Program designed to assist new transfer students in their adjustment to life at the university. (Florida State University, 1998a; 1998b). This program is operated from and located in a dormitory reserved for transfer and staffed by Transfer Student Advisors, former transfer students themselves, who are able to plan programs and activities designed to meet the needs of transfer students. It is hoped, thus, that the community college transfer students who participated in this study would be able to provide recommendations as to ways in which four-year institutions can improve the transfer experience for future community college transfer students (Harrison et al, 1999).

Fifty-four percent of all first-time, full-time college students in the U.S. start their academic careers in two year community colleges (Hankin, 1996). The community college has become the educational melting pot for our society through its open admissions policy, which enables individuals, who otherwise would not have access to higher education because of their academic background, to attend community two-year colleges. New immigrants, first-generation postsecondary education students, and adults returning to college after an absence from education for a number of years attend community colleges as a safe haven in which to begin their education. Because community two-year colleges are generally centrally located so students can live at home while attending school (Grubb et al, 1999).

Two year colleges have always exemplified the ideal of lifelong learning and flexible enrollment. Two year colleges have often been called “second-chance” institutions, providing a second crack at higher education for students whose motivation and performance in earlier schooling are inadequate to gain them admission to four-year schools. These include older students deciding to take a different direction in their lives. Women after divorce or after children have grown; and displaced workers (Grubb et al, 1999).

Transferring to Four-Year College

In a study conducted by Gao, Hughes, O’Rear, and Fendley (2002), transfer students, as a group, had a significantly higher 4-year graduation rate than native students. As expected, given the advanced status when entering the University, the 4-year graduation rates of transfer sophomores, juniors, and seniors were significantly higher than native students. Transfer freshmen had a lower 4-year graduation rate than native students though the graduation difference was not statistically significant.

Many studies, both those of national scope and those limited to a single institution, have reported that students who transfer from community colleges to four-year institutions often have difficulty adjusting to the differences they encounter in both the academic and social culture at the four-year institution (Harrison, 1999). There adjustment difficulties result in a drop in GPA their first semester at the four-year institution, a phenomenon that Hills (1965) and others refer to as transfer shock. Other studies, however, report that community college transfer students do as well as or better than native students, a phenomenon Nickens (1972) calls transfer ecstasy.

In an attempt to make sense of both theories, Diaz (1992) conducted a meta-analysis of 62 of these conflicting studies. She found that 79 percent of the studies indicated that transfer shock (as defined by a drop in GPA in the first semester at the four-year institution) did typically

occur, with a magnitude, on average, of one half of a grade point or less. However, she found that in 68 percent of the cases indicating transfer shock, students showed partial or complete recovery of the lost GPA (Harrison, 1999).

Diaz's study thus confirmed that, on average, community college transfer students experience a number of adjustment problems, often manifested as an initial drop in GPA; but also indicated that after an initial period of adjustment to the four-year institution, these students recover most of their entering GPA (Harrison, 1999).

According to Townsend (1993a), the researcher believed that:

> Understanding how community college transfer students view the transfer process and their academic and social experience at the community college and the university is crucial to improving the enrollment and retention of community college transfer students in the four-year sector (Townsend, 1993).

Townsend (1993), the researcher further found it likely that the difficulty of the transition experience varies from student to student. In these words, in any population of transfer students some students will transition easily, while others will experience various degrees of difficulty in adjusting to their transfer institution. However, both the smooth and the difficult transfer experiences were expected to be informative for the purposes of the study. Students who experienced transfer difficulties would be able to identify specific aspects of the transfer experience that served as barriers to their transition process. The experiences of students who transitioned easily, on the other hand, could provide insights into what factors increased the likelihood of a successful transition (Harrison, 1999).

It was hoped that by identifying the problems encountered by community college transfer students, administrators at four-year institutions would be able to develop programs and support

services to facilitate the transition process for these students. Although many studies focus on ways in which community colleges can better prepare students for transfer to a four-year institution (Harrison, 1999), this study focused on ways the receiving institutions, four-year colleges and universities, can improve the transfer process. Townsend (1993a) observes that "usually the focus is upon what the community colleges can do to improve the process or mechanics of transferring; less frequently is attention paid to what four-year colleges and universities can also do to facilitate transfer" (p. 1).

Recently, four-year institutions have come to realize the importance of facilitating the transition process for freshman students, and have begun to offer these students effective orientation programs and support services (Harrison, 1999). Transfer students also experience a transition process, which, in general, four-year institutions have not adequately addressed. As noted by Watkins (1990) the majority of four-year institutions "take a *laissez-faire* attitude toward transferring" (p. A1). This study was based on the concept that a successful transition requires efforts on the part of both the students and the receiving institution; the transfer institution must bear some of the responsibility for the successful transition of community college transfer students. One possible outcome of this study was the identification of ways in which four-year institutions can address the needs of the community college transfer student (Harrison et al, 1999).

Native American Representation in Higher Education

In a study conducted by Matti (2000), almost two-thirds of the student (64 percent) respondents indicated that the most important reason they were attending this college at the present time was to prepare for transfer to a four-year college or university. Twenty percent of the respondents indicated that the most important reason they were attending this college was to

gain skills necessary to enter a new job or occupation. Fourteen percent of the respondents indicated that the most important reason they were attending this college was to gain skills necessary to remain current or advance in a current job or occupation. In addition, two percent of the respondents indicated that the most important reason they were attending this college at the present time was to satisfy a personal interest.

In addition, Matti (2000) found that there were significant differences in a number of factors such as demographic, environmental, academic, social integration, institutional, and goal commitment factors that affected a minority student's persistence in community colleges. The results also indicated that the demographic and environmental variables (e.g. the number of hours worked per week, the effect of hours worked per week on studying, the effect of family responsibility on studying, amount of hours spent studying, amount of time spent on campus, the time of day class meeting) were significant either by age, gender, and ethnicity. Other results indicated that the academic and social integration, and institutional and goal commitment factors were statistically significant by age, gender, and ethnicity.

Of the Native American students enrolled in 30 two-year and four-year colleges from among the 91 serving the largest percentage of Native American students, about 43 percent are enrolled full-time and the first year retention rate is 45 percent (Wells, 1997). In 2007, some 44 percent of American Indian/Alaska Natives ages 25 or older had attended some college or completed an undergraduate or graduate degree. Approximately 36 percent of American Indian/Alaska Natives had completed high school without continuing on to a postsecondary institution, and 20 percent had not finished high school. A higher percentage of American Indian/Alaska Natives did not finish high school when compared to Whites (9 percent), Asians (12 percent), and Native Hawaiian/Pacific Islanders (11 percent). However, a lower percentage

of American Indian/Alaska Natives did not finish high school when compared to Hispanics, (40 percent).

A lower percentage of American Indian/Alaska Natives completed a bachelor's degree (9 percent), as their highest level of education attainment than all other racial/ethnic groups, with the exception of Hispanics. In addition, a lower percentage of American Indian/Alaska Natives obtained a graduate degree (5 percent) than their White (11 percent) or Asian (21 percent) peers. No measurable differences were detected among American Indian/Alaska Natives and Blacks, Hispanics, and Native Hawaiians/Pacific Islanders at this level (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

In 2000, the bachelor's and higher degree graduation rates for American Indians/Alaska Natives (who were 12th graders in 1992) were lower than the graduation rates for the total population (who were 12th graders in 1992). Of the American Indian/Alaska Native 1992 12th graders who were likely postsecondary participants, 11 percent received bachelor degrees as their highest degree by 2000 compared to 31 percent for the total population of likely postsecondary participants. American Indians/Alaska Natives were less likely to have received bachelor degrees by 2000 than White (34 percent), Black (24 percent), and Asian/Pacific Islander (34 percent) students who were likely postsecondary participants. In addition, of the American Indian/Alaska Native 1992 12th graders who were likely postsecondary participants, 2 percent received a graduate degree by 2000 compared to 6 percent of the total population of likely postsecondary participants. American Indians/Alaska Natives were less likely to have received a graduate degree of 2000 than White (6 percent) and Asian/Pacific Islander (8 percent) students, but had similar rates as Black (2 percent) and Hispanic (3 percent) students (National Center for Education Statistics, 2005).

Between the 1976-77 and 2002-03 school years, the number of degrees awarded by colleges and universities to American Indians/Alaska Natives more than doubled for each level of degree. In 1976-77, 2,498 associate's degrees were conferred to American Indians/Alaska Natives. The number steadily increased to 3,871 by 1990-91, the rate dramatically increased and 7,470 associate's degrees were awarded to American Indian/Alaska Native students in 2002-03. This was also the pattern for the number of bachelor's degrees earned by American Indian/Alaska Native students. In 1976-77, 3,326 bachelor's degrees were awarded; by 1990-91, the number increased to 4,583 and in 2002-03, 9,803 bachelor's degrees were awarded to American Indian/Alaska Native students (National Center for Education Statistics, 2005).

The number of post-baccalaureate degrees awarded to American Indians/Alaska Natives also increased between 1976-77 and 2002-03: 967 to 2,841 for master degrees, 95 to 192 for doctoral degrees, and 196 to 586 for first-professional degrees. During the same period, American Indians/Alaska Natives earned a slightly increasing share of the degrees at every level. In 1976-77, American Indian/Alaska Native students received 0.6 percent of the entire associate's degrees awarded, 0.4 percent of all bachelor degrees, and 0.3 percent each of all master degrees, doctoral, and first-professional degrees. These percentages increased to 1.2 percent for associate's degrees, 0.8 percent for bachelor's degrees, 0.6 percent for master's degrees, 0.6 percent for doctoral degrees, and 0.7 percent for first-professional degrees awarded in 2002-03 (National Center for Education Statistics, 2005).

Tribal College Success

A study conducted by Davis (1992), that consisted of Native American students from the Crow, Northern Cheyenne, and Blackfeet tribes in Montana. The researcher focused on identifiable factors that relate to retention and the success in the post-secondary education for the

ten participants. Davis (1992) reported the key factors contributing to the success of the Montana Indian students was the value the family placed on education and the desire to please a family member, although there was no pressure on the students to succeed academically. The graduates' families encouraged the students in whatever they chose to do, even though there was no expectation of a college education for their children. The successful graduates reported a desire to better themselves through education. The elementary and secondary educational history was generally disappointing and unpromising for these Indian graduates. They nonetheless succeeded in spite of their early educational and socioeconomic background.

Even though data on retention and graduation are still missing, there is growing evidence that persistence in tribal colleges is rewarded. Vocational degrees and certificates tend to have higher completion rates because they often lead directly to employment. In that many tribal college students have been away from formal education for an extended period prior to enrollment, they often proceed at a slower pace than students at other colleges and this pace is often more easily accommodated in the tribal college setting (Cahape & Howley, 1992).

Recent surveys of tribal college graduates consistently find that most are employed or continuing their education. Their success is more striking when compared to the poverty and unemployment that exists on most reservations. In a comprehensive study done by Carty Monette (personal communication, 1996), five hundred graduates at Turtle Mountain Tribal College from 1980 to 1990, most were working or continuing their education. Fewer than 13 percent reported they were unemployed. Fifty-six percent of graduates had continued their education at a non-Indian college or university, and among this group 32 percent had earned a four-year degree. These figures exceed the transfer and graduation rates of community college students nationwide. More impressive is the fact that most graduates stay on their reservations,

where they are able to share their knowledge and new skills with the whole community and to serve as role models (Boyer, 1997).

Tribal colleges are small, which provides an intimate and supportive atmosphere for students. Often the facilities are very hodgepodge, such as rented store fronts, trailers, and leftover government buildings. Classrooms and office space are usually severely restricted. The extras, like a student lounge, dining facility, and a gym are usually nonexistent (Boyer, 1997).

A study of the tribal colleges between the years 1983-1989 reported 1,575 graduates. These graduates have been successful in finding employment. Eighty-three to 88 percent were employed in geographic areas that typically experience unemployment rates of 54 percent to 85 percent. The education attained at tribal colleges has helped women get off federal assistance and Aid to Families with Dependent Children (Cahape & Howley, 1992). Tribal colleges have been a reasonable, appropriate, and successful approach to addressing both the cultural and postsecondary educational needs of American Indians.

College Persistence

Tinto (1997) proposed a theory of individual departure to explain factors involved in either persistence or attrition of college students. Tinto's model holds that the decision to remain or depart is impacted by:

1. pre-entry attributes – family background, academic preparation, natural abilities;
2. institutional experience – both formal and informal academic and social experiences; and
3. the student's goals and commitments – with regard to both education in general, and the institution in particular

The degree of social and academic integration is influenced by the interaction between these three categories of variables, and results in the decision to stay or leave. Tinto (1987, p. 115)

noted that “negative or malintegrative experiences serve to weaken intentions and commitments, especially commitment to the institution, and thereby enhance the likelihood of leaving” (Harrison, 1999).

Gerdes and Mallinckrodt (1994, p. 286) confirmed Tinto’s assertion regarding academic and social integration. In a study examining reasons for college persistence, they suggested that retention is determined by a combination of academic, social, and emotional adjustments. Their study of students at a large public university found that “adjustment and integration into the social fabric of the campus life play a role at least as important as academic factors in student retention” (Harrison, 1999).

Tinto (1988) acknowledged that, although his theory is based on high school graduates going to college, transfer students “are also likely to experience problems of separation, transition, and incorporation. But they may do so in ways that may be qualitatively different from those experienced by young high school graduates” (p. 452). He further noted that few schools offer orientation programs adequate to their needs, “yet their needs may be as great as, if not greater, than those for more youthful entrants from high school” (p. 452). With that caveat in mind, Tinto (1988) argued that transition involves 3 stages:

1. separation: students are required to “disassociate themselves…from membership in past communities, most typically those associated with high school and place of residence” (p. 443). In this study, the past community will be the community college, and the present community will be the transfer institution.
2. transition: students experience a “period of passage…between associations of the past and hoped for associations with communities of the present” (p. 444). Because the students are neither bound to the past nor the present, they experience feelings of stress,

sense of loss, and bewilderment. Tinto notes that "scope of the transition stage…depends on…the degree of difference between the norms and patterns of behavior of the past and those required for incorporation into the life of the transfer college (p. 445). Laanan (1996, p. 81), confirms this statement, stressing that "the greater dissimilarity between a student's previous experiences (familiar institutional culture at the four-year institution), the greater the adjustment that will be required.

3. incorporation: students take on new patterns of interaction and full membership in the group. Tinto notes that unlike other societal transitions, students transitioning to college lack group support. According to Tinto, "new students are left to make their way through the maze of institutional life. They…have to 'learn the ropes' of college life largely on their own. Not all individuals…have that capacity…Without assistance; many are unable to establish competent intellectual and social membership in the communities of the college (p. 446-447). Should incorporation fail, the student may leave college (Harrison, 1999).

Theoretical models have been developed on students' persistence/withdrawal theory. Spady (1970) proposed the first theoretical model, Tinto (1975) built on Spady's model and Pascarella (1980) expanded Tinto's (1975) model with the development of the Institutional Integration Scales (IIS) which were designed to measure academic and social integration and institutional commitment. Bean and Metzner (1985) developed a conceptual model of student attrition which took background variables into consideration. In 1987, Tinto added environmental variables and student intentions to update his model (Matti, 2000).

The literature revealed persistence theories as one of the most researched topics in higher education, often referred to as the college-impact theories of change developed by (Astin et al,

1980; 1985) possess several common features or propositions. Although each presents an alternative conception, all place an important emphasis on the context in which the student interacts with environments. These models differ in specific structural elements and nomenclature, and they tend to view persistence mainly as a function of the student's fit or match with the college environment. Institutional characteristics (organizations, policies, programs, and services, both academic and non-academic), along with attitudes, values, and behaviors of the members of the institutional environment, are all potential sources that may impact student persistence (Matti, 2000).

Tinto (1993) and others have noted high rates of attrition during the first year of college (Astin et al, 1975; 1985). In their nationwide study, Beal and Noel (1980) reported that an average 34 percent of the full-time, first year students were not at the same institution one year later. Likewise, Lenning et al (1980) concluded that attrition is not only a local and state problem, but a national problem as well. The attrition rate for public two-year institutions nationally is 59 percent after three years (Lenning et al, 1980). The completion of a two or four-year degree for this group can be projected to be 46 percent, while 54 percent will leave the institution (Tinto, 1993). For four-year public institutions, the attrition rate nationally is 47 percent after five years, while at four-year private institutions the attrition rate is 40 percent after five years (Lenning et al, 1980). Approximately 61 percent of those who pursue a four-year degree will earn one while 34 percent will leave the institution (Matti, 2000).

Recently, researchers have turned to persistence theory in an attempt to explain student departure and persistence behavior patterns (Astin et al, 1985). Popular among the persistence researchers is the work of Tinto (1975; 1987; 1993), who drew from Spady's (1971) works based on Durkheim's (1951) research on suicide. Durkheim's (1951) theory of suicide examines the

role the social environment plays in incorporating or excluding an individual. In other words, the factors that resulted in student persistence or withdrawal from college are viewed as analogous in kind, if not to some degree, or to the factors that Durkheim determined had led to suicide or to persistence in society. Durkheim (1951) found that the greater the value consistency, and the stronger the relationships with other people, the more integrated a person is in a society. Hence, the greater the degree of integration, the greater the likelihood that a person will persist in the society. In much of the research on student persistence and withdrawal behavior in college setting, many theories and models have been advanced to explain the factors contributing to community college students persistence and withdrawal behavior. However, Tinto's model has been the most extensively tested and used to study college persistence/withdrawal behavior (Matti, 2000).

Tinto's Model

A longitudinal model of the persistence and withdrawal process was developed by (Tinto (1975; 1987) to explain college student withdrawal behaviors in the educational environment. Tinto's longitudinal model is based largely on degree of fit between the individual student and the institutional environment. Tinto's model concentrates on the impact of the institution and asserts that the quality of a student's interactions with the academic and social systems of the institution was related to whether the student persists or drops out.

Tinto's model argues that an individual's departure from an institution can be viewed as arising out of a longitudinal process of interactions between the individual with given attributes, skills, and dispositions (intentions and commitments) and members of the academic and social systems of the institution (Tinto, 1987; 1993). Building on Spady's work (1970; 1971), Tinto (1975; 1987; 1993) formulated a theory explaining the process that motivates individuals to

leave college before graduating. Tinto's (1975; 1987; 1993) model suggests that students come to a particular college or university with a range of background traits (e.g. race, secondary school achievement, academic aptitude, family, education, and financial context). These background characteristics lead to initial commitments, both to the goal of graduation from college and to the specific institution attended. Together with background characteristics, these initial commitments are hypothesized as influencing, not only how well the student will perform academically, but also how the student will interact with and subsequently, become integrated into the institution's social and academic systems.

Other things being equal, the greater the individual's level of social and academic integration, the greater the individual's subsequent commitment to the institution and commitment to the goal of completing college and graduating will be. These subsequent commitments, in turn, are seen, along with levels of integration, as having a positive influence on persistence. However, Tinto's model suggested that both social and academic integration into a university are necessary for students to persist until completion of their degrees. Tinto (1975) and many of those who tested his model empirically, such as; Fox et al (1986) used the concepts of social integration and academic integration to explain persistence. In addition to the theoretical model, previous research demonstrated the importance of variables such as involvement, academic and social integration and commitment to college persistence (Astin et al, 1985).

Tinto's (1975) model specifics that upon entering college, students came with a variety of attributes or pre-college experiences and demographic characteristics that have an impact on determining educational expectations and commitments. Students' educational expectations and commitments represent initial institutional and goal commitments as a result of the students'

integration into the academic and social systems of the institution (Tinto, 1975). The decision to withdraw or remain in college until completion is made as a result of the students' social and academic integration. Therefore, students' background characteristics, initial commitments, and integration process could conceivably have an impact on persistence decisions.

Tinto's model of student persistence and withdrawal processes was developed for residential colleges which focus on the elements of student academic and social integration as key variables underlying student persistence. In Tinto's theory, it is argued that the more a student integrates himself/herself into the social and academic life of campus, the more the student becomes committed to the goal of graduation, and develops loyalty to the individual institution, and the greater are the chances that the student will persist and graduate (Mutter, 1992).

First-Generation Students

In the study conducted by Harrison et al (1999), she found that every student in her study did experience a drop in GPA when transferring and it was a shock for them academically because of the increased rigor. They are nonetheless aware of the academic expectations and confident in their abilities to succeed. In addition, the students in this study were guided by counselors and received specialized attention at a community college but when they transferred they were expected to accomplish many tasks on their own such as the registration process and selecting a curriculum of courses. The students also reported that the native students were reluctant to provide help or study with the transfer students.

The researcher predicted that community college students would struggle to become proficient in the use of computers but this ended up not being the case. The students in this study reported little or no difficulty in setting up an email account and learning to incorporate

computers into their academic accomplishments. Furthermore, there was a sense of urgency felt by many of the transfer students to assimilate quickly into the four-year institution culture. Several participants mentioned feeling pressure to become familiar and comfortable with both the academic and social cultures of the four-year institution. Feeling behind, transfer students tried to accomplish in a few weeks or months what their native peers had had two years to do in order to make a place for themselves at the four-year institution and become familiar with the institutional structure. This study confirmed the importance of providing institutional support programs to ease the difficulties students might encounter with differences in institutional culture between their community college and their transfer institution.

The college environment presents new academic, social, and personal challenges to many first-time students, but these challenges are often greater for students who are the first members in their families to attend college (referred to as “first-generation students” in this report) (London et al, 1989). The difficulties that such students experience are reflected in many indicators of postsecondary education success (Choy, 2001). For example, compared with their peers who had college-educated parents, students from families in which neither parent attended college are at a distinct disadvantage in gaining access to postsecondary education (Berkner & Chavez, 1997). Even those who overcome these barriers and do enroll have difficulty remaining enrolled and attaining a degree. This disadvantage persists even after controlling for a wide range of demographic, academic and enrollment characteristics (Horn & Nunez et al, 2000). Taken together, these results suggest that growing up in a family in which neither parent has gone to college may have long-term consequences on students’ success in postsecondary education (National Center for Education Statistics, 2005).

Analyzing first-year data from 23 colleges (both 2- and 4-year institutions), Terenzini et al, (1996) found that compared with other students, first-generation students completed fewer first-year credit hours, took fewer humanities and fine arts courses, studied fewer hours, and were less likely to participate in an honors program. Similar findings were reported in another study that focused on first-generation students attending five community colleges located in five different states (Pascarella et al, 2003). Although these studies are informative of first-generation students' course taking in college, they are limited by the fact that they use small-scale local data or followed students only during the first year of college (National Center for Education Statistics, 2005).

To be consistent with earlier studies (Nunez & Cuccaro-Alamin et al, 1998), this report defines students' generation status according to the highest level of education attained by their parents. First-generation students are defined as those families where neither parent attained any education beyond high school. These students are compared with two groups of students whose parents went to college; those with at least one parent who had some college education, but with attaining a bachelor's degree; and those with at least one parent who earned a bachelor's or advanced degree (National Center for Education Statistics, 2005).

About 28 percent of all the 12^{th} graders in the National Education Longitudinal Study (NELS) cohort were identified as having parents with no postsecondary education. However, 22 percent of the students who entered postsecondary education between 1992 and 2000 had parents who did not go to college, indicating that students of parents without any college education are less likely than others to attend college after high school. The focus of this report is on the 21 percent of the NELS cohort who became first-generation college students by enrolling in postsecondary education by 2000 and who also had a complete transcript, and comparing their

postsecondary experience and outcomes with those of students in postsecondary education whose parents went to college (National Center for Education Statistics, 2005).

Many high school graduates lack adequate academic preparation for higher education and need remedial assistance to do college-level work (Parsad & Lewis, 2003). Among the 1992 12th graders who had enrolled in postsecondary education in 1992-2000, 4 in 10 (40 percent) took at least one remedial course, about 3 in 10 (27 percent) took remedial mathematics courses, and nearly 1 in 10 (9 percent) took remedial courses.

First-generation students, in particular, needed remedial help: 55 percent took remedial courses during their college years, compared with 27 percent of their counterparts whose parents held bachelors or advanced degrees. Among those with bachelor's degree goals who attended 4-year institutions, 45 percent of first-generation students took at least one remedial course, compared with 21 percent of students whose parents had at least bachelor degrees (National Center for Education Statistics, 2005).

Previous research has found that students from disadvantaged backgrounds do not earn as many college credits as their more advanced peers (McCormick, 1999). They trail their peers in credit accumulation as early as the first year of their enrollment. Because first-generation students are more likely to come from low-income families and have similar risk characteristics, they exhibited the same patterns. As shown in figure 5, first-generation students trailed their peers in the number of credits earned beginning in their first year of college: on average, they earned about 18 credits in the first year, compared with 25 credits earned by students whose parents had a bachelor's degree or higher. One-in-three first generation students (33 percent) earned 10 or fewer credits in the first year, compared with 12 percent of those whose parents had at least a bachelor's degree. As in earlier studies demonstrating the relationship between credits

earned and postsecondary outcomes (Adelman, 1999; McCormick, 1999), the current analysis shows that the fewer credits earned in the first year was associated with a reduced likelihood of attaining a degree and an increased time to degree for those who earned one (National Center for Education Statistics, 2005).

First-generation students continued to trail their peers in overall credit accumulation as they progressed through postsecondary education: they earned an average of 66 credits during their entire period of enrollment through 2000, compared with an average of 112 credits earned by students whose parents were college graduates. Part of this difference reflects the fact that first-generation students were more likely than students whose parents had graduated from college to start college late, disrupt their enrollment, attended part-time, and leave without a degree within the time period of the study. The gaps in credits, both overall and in the first year, were also found among those with bachelor degree goals who attended 4-year institutions (National Center for Education Statistics, 2005).

First-generation students did not perform as well as their peers starting from the first year of college. As shown in figure 10, first-generation students had lower first-year GPAs than students whose parents had a bachelors or advanced degree (2.5 vs. 2.8). This observation also held among those with bachelor's degree goals who attended 4-year institutions. Like first-year credit production, academic performance in the first year bears an important relationship to long-term degree completion. Previous research found that the higher a student's first-year GPA, the more likely that student was to receive a bachelor's degree (McCormick, 1999).

The lower GPAs of first-generation students persisted throughout their entire undergraduate enrollment. Overall, first-generation students had an average GPA of 2.6, compared with an average GPA of 2.9 for students whose parents had a bachelor's degree or

higher. This difference was also observed among students with bachelor's degree goals who attended 4-year institutions. The lower the performance of first-generation students was also evident in most academic areas show in table 14, including mathematics, science, computer science, foreign language, and history. Some of these differences remained even after controlling the major fields of study. For example, first-generation students majoring in mathematics and science on average earned GPAs of 2.6 in mathematics and 2.5 in science, compared with 3.1 and 2.9, respectively, for their counterparts whose parents completed college. First-generation students majoring in humanities/arts earned an average GPA of 2.5 in history, compared with an average GPA of 2.9 for students whose parents completed college (National Center for Education Statistics, 2005).

In addition to parents' education levels, credit completion and performance in the first year bore an important relationship with students' success in completing their bachelor's degree programs. After controlling for first-generation status and a wide range of demographic, academic, and enrollment characteristics, students who completed at least 30 credits or earned a 3.0 GPA or higher in the first year were more likely to complete a bachelor's degree than their counterparts with fewer credits or lower grades. In addition, students with fewer withdrawn or repeated courses (i.e. less than 10 percent in all attempted courses) were more likely than their counterparts with 10 percent or more of withdrawn or repeated courses to earn a bachelor's degree. Major field was related to students' success as well. Compared with business majors, students who majored in education/library science/social work and social sciences/journalism/communication were more likely to earn a bachelor's degree after controlling for all other variables; those with majors in health sciences/services,

human/protective services/vocational fields, or other fields were less like to do so (National Center for Education Statistics, 2005).

Incoming Freshmen

In a study conducted by Ness (2001) found that there are both internal and external societal conflicts that impact American Indians. These conflicts come from both the American Indian community and the dominant community. The pressure from one's own community may be the "crabs in a bucket" (when one Indian tries to get out of the community, others pull him back "down"). The pressure from the dominant community may in the form of overt or covert racism. In either case, the societal factors that impact educational success begin at an early age and can have a significant effect on completion and non-completion in higher education.

Furthermore, the key organizational factor in the tribal college that affected the completion of students was the accessibility, i.e., a campus close to home and inexpensive. Organizational factors that prohibited the completion of students included transportation and a full range of support services, including child care for evening classes. The institutional factors at the tribal college that affected students most were those related to faculty, staff, culturally relevant instruction, and planning for nontraditional age learners. Student felt the flexible, accommodating, and supportive style of faculty plus the use of alternative styles of teaching (other than lecture) made the learning environment unique and positive. Staff members were often compared to the staff from other colleges that students had attended and were described as much more student oriented and customer friendly (Ness, 2001).

Poverty is an all-encompassing aspect of American Indian family life. Integrated in the cycle of poverty is alcohol abuse, other forms of abuse, teen pregnancy, and the family's lack of support for education. Thus family life, whether family of origin or current family life, affected

all the interviewees in their efforts to complete school. Interestingly, regardless of poverty or abuse in the family, most families encouraged their children to complete high school; however, family members often did not have the knowledge of what supports to provide to facilitate that process. Students spoke of role models. Parents, whether negative or positive, were the most influential role models in the students' lives. Secondarily, teachers in the K-12 system were also mentioned as important role models (Ness, 2001).

The idea of going to college enhanced the self-esteem of all the interviewees, whether they were completers or non-completers. Most of those interviewed did not have fond memories of their K-12 years in school. Many could easily identify how they learned best and often this was in a style that required more individual attention and support, which was not available to them for one reason or another. Many moved or changed schools often during these years so they had little opportunity to establish trusting relationships with teachers or peers.

Although everyone loses sight of personal goals from time to time, those who had a clear goal and had all the pieces in place to accomplish their goals were more likely to keep on track than those who did not. Nontraditional-age students were often more motivated and more goal oriented, having attended postsecondary schools unsuccessfully earlier in their lives (Ness, 2001).

The freshman year represents a stressful transition for college students (Lu, 1994). Despite a multitude of social, academic, and emotional stressors, most college students successfully cope with a complex new life role and achieve academic success. Other students are less able to manage this transition successfully and decide to leave higher education during or at the end of their freshman year. It is estimated that 40 percent of college students will leave higher education without getting a degree (Porter, 1990), with 75 percent of such students

leaving within their first two years of college (Tinto, 1987). Freshman class attrition rates are typically greater than any other academic year and are commonly as high as 20-30 percent (Mallinckrodt & Sedlacek, 1987).

The implications of leaving college without obtaining a degree are many. Each student who leaves before degree completion costs the college or university thousands of dollars in unrealized tuition, fees, and alumni contributions. The decision to leave college is also often economically deleterious to the college dropout, whose decision to leave often leaves the dropout in a position to earn much less over lifetime to work (National Center for Educational Statistics, 1989). Despite these considerable negative consequences for universities and students, attrition rates have not changed appreciable over the last few decades (Porter, 1990). This fact has provided an impetus to understand risk factors for college student attrition. If such risk factors can be identified, then intervention programs can be designed to increase retention rates (Clark et al, 1993).

Society's influence on elementary and secondary students has left many of our young people less than prepared for college (Parker, 1999). The poor academic preparation of incoming freshman also made retaining these students at the postsecondary level more difficult. If higher education is going to embrace these students, it is important for institutions to establish a campus-wide commitment to retention while simultaneously implementing a variety of strategies to help students accomplish their educational goals. Colleges and universities must construct a learning environment that offers the best chance for all students to progress regardless of their class or color (Parker, 1999).

One of the most important steps in the retention process begins the first week students are on campus. It is then that they get a feel for the spirit of an institution. The people conducting

enrollment and orientation activities should be friendly, communicative and enthusiastic. Orientation sessions are usually when students learn about the college, its mission, expectations, standards, accomplishments, and basically how the system works, but they also offer a good opportunity to share information about scholarships and financial aid, campus service, and course selection (Parker, 1999). Counseling services can facilitate the campus retention management system by obtaining valuable information about the learning styles, study strategies and educational plans of students. Many colleges utilize the skills of instructors to assist in the advising process, which helps students get acquainted with them before classes begin. It also helps students to view instructors as regular people who are concerned about them.

Students should meet regularly with their advisors and counselors to work on occupational goals, student success strategies, personal issues, job placement, tutorial need and financial aid. Tutorial services must be connected to the overall campus activity and curriculum, and should be available at times when students need them the most. An adequate number of tutors in each subject also are necessary. Faculty are the most important part of a student's academic experience and, therefore, have a tremendous effect on retention and college success. Their effectiveness involves recognizing and understanding different student learning styles and being helpful to students in dealing with their failures. They must be sensitive to this and open to presenting information in ways to accommodate different learning styles (Parker, 1999).

Personal Struggles

Family

In 2006, about 15 percent of American Indian/Alaska Native families with children, including those of Hispanic ethnicity, were headed by married couples, 38 percent were headed by females with no spouse present, and 11 percent were headed by males with no spouse present.

The percentage of American Indian/Alaska native families living in married-couple households was greater than the percentage of Black families doing so, 37 percent, but less than the percentages of White, Hispanic, and Asian/Pacific Islander families doing so, 73 percent, 63 percent, and 82 percent, respectively.

The percentage of American Indian/Alaska Native families headed by females with no spouse present, 38 percent, was three times higher than the percentage of Asian/Pacific Islander families arranged this way, 12 percent. A lower percentage of American Indian/Alaska Native families than Black families, however, were living in this situation, 38 percent compared to 54 percent. Higher percentages of American Indian/Alaska Native families were headed by males with no spouse present than White, Black, or Asian/Pacific Islander families, 11 percent compared to 7 percent, 8 percent, and 5 percent, respectively (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Numerous studies of Native American students who attend mainstream colleges and universities suggest that factors such as pre-college preparation, family support, supportive and involved faculty, institutional commitment, and maintaining an active presence in home communities and cultural ceremonies are crucial elements impacting these students' ability and/or desire to persist in college (Astin, 1982; Barnhardt, 1994; Brown, 1995; Falk & Aitken, 1984; Huffman, Sill, & Brokenleg, 1986; Lin, 1990; Patton & Edington; 1973; Reyner & Dodd, 1995). Maintaining connections to home communities in many instances, on federally designated Indian reservation lands and attending tribal ceremonies; seem to be particularly important (Barnhardt, 1994; Huffman et al., 1986).

A less widely known student retention theory is the Family Education Model (FEM) developed by HeavyRunner and DeCelles (2002). Research that forms the basis for this model

was conducted at five institutions in Montana; Fort Peck Community College, Stone Child College, Salish Kootenai Community College, Blackfeet Community College, and the University of Montana, Department of Social Work. It is an Indigenous-based model on student persistence in higher education that explicitly concentrates on Native American students. Similar to other retention/attrition models, the FEM is based on principles of education and social work. Because it is a model that promotes action, it also offers strategies for dealing with Native American student attrition. A central feature of the model that expands its explanatory power as it relates to Native American students is its purposeful inclusion of the core cultural factors suggested by Pavel and Padilla (1993).

The FEM also incorporates the concept of cultural resilience. HeavyRunner and Morris (1997) defined this concept from the American Indian point of view:

> The elders teach us that our children are gifts from the Creator. It is the family, community, school, and tribe's responsibility to nurture, protect, and guide them. We have long recognized how important it is for children to have people in their lives who nurture their spirit, stand by them, encourage, and support them. This tradition process is what contemporary researchers, educators, and social service providers are now calling "fostering resilience." (p. 1)

The meaning of family requires some Native American women to be responsible for not only nurturing their children but also providing for the family. According to HeavyRunner and DeCelles (2002), in traditional family structures, the desire to help others by sharing knowledge emerged from Plains Indian philosophy to become a vital them for dynamic leadership in the FEM. The Plains Indian tribes placed the family at the center for their social values. From

heartfelt beliefs and perennial wisdom flow the values that shape and direct the development of a culture's system of values. Although all cultures within a system share similar values, the prioritization of particular values distinguishes one culture from the next. For many of the Plains Indians, the value of family was preeminent, and this preeminence fostered other values such as respect, generosity, and cooperation.

According to NCES (2010), in fall 2009 at Little Big Horn College the women enrollment was (66.5 percent) compared to men enrollment of (33.5 percent) followed by Fort Belknap College, (59.8 percent) to (40.3 percent), Chief Dull Knife College, (58.9 percent) to (41.1 percent), Stone Child College, (58.4 percent) to (41.6 percent), Fort Peck Community College, (58.3 percent) to (41.7 percent), Salish Kootenai College, (57.3 percent) to (42.7 percent), and Blackfeet Community College, (57 percent) to (43 percent). This data proves that women have a higher enrollment rate at the seven Montana tribal colleges and more women are attending college than men.

This intervention-based model suggests that replicating the extended family structure within the college culture enhances an American Indian student's sense of belonging and consequently leads to higher retention rates among American Indians. Establishing and maintaining a sense of "family," both at home and at college, fortifies American Indians' academic persistence and reduces feelings of resentment that family members toward students because they spend time away from home. The family specialist is a unique model feature. This individual serves as family counselor, educator, advisor, advocate, team member, and event planner (e.g., cultural ceremonies and feasts). The specialist works directly with students and their families, assisting with micro-level issues such as child care, transportation, substance abuse, family illness, academically unprepared students, family violence, and depression, as well

as macro-level aspects of college such as career planning and dealing with racism and discrimination in society (Guillory & Wolverton, 2008).

According to Brown and Lavish (2006), Native American people who attend college suggested that they perceive a connection between a good education and a good job/future. Although many believed a good life and future to be contingent on securing a good education, others regarded education as an opportunity to help family/community and to escape the high unemployment rate on a reservation. Career counselors are encouraged to assist Native American clients with life-career planning from a developmental multiple role perspective, which includes assessing their cultural and family-of-origin dynamics. Such assessments may help clients to better understand what their home/family and community roles mean to them as they design their life careers. Given the noted importance that Native American college students attach to both their home/family and work life roles, career counselors must examine the extent to which family responsibilities affect Native American students' educational and career choices. Moreover, counselors can encourage students to identify how they perceive and interpret the role expectations emanating from their cultures of origin, and how these expectations influence their decisions whether a particular life role is important. Particular attention can be paid to exploring how these expectations influence students' understanding of the behaviors required for effective role-performance.

Niles (1998) defined life-role readiness as possessing the knowledge, attitudes, and skills necessary for effective life-role participation. Niles further maintained that one who assigns high importance to a life role is likely to engage in the behaviors necessary for becoming prepared in that important life role. Likewise, low role salience is indicative of limited motivation directed toward the preparation for participation in that life role.

Poverty

Poverty rates are especially high among American Indian/Alaska Native families who live in American/Alaska Native areas. In 1989, the poverty rate among all American Indian/Alaska Native families living on reservations and on off-reservation trust lands was over one and a half time higher than the poverty rate for families in the total American Indian/Alaska Native population, 47 percent compared to 27 percent. By 1999, although both percentages had decreased and the gap had narrowed to 14 percentage points, a larger percentage of families on reservations lived in poverty. On the other hand, the rates of American/Alaska Native families living in poverty in Oklahoma tribal statistical areas, Alaska Native village statistical areas, and state designated American Indian statistical areas were smaller than that of the total American Indian/Alaska Native population. In tribal designated statistical areas, poverty rates for families also did not differ significantly from the rates for American Indians/Alaska Natives in the total U.S. population (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Persistent poverty in remote rural areas is an enduring problem in both advanced and developing nations. In the United States, persistent rural poverty is especially evident in areas containing American Indian tribal lands, many of which are also afflicted by poverty-related problems, such as high rates of infant mortality and substance abuse. Yet the fact that tribal lands are primarily located in remote rural regions suggests that the relatively lower per capita incomes in tribal areas may be largely a function of factors, such as the lack of access to markets, an inadequate infrastructure, and lower cost of living (Leichenko, 2003). Although the role of such spatial factors in explaining differential regional development is receiving renewed attention within the geographic and economic literatures (Glasmeir, 2002; Levernier, et al, 2000;

Glasmeier & Wood, 2001; Ravillion & Wodon, 1999; Henninger, 1998), there has been no systematic examination of the role of these types of factors in accounting for differences in income between tribal and non-tribal areas or across different types of tribal areas. Because of the continuing problems of persistent poverty in many tribal areas despite, or perhaps as the result of, decades of federal policy initiatives that were intended to alleviate those conditions; additional consideration of these issues is merited.

Unemployment and Income

Between 1997 and 2007, the unemployment rate for American Indian/Alaska Natives fluctuated, but did not significantly increase or decrease overall. In 2007, some 12 percent of American Indian/Alaska Natives ages 16 and over were unemployed. Generally, for all race/ethnicities, including American Indian/Alaska Natives, unemployment rates were lower for those with higher levels of educational attainment. Specifically, 2 percent of American Indian/Alaska Natives with a bachelor's degree or higher were unemployed, compared with 12 percent of high school completers and 29 percent of those who were not high school completers. The unemployment rate of American Indian/Alaska Natives who did not complete high school, 29 percent, was higher than the rates of Whites, 12 percent, Blacks, 19 percent, and Hispanics, 9 percent (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

American Indians have experienced a large degree of difficulty in the labor market. They have lower levels of labor-face participation, higher levels of unemployment and lower wages than the rest of the population, as well as higher poverty rates. Despite the fact that these economic problems are particularly acute for Indians living on reservations, no previous research

has examined the effects of reservations on individual employment rates, controlling for other observable attributes (Gitter & Reagan, 2002).

The labor force participation rate in 1997 for all Indians age 16 and over was 62 percent, roughly 5 percentage points below whites and 1.7 percentage points below blacks. However, Indians living on reservations had labor-force participation of only 51 percent. The unemployment rate for all Indians was 11 percent, comparable to that for blacks, and more than double that for whites and Asians. Again, Indians on reservations were especially disadvantaged. They had an unemployment rate of 25.6 percent. The pattern of statistical disadvantage for Indians on reservations is mirrored in median household income and poverty rates. Median household income for all Indians was $20,025 in 1989, with 31 percent of Indians living below the poverty line. These numbers are comparable to the median income and poverty rates of blacks. However, Indians on reservations had median household income of only $12,459 and almost 51 percent of the population below the poverty line (Gitter & Reagan, 2002; Census of Population, 1990; Current Population Survey, 1997). Native American students face obstacles in higher education based on their location within several underserved groups whose needs and cultures are different from that of the dominant culture. U.S. higher education has been less successful serving students from low-income families (Fitzgerald, 2004; Heller, 2004; Levine & Nidiffer, 1996; McDonough, 1997; Paulsen & St. John, 2002; U.S. Department of Education, 2003), non-White racial/ethnic groups (Ancis, Sedlacek & Mohr, 2000; Fries-Britt & Turner, 2001; Garrod & Larimore, 1997), and students whose home culture is quite different from that of the dominant university culture (Astin, 1982; Rendon, 1996; Torres, 2003). Many Native American students belong in all three categories, with obstacles in postsecondary education simply because they belong to multiple categories that are not well served.

Health Issues

Alcohol, Tobacco, and Drug Use

In 2006, 21 percent of American Indian/Alaska Native children between the ages of 12 and 17 reported the use of alcohol in the past month. A higher percentage of American Indian/Alaska Native children reported use of alcohol in the past month compared to the percentage reported by Black, 11 percent, and Asian, 8 percent, children. A higher percentage of American Indian/Alaska Natives between the ages of 12 and 17 smoked cigarettes in the past month, 21 percent, compared to their White, Black, Hispanic, and Asian peers, 12 percent, 6 percent, 8 percent, and 5 percent, respectively. Among 12 to 17-year olds, a higher percentage of American Indian/Alaska Native, 11 percent, than Hispanics, 6 percent, and Asians, 3 percent, had used marijuana in the past month (National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives, 2008).

Alcohol use among Native Americans shares commonalities with alcohol use among other ethnicities; however, Native Americans' uniqueness in terms of history, culture, and societal position has resulted in a distinct set of circumstances that are unlike those found in any other group. These circumstances are further complicated by the diversity within Native American groups. With over 500 federally recognized tribes, each with, its own history, culture, and traditions, estimating the level of alcohol use and abuse is difficult, and preventions that work for one tribe may be inappropriate or even counterproductive in another (Szlemko, Wood, & Thurman, 2006).

May and Moran (1995) reported that, among Native American men, 26.5 percent of all deaths were alcohol-related, while among women, 13.2 percent of all deaths were alcohol

related. In the general U.S. population, alcohol is the third leading cause of preventable death, with 3.5 percent of all deaths in the U.S. considered alcohol-related (Mokdad et al, 2004).

The researchers have also examined age-adjusted alcoholism mortality, which does not include many of the causes of alcohol-related deaths as such; age-adjusted alcoholism mortality is a much more conservative estimate. During the 1991-1993 calendar years, researchers reported that, among Alaska Native Americans, the age-adjusted alcoholism mortality rate was 50.6 deaths per 100,000 as compared with only 6.8 deaths per 100,000 deaths in the total U.S. population (Shalala et al, 1996). In contrast to adult alcohol use, about which data are limited, much is written about adolescent Native American alcohol use. One of the largest ongoing studies of alcohol use among Native American adolescents has involved annual school-based surveys carried out since 1975 (Beauvais, 1998).

Data from this research have consistently shown that Native American adolescents have a higher lifetime prevalence of alcohol use than do non-Native adolescents. In 1993, 71 percent of Native American adolescents in Grades 7-12 reported ever having used alcohol (Beauvais, 1998).

In 1996, among a national sample of 17-to-18-year-olds, 62 percent had drunk alcohol (Substance Abuse and Mental Health Services Administration, 1998). In the same study, 55 percent of Native adolescents reportedly had been drunk and about 34 percent reported having been drunk in the month prior to the study. In comparison, Johnston, O'Malley, and Bachman (1998) reported about 21 percent of adolescents in a national sample had been drunk within the past month, a considerably lower percentage than among Native American adolescents.

Beauvais (1992) showed that lifetime prevalence rates for alcohol use over a 15-year period among Native Americans were consistently 5 percent to 15 percent higher than for non-

Native Americans, and that Native Americans appeared to begin alcohol use at an earlier age. Studies conducted by other groups have produced similar findings (Wallace et al, 2003). For example, other studies have found that Native adolescents drink larger amounts and experience more negative consequences of drinking than do other adolescents (Oetting & Beauvais, 1989). Native American adolescents who live on reservations, attend boarding schools, or drop out of school have been found to have higher levels of alcohol use than do other adolescents (Beauvais et al, 1996; Dick et al, 1993).

Almost 12 percent of the deaths among American Indians and Alaska Native are alcohol-related, more than three times the percentage in the general population (Centers for Disease Control and Prevention, 2005). In addition, 11.7 percent of deaths among American Indians and Alaska Natives between 2001 and 2005 were alcohol-related, compared with 3.3 percent for the U.S. as a whole. The two leading causes of alcohol-related deaths among Indians were traffic accidents and alcohol liver disease, each of which causes more than a quarter of the 1,514 alcohol-related deaths over the four-year period (Centers for Disease Control and Prevention, 2005). According to the State of Montana Department of Transportation (2008); all fatal crashes on the Blackfeet Reservation during the period of 2003-2007, 29 out of 42 car accidents involved alcohol and 36 out of the 42 car accidents; the passengers were not wearing seatbelts.

HIV/AIDS

As we enter the Twenty-First Century, Native American women face a variety of health concerns. Two critical and interrelated issues are HIV/AIDS and intimate-partner violence. Both are serious problems by themselves and an even bigger concern where they connect. Many relationships between HIV/AIDS and violence can be found. One is that “women at highest risk for domestic violence are demographically similar to women at risk for HIV infection.” In

addition, the two health problems intersect when women lack sexual agency, experience abuse and/or rape, and notify their partners of their HIV status (Vernon, 2002).

Domestic Violence

An exploration of domestic violence against Native women also indicates a serious problem. A study of family violence in four Native communities found that the pressure against recognizing family violence are so great as to cause American Indian tribes and communities to overlook the problem, and thus, to fail to develop intervention to prevent and reduce family violence. This is a dreadful circumstance given the rate of violent crime experienced by Native women. A National Crime Victimization Survey (NCVS) conducted between 1992 and 1996 found that the average annual violent crime rate among Native people was approximately two-and-a-half times the national rate, and the rate for Native women was the highest of all ethnic groups. The survey found that violent crime rate among ethnic females was Native women, 98 per 1,000; Black women, 56 per 1,000; Asian women 21 per 1,000; and White women, 40 per 1,000. It is also important to note that the rate of AIDS among Natives is 11.3 per 100,000 people compared to 9 per 100,000 for whites. It was reported in April 2002 that in the year 2000, Natives continued to experience the worst rate of violent crime in the Nation (Vernon, 2002).

Type-Two Diabetes

Type-two diabetes has been recognized as a significant public health problem in American Indian communities for almost 40 years. The Pima Indians in Arizona have the highest recorded prevalence of diabetes in the world. Compared with other US populations, American Indians and Alaska Natives have been disproportionately affected with diabetes since the early 1960’s and its increasing prevalence in this population has been documented since 1983 (Acton et al, 2002).

Among American Indian and Alaska Native adults, diabetes is a major cause of morbidity (such as blindness, kidney failure, lower-extremity amputation, and cardiovascular disease), disability, decreased quality of life, and premature mortality as well as a major cause of congenital anomalies, malformations, and prenatal death. Little is known, however, about the prevalence of diabetes among young American Indians and Alaska Natives in the United States and how this prevalence varies geographically (Acton et al, 2002).

Suicide

For the residents of the Standing Rock Sioux reservation along the North Dakota-South Dakota border, the winter months in 1997 and 1998 were plagued with disbelief, anger, and fear stemming from a suicide epidemic that culminated in 37 attempts among adolescent youth and 5 completed suicides by adolescent males. At the height of this epidemic, an estimated 150 at-risk adolescents were monitored by mental health professionals, relatives, and other tribal members.

The suicide crisis and subsequent prevention efforts at Standing Rock are but one example of many similar instances throughout “Indian Country.” This situation illustrates the growing concern regarding the alarming prevalence of suicidal behaviors among American Indian and Alaska Native (AI/AN) communities in the United States. Current mortality statistics reveal that suicide is the second leading cause of death for AI/AN populations aged 15 to 24 years of age, the third leading cause of death for ages 5 to 14 and 25 to 44 years of age, and the eighth leading cause of death for decedents of all ages (Centers for Disease Control & Prevention, 2003; Indian Health Service (IHS), 2000-2001a, 2000-2001b). In addition, the age-adjusted suicide death rate for AI/ANs is 20.2 per 100,000, approximately twice as high as the U.S. all-races rate of 10.6 per 100,000, with males accounting for the majority of suicide decedents (IHS, 2000-2001A, 2000-2001b).

Suicide is the second-leading cause of death behind unintentional injuries among Indian children and young adults, and is on the rise, according to the Indian Health Service. Native Americans ages 10 to 24 killed themselves at more than twice the rate of similarly aged whites, according to the most recent data available from the federal Centers for Disease Control and Prevention (Great Falls Tribune, retrieved March 21, 2011). On the Fort Peck reservation, five children killed themselves during the 2009-2010 school year at Poplar Middle School – enrollment about 160 – 20 more of the 7th and 8th graders tried. In the current school year, two young adults have committed suicide, though none at Poplar Middle School (Great Falls Tribune, retrieved March 21, 2011).

Native American Incarceration Rates

Despite being the smallest segment of the population, Native Americans have the second largest state prison incarceration rate in the nation, according to a recent review of prison statistics. The review, conducted by the Foundation for National Progress, an umbrella organization for the magazine Mother Jones, found that 709 per 100,000 American Indians and Alaska Natives were incarcerated in state prisons in 2000. The rate was surpassed only by African-Americans, whose jail rate was a startling 1815 per 100,000 (http://www.indianz.com/News/archive.asp?ID=law/7132001-1&day=7/13/01, no author, 2001).

Overall, Native Americans are 1 percent of the state prison population, a rate which has not increased significantly nationwide over the past two decades. In federal facilities, Natives were 2 percent of the population depending on the state; however, Native Americans are disproportionately incarcerated. The phenomenon was most evident in the Plains states. In Montana, for instance, 16 percent of prisoners were Native, compared to just 6 percent of the state population. In North Dakota, 19 percent of prisoners were American Indian and Alaska

Native in a state where just 5 percent are Native (http://www.indianz.com/News/archive.asp?ID=law/7132001-1&day=7/13/01, no author, 2001).

Wyoming Indians made up 2 percent of the state population and 7 percent of the prison. The rate was comparable to Minnesota, where Indians were 1 percent of the general population and 7 percent of the prison, and Nebraska—1 percent and 5 percent, respectfully. South Dakota had the highest percentage in the Plains. Some 21 percent of state prisoners were Native, compared to just 8 percent of the state. The only other state which had a large disparity was Alaska, which has the largest percentage of Native Americans in the entire country. A full 37 percent of the state prison population was Native in 2000, compared to 16 percent of the general population (http://www.indianz.com/News/archive.asp?ID=law/7132001-1&day=7/13/01, no author, 2001).

Other states with significant Indian populations did not necessarily experience the same phenomenon. The percentage of Natives in state prisons in California, New Mexico, Oklahoma, and Arizona, for instance, were not extraordinarily high. Yet across the board, Natives are being sent to state prisons at increasingly higher rates. In 1980, there were 145 Indians per 100,000 inmates in California's prisons, a rate which jumped to 767 per 100,000 in 2000. Such large jumps can be attributed, in part, to increases in the general American Indian and Alaska Native population. The review was based on statistics provided by states, the U.S. Department of Justice, and the US Census Bureau. Research was conducted by the Justice Policy Institute, a program of the Center on Juvenile and Criminal Justice, a non-profit organization whose mission is to reduce the use of incarceration as a solution to societal ills. The U.S. Department of Justice last year released a study of jails in Indian Country, noting they were overcrowded and

underfunded (http://www.indianz.com/News/archive.asp?ID=law/7132001-1&day=7/13/01, no author, 2001).

Although, in 2010, American Indians represent 7 percent of Montana's total population, they account for 19 percent of all men in prison and 33 percent of all women in prison. These statistics are based on self-reporting by offenders (Montana Department of Corrections, 2011).

Research Related to Higher Education Institutional Efficacy

Non-Native American Schools of Higher Education

The general public increasingly demands more accountability in American higher education. Student engagement is perceived to be an integral part of the accountability by way of understanding how institutions engage students in educationally effective activities, therefore, fundamentally influencing the student learning outcomes. Understand, the landscape of studying student learning outcomes is crowded with the unrelenting accumulation of data. What remains as a challenge to the research community is to find new tools that can both efficiently tame large datasets and uncover fresh conceptual and methodological models useful for understanding student learning engagement (Luan et al, 2009).

A relatively new tool in higher education research, data mining, provides a powerful way to detect patterns in data that would be significantly more difficult, if not impossible, to see using traditional statistical techniques alone (Dyche, 2000). Data mining is a collection of statistical and data management techniques previously unattainable due to limitations in computing power, data storage capacity, and statistical sophistication. However, as these technical barriers have fallen, data mining has become a mission-critical part of business research and a productivity tool in many industries such as healthcare, banking, and the retail sector. In higher education,

data mining is mostly considered enigmatic due to a current lack of use and understanding (Luan, 2009).

Marton and Saljo (1976) introduced the phrase “deep processing” to distinguish qualitatively among students’ responses to learning tasks. “Deep” approaches are usually preferred because it represents students looking beyond the signs associated with information (surface approaches) to the more important underlying meaning. As Ramsden (2003) stated; “Surface approaches have nothing to do with wisdom and everything to do with aimless accumulation. They belong to an artificial world of learning, where faithfully reproducing fragments of torpid knowledge to please teachers and pass examination has replaced understanding” (p. 59).

A growing body of research suggests that educationally effective learning environments are characterized by the promotion of deep approaches to learning. Students who use deep approached to learning tend to perform better, as well as retain, integrate, and transfer information at higher rates than students using surface approached to learning (Biggs et al, 1988). Simply put deep approaches to learning lead to more meaningful learning. As a result, particularly in this period of increased emphasis on assessment and accountability, deep learning and the processes that produce it are of interest to those investigating and documenting student engagement and learning in higher education (Nelson-Laird et al, 2008).

To better understand where and how deep approaches to learning are used and the effects of these approached on students, we focused this study on the relationships between disciplines and deep learning approaches. In what fields do faculty members emphasize and students use deep approaches frequently? Where are these approaches used less frequently? Is the positive effect of deep approaches to learning on students’ outcomes less in those fields that use these

approaches less? To place our research in context, we provide some background about deep approaches to learning and the effects of discipline on student and faculty practice, particularly deep approaches to learning and related practices (Nelson-Laird et al, 2008).

Two factors found to influence persistence among college students are the students' commitment to their educational goal (s) and the students' commitment to the postsecondary institution they are attending. Students with weak or unclear goals are at risk. Many students coming to college for the first time do not know what they want to do with their lives or what they want to study. This time of exploration is also a time of risk, particularly among students with backgrounds strongly associated with high dropout rates (Brown & Robinson, 1988).

Institutional loyalty and commitment prove to be important factors in persistence. Students at commuter institutions have lower levels of identification with the institutions they are attending. Student participation in college life strengthens institutional commitment. For this reason, residential colleges have lower dropout rates among their students. When students develop a sense that they are making progress toward attaining their educational goals, they are less likely to drop out. Students who report progress in gaining a broad general education are more likely to succeed in college (Brown & Robinson, 1988). Such general education includes enhancing their ability to analyze ideas, write clearly and effectively, and become actively involved in campus life (Ratcliff, 1991).

Students attend college for different reasons. Knowing why students have chosen to attend college may help in understanding and strengthening their goal commitment. Many students are vocationally or career oriented. They seek to earn a degree to enhance their ability to get a job. Academic integration and commitment to the institution are strong predictors of student success among career-oriented students. Other students go to college for purely academic

reasons. In essence, they are learning for the sake of learning. Certain adult students, for example, may not be motivated to attain a degree or to prepare for a career; for them, a college education is a means to satisfy a lifelong thirst for inquiry. For academically oriented students, regardless of age, academic integration and commitment to the institution are important indicators of progress, persistence, performance, and degree completion. A third group of students attends college to prepare for community service. Service-oriented students seek to better humanity, or at least their own community. For this service-oriented group, social and academic integration are only indirectly related to persistence. Students' commitments to their educational goals and to their institution are directly related to their persistence (Brown & Robinson, 1988). Different students have different goal orientations. Some are there because of the love of learning; some to get or enhance job skills. Each produces a different motivation to college success (Kember, 1989).

Native American Schools of Higher Education

Extended families are an integral component of American Indian cultures. Family obligations can be so great that they can interfere with school. Families, however, also can be used to enhance academic and social integration for American Indians students. The Family Education Model (FEM) has been implemented at four tribal colleges in Montana to improve retention rates among tribal college students. The FEM family-centered approach builds on student and family strengths, offering strategies for increasing the student support network. Families are invited to participate in the college's cultural activities such as social dances, storytelling, and traditional arts and crafts (Ortiz & HeavyRunner, 2003).

According to Boyer (2008), intertribal colleges support thriving cultures; their vision is to not only train students for employment, but also strengthen tribal cultures and ultimately advance

tribes as sovereign nations. In the end, what matters most is the commitment students feel to serving their own communities. Not all graduates return to reservations, of course, nor should they be expected to. Most believe they are part of what many call the renaissance of Native societies. Whether they work as a computer programmer or artist, graduates of intertribal colleges tend to feel committed to serving this larger cause (Boyer, 2008).

Tribal colleges have also implemented programs to assist American Indian students in making the transition from high school to college. For example, Haskell Indian Nations University in Lawrence, Kansas implemented summer bridge programs that bring high school students to campus for math and science enrichment programs. In addition, the university established new student orientations programs and extended orientation courses. The new student orientation program is a one- or two-day experience offered during the summer for freshman students and their parents. Student evaluations revealed that two-day programs allow student participants to become better acquainted with other new students and with the institution (Martin, 2005).

Once students enter the tribal colleges, they experience culturally relevant academic and student support services that will enhance their opportunities for success. Haskell implemented a one-credit hour required course called Vision-Quest-The Freshman Year Experience to provide an opportunity for students to learn more about American Indian culture. Vision Quest addresses retention, academic preparedness, and survival skills. The course is designed to be culturally relevant. Most tribes have the tradition of expecting a young person just before achieving adulthood to seek out a secluded spot to enter into a state of dreams and visions. At this time the individual discovers purpose and direction in life. The intent of Vision Quest is to serve as the

academic parallel of self-discovery. The course seeks to provide the skills that students need for success in higher education and life (Martin, 2005).

Each student in Vision Quest must select a mentor. The mentor program is designed to encourage and allow faculty and staff to play a role in students' pursuit of education by acting as a resource, offering support, and participating in students' academic and personal development. The lack of mentors and role models in many American Indian communities who are able to convey that one can obtain a valuable education while maintaining one's cultural identity makes mentoring programs essential to the success of American Indian students (Ortiz & HeavyRunner, 2003).

Tribal colleges assist their graduating students in transferring to mainstream universities. Several years ago at Haskell's request, the University of Kansas (KU), implemented a mentoring program for students who transferred from the tribal college to KU. The goal was to improve the students' first-year experiences and increase their retention and graduation rates. The program included the following: early enrollment opportunity; faculty, student, and staff mentors; expanded orientation programs with staff from both KU and Haskell; and a textbook grant for participants. During the program's first year, all twenty-one students who had enrolled for the fall semester returned for the spring (Martin, 2005).

Haskell and KU also implemented a student exchange program whereby students at one institution enroll in the other and pay only their home institution's tuition. This has benefited students by permitting them to enroll in classes that their institution was unable to offer. For example, an American Indian Studies student from Haskell was able to earn fifteen credit hours with a 4.0 grade point average in Russian studies at KU (Martin, 2005).

There has been an increase in both higher education enrollment and completion rates for American Indians since the 1970s. Moreover, American Indian enrollment has shifted from two year colleges to four-year colleges. Obviously, tribal colleges have played a major role in the growing number of American Indians who are accessing and finding success in higher education (Ortiz & HeavyRunner, 2003).

Through the BEAMS (The Building Engagement and Attainment for Minority Students), Oglala Lakota College (OLC) developed an action plan to improve student learning and success with the aim of directly affecting the local community by helping to create individuals who are knowledgeable about Lakota culture and strongly involved in the Pine Ridge Indian Reservation. The BEAMS team linked its work to the institution's mission of enhancing Lakota life by developing a plan that addresses OLC's unique position in serving the postsecondary needs of the Lakota on the reservation. This includes providing services in a decentralized setting with 10 college centers and nursing facilities, working around ceremonies that often take precedence in a student's life; and providing learning opportunities to students who are nonresidential, frequently lacking transportation, and often have families of their own. After only one year of plan development and implementation, the BEAMS team has already made an impact on some of the challenges affecting OLC students and faculty (Del Rios & Leegwater, 2008).

The BEAMS initiative crafted by the OLC team identified strategies to enhance the perspective based on Lakota culture and language in the teaming process for both students and faculty. The Lakota perspective is a framework through which the college acknowledges the unique culture of the Lakota and honors it through the use of language and community resources such as elders, and social protocol intertwined in course context. Using the framework, the BEAMS team is creating faculty development opportunities and support services for students

among them a faculty orientation and handbook and a student handbook that will help provide an environment where culture is one of the strategies used to guide student success (Del Rios & Leegwater, 2008).

The changes developed through the BEAMS plan began during the 2006-07 academic year, immediately following the team's participation in the 2006 Summer Academy. Two of the BEAMS team members in collaboration with staff from student support services, focused their efforts on developing and distributing a student handbook to provide an accessible source of important institutional information, which is essential for an institution with 10 college centers and faculty who travel extensively. Created as a daily calendar for students, the handbook provides information on placement testing, registration, scholarships, and deadlines. It includes space for instructors' contact information, and tips and strategies for studying and test-taking. To highlight the importance of the Lakota culture to the learning experiences, the handbook includes motivational quotes from influential Lakota members. The handbook was well received by the OLC community, and the team published a new version for the 2007-08 academic years (Del Rios & Leegwater, 2008).

Research Related to Higher Education Student Efficacy

Non-Native American Students

Scholars investigating "deep learning" avoid confusion by distinguishing "approaches to learning" from the learning that results. Approaches to learning describe the types of activities and behaviors students participate in or utilize in their studies (Biggs et al, 1987). What results from those approaches is some form of learning. By definition, deep approaches lead to deep learning and surface approaches lead to surface learning (Nelson-Laird et al, 2008).

In developing these distinctions, researchers found that deep learning reflects a personal commitment to understand the material which manifests itself in the use of various strategies such as reading widely, combining a variety of resources, discussion of ideas with others, reflecting on how individual pieces of information relate to larger constructs or patterns, and applying knowledge in real world situations (Nelson-Laird, 2008). Also characteristic of deep learning is integrating and synthesizing information with prior learning in ways that become part of one's thinking and approaching new phenomena and efforts to see things from different perspectives (Ramsden et al, 2003). By contrast, students using "surface" approaches focus on the substance of information and emphasize rote learning and memorization techniques (Biggs et al, 1989). With surface approaches, the goal of studying for a test or exam is to avoid failure, instead of grasping key concepts and understanding their relation to other information and how they information applies in other circumstances (Bowden et al, 1998).

Colleges and universities are paying increased attention to benefits of learner-centered approaches to teaching and learning such as deep approaches. Faculty members are being encouraged to shift away from pedagogical approaches that emphasize surface learning (Biggs et al, 1989). Instructors are instead expected to foster learning environments that encourage students to grasp the underlying meaning of information, gaining a personal interest in the learning process. The increased emphasis on active, learner-centered approaches seems to have had a positive impact. For example, findings from the National Survey of Student Engagement (NSSE) (2000, 2001, 2002, 2003, 2004, and 2005) demonstrate that a majority of undergraduates at 4-year institutions engage in activities of a deep approach at least "sometimes" during a given academic year and that faculty are encouraging, and at times requiring, such engagement (Nelson-Laird et al, 2008).

Native American Students

In 1982 fewer than 2,500 students were enrolled in tribal colleges. Today enrollment is more than 30,000 students and rapidly growing (American Indian College Fund, 2003 as cited in Martin, 2005). The growth in enrollment is occurring despite financial shortages, poor academic facilities, and service to an at-risk student population. The average age of tribal college students is twenty-eight; sixty-four percent are women; and a large percentage is single parents. Despite the high risk factors of many tribal college students, 86 percent persist to complete a degree. Moreover, after attending tribal colleges, American Indian student persistence rates at mainstream institutions are four times the rate of those for American Indian students who have never attended a tribal college (American Indian College Fund, 2003).

Tribal colleges have greater success with American Indian students because they recognize the importance of individualized attention, offer programs that are culturally sensitive, and have learned that family support services are integral to their students' progress and success. Tribal colleges understand the importance of the student's role within his or her cultural, family, and community context (Boyer, 1997). Accordingly, tribal colleges value the role of family and community in their students' lives and provide for flexible policies that permit students to maintain their familial and tribal obligations. Close proximity to home community, personal attention, and culturally relevant curriculum are among the reasons students choose to enroll in tribal colleges (American Indian College Fund, 2003).

Learning Styles

A number of reasons have been given for the high attrition by Native American students. The most common reasons have been inadequate preparation, low motivation, and lack of family support for education (Atwell, 1989). More important than any of these reasons is that:

> For white students the college setting is simply an extension of the national social institution of their culture. The college institution reflects dominant society's white middle-class values and, by and large, students, on the other hand, tend to bring to college generally oriented toward a set of value and goals which are different from those institutionalized in the college or university…The challenge for Native American students becomes the ability to interact on two cultural levels simultaneously (Huffman et al, 1989).

An examination of learning styles to student learning is important because:

> People think in different ways. Some people think with their sensory apparatus; others think with their hearts. A few think with their intuition; and some think with their intellect…Learning style research indicates that people's styles reveal how they identify, judge, substantiate, confirm and validate truth (Gregoric, 1982).

"The sociocultural system of which the student is a product must be clearly understood if education is to be effective" (Ramirez et al, 1974). Witkin's (1967) research has shown that members of some cultures tend to be field independent while those of other cultures tend to be field dependent. This would appear to mean that people of various cultures, because of their socialization practices, encourage their children to be more field independent or more field dependent (Ramirez et al, 1974).

Barbe and Milone (1981) agree that differences in minority learning styles are probably not inherent. By this they mean that learning styles are probably a result of environment rather than being caused by heredity. They conducted a study involving 1,000 southern California children and found that minority children, who were exposed on a continuing basis to the culture of the majority, developed dominant learning styles strengths similar to those of the majority.

Children, however, who were from the groups outside the American cultural mainstream, such as Native Americans, may show unique modality characteristics (Atwell, 1989).

In a study of Sioux students (Huffman et al, 1986), the students' success seemed to be related to their cultural identity. The crucial factor for the likelihood of college achievement was retention of their traditional cultural identity and heritage. Thus, traditional Sioux students seem to have a better chance for achievement in college than their nontraditional counterpart. This is surprising because the typical college expects its student to learn in the way of the White American and usually adapts teaching very little to accommodate other learning methods (Atwell, 1989).

A demonstration of the importance of these cultural differences is the wide acceptance that everyone's culture plays an important part in one's life (Butterfield, 1985). However, in academic settings, this does not cause a problem for the White American; for the Native American, it can result in failure. Phillips (1972) reported that in the Native American home and community, no one person tells others what to do or when to speak. The regulation of conversational exchange and designation of attention differ greatly from that of the Anglo system. Phillips went on to suggest that when Native Americans enter a school in which most of the instructors are not Native Americans, they encounter a totally unfamiliar way of communicating. For the first time, the Native American student is expected to engage in a highly structured and directive interaction. In particular, the instructor is likely to have complete control of the conversation as far as who talks and when they should talk. During Native America social activities there is no single individual directing and controlling activities. Access is open to everyone. No one is just an observer, and there is no sharp distinction between the audience and

the performer. Individuals choose for themselves how much they participate in the conversation (Atwell, 1989).

There is support for the view that there is no one Native American learning style (Bland et al, 1975). Conti and Fellenz (1988b) also stated that there is no one Native American learning style; however, they did maintain that culture plays an important role in learning style among certain Native American individuals. According to Bland et al (1975), many Native American children learn by observing a process and then practice the process with a minimum of verbal comments. Native American children learn by observing and by self-directed exploration and experience. Also, Native American students learn better when the teacher uses the concrete approach and moves to the abstract—that is, from practice to theory. There is also a need to be more visual in presenting instructional information. Bland (1975) and Gardner (1980), state that visual perception and recall are the primary factors for Native Americans in determining their learning styles. Native Americans, according to Bland, learn better in an environment where they capitalize on as many of the human senses as possible. Using sight, sound, and touch will greatly assist the Native American in his/her learning experiences (Atwell, 1989).

Bland (1975) asserted that research does show that to be the most compatible with a large number of Native American students' learning styles, instructors should do the following:

1. Use formal and varied seating patterns;
2. Motivate by providing frequent positive feedback and praise success;
3. Allow for pairs or small teams to work together. Allow for many group projects rather than individual assignments; and
4. Incorporate many manipulative activities which rely heavily on visual as well as tactile/kinesthetic senses (Atwell, 1989).

Boseker and Gordon (1983) stated that cooperation is more important than competition for the Native American. This view is upheld by recent research. Conti and Fellenz (1988) found that in the tribal colleges in Montana competition of the collaborative type, in which the students work together to improve the performance of the group, is desired by students. According to Boseker and Gordon (1983), Native Americans also make decisions by consensus rather than by majority rule. In addition, while people from the dominant culture tend to find silence uncomfortable, silence among Native Americans communicates oneness. In the dominant culture, if a pause is perceived as too lengthy, someone will say something, while Native Americans like to wait and think before answering a question. Therefore, giving the Native American more wait time increases the chances that he/she will give answer to the question (Atwell, 1989).

Financial Challenges

Tribal and federal financial aid programs are often unable to address the economic situations of American Indian students (Stein, 2003). Tribal colleges have made financial aid assistance for their students a priority. More than 90 percent of American Indian students require financial aid (American Indian College Fund, 2003). Tribal colleges provide financial aid programs to American Indian students from a variety of sources, including the tribe, federal, and state governments; benefactors; and private foundations. For example, scholarships from the AICF have played a crucial role in increasing persistence rates from tribal college students by allowing recipients to make their education a higher priority than work. Many of the scholarship recipients are able to reduce their work hours so that they can focus more on coursework (American Indian College Fund, 2003).

The treaty obligation and trust responsibility between the sovereign Indian tribes and nations and the U.S. federal government sets Tribal Colleges apart from mainstream institutions in a specific way: the federal government is committed to providing funding for Indians for a variety of programs, including higher education. This commitment is especially important because Tribal Colleges receive little or no funding from state governments, as states have no obligation to fund them due to their location on federal trust territory. The status of reservations as federal trust territory also prevents the levying of local property taxes to support higher education-an important source of revenue for most mainstream community colleges (American Indian Higher Education Consortium, (AIHEC), 1999).

As a result of the lack of local or state support, Tribal Colleges rely heavily on federal funds for their core operational funding. In particular, they depend on the funds distributed through the Tribally Controlled College or University Assistance Act of 1978 (TCCUAA) and administered by the Bureau of Indian Affairs for their operating expenses. The Act authorizes funding through several sections:

1. Title I currently allocates funding to 25 of the colleges through a formula based on the number of Indian students enrolled (called the Indian Student Count or ISC). No funds are distributed for non-Indian students, who make up a significant percentage of total enrollment at Title I schools on average. Title I is authorized at a per Indian student level of $6,000, with a maximum total amount of $40 million.
2. Title II provides funding for core operations for Dine College.
3. Title III provides matching funds for endowment grants, and is authorized at $10 million. However, appropriations have never surpassed $1 million.
4. In addition, funds are authorized for Facilities Renovation and Technical Assistance.

Recently total appropriations have increased slightly, after remaining static for many years in real terms (The Institute, 1997). In Fiscal Year 1999, total appropriations reached $30 million. Nevertheless, appropriations for Title I schools in particular have never matched the authorized levels. The current funding per Indian student, $2,964, is now less than half the authorized amount of $6,000. Despite the increases in total appropriations, the Title I funding per Indian student has increased only slightly since 1981 by $133 and in fact has decreased by 45 percent when inflation is considered. This is primarily because enrollment growth has outpaced the small increase in appropriations from Congress, and because the number of eligible Title I colleges has grown (AIHEC, 1999).

Because the authorized amounts have never been fully realized, Title I Tribal Colleges operate with significantly less funding per student than mainstream colleges. Estimates indicate that community colleges will receive an average of $4,743 per FTE student from federal, state, and local government revenues in Fiscal Year 1999 (AIHEC, 1999).

To make up for the shortfall in revenue, most Tribal Colleges must charge tuitions that are high, far cedes the poverty levels of the communities they serve. In 1996-97, in-state tuition and fees at the tribally controlled colleges averaged $1,950. In comparison to mainstream colleges, this average was 52 percent higher than tuition and fees for public two-year institutions, and was only slightly lower than the average for all two-year and four-year public institutions (NCES, 1997b; NCES, 1990-97).

Tribal Colleges also receive limited funds from other sources:

1. Some colleges, not funded through the TCCUAA, receive core operational funding through other federal mechanisms. For example, United Tribes Technical College and Crownpoint Institute of Technology receive funds through the Carl D. Perkins Vocational

and Applied Technology Act-together; they received $3.1 million in Fiscal Year 1998. These two colleges are ineligible to receive funding under the TCCUAA because the Act limits funding to only one Tribal College per tribe (Billy, 1998). Haskell Indian Nations University and Southwestern Indian Polytechnic Institute, which are owned and operated by the Bureau of Indian Affairs and the Institute for American Indian Arts, which congressionally chartered, also receive funding through separate authorization.

2. The Tribal Colleges benefit from 1994 federal legislation awarding them land-grant status. They join 55 state universities and 17 Historically Black Colleges and Universities (HBCUs), which were designated as land-grant institutions in the 19th century. This new designation helps the Tribal Colleges become more visible and connected to mainstream institutions, by sharing projects, resources, and information with other land-grant colleges (St. Pierre & Stein, 1997). The colleges (collectively called the "1994 institutions") receive equity grants-$50,000 per institution—to strengthen agricultural and natural resources; share the interest from an endowment fund that receives $4.6 million annually; and may compete for funding for extension programs (about $2 million in total). In addition, the creation of a new research program was authorized in FY 1999. However, total appropriations for the programs authorized for all 29 eligible institutions are approximately equal to the amount given to just on state land-grant college each year (Billy, 1998). The colleges will use the funds available to them to help reservation communities develop potential in the following areas: nutrition, youth, economic development, family development, natural resources, agriculture, and community development.

3. In addition, some Tribal Colleges—like other minority-serving institutions—receive funding from Title III under the Higher Education Act, the *Aid for Institutional Development Program.* In Fiscal Year 1998, Tribal Colleges had eight ongoing competitive grants under Part A, for a total of $2.6 million out of the more than $55 million available (Billy, 1998). In Fiscal Year 1999 the Tribal Colleges will join HBCUs and Hispanic-serving institutions by getting a separate section under Title III. This new section was authorized at $10 million, but actually only received appropriations of $3 million.
4. Finally, Tribal Colleges receive minimal funding from other sources, including state block grant programs for adult education; the Minority Science Improvement Program; Environmental Management Grants; and other specially directed funds. The U.S. Department of Agriculture recently announced rural development grants for four colleges—Cankdeska Cikana Community College, Crownpoint Institute of Technology, Fort Peck Community College, and Nebraska Indian Community College—to strengthen aspects of the agricultural programs and make them "Centers of Excellence" in the nationwide rural development network (Tribal College Journal, 1998; AIHEC, 1999).

It is important to recognize that only five of the Tribal Colleges receive any income from gaming (American Indian College Fund, 1998a); in additions, such funds—when received—are relatively small and unstable. The misperception exists that tribes either operate casinos themselves or receive portion of the revenue from other tribes' casinos. In fact, only a fraction of tribes own casinos and tribes generally do not share revenue because they are sovereign entities (AIHEC, 1999).

Given the Tribal Colleges' chronic underfunding, the White House Executive Order on Tribal Colleges and Universities (No. 13021) was signed in order to more fully integrate the colleges into federal programs. This document, issued by President Clinton on October 19, 1996, reaffirms the important role Tribal Colleges play in reservation development by directing all federal departments and agencies to increase their support to the colleges. The initiative hopes to direct more attention toward the colleges, but also bring in more resources and create greater opportunities (AIHEC, 1999).

CHAPTER THREE - METHODOLOGY

Introduction

Tribal Colleges offer higher education that is uniquely tribal with culturally relevant curricula, extended family support, and community educational services. Most TCUs are located on federal trust territories. The tribal college movement was created to focus on the culture of each tribe and to insure that the students graduated with a two-year degrees from these institutions. Native American students must be adequately prepared. This preparation is imperative so they can be more successful in obtaining higher education and earn a four-year degree.

It is estimated that only 6 percent of American Indian students complete their college education (Astin, 1996). A variety of factors identified in the review of the literature account for the lack of American Indian academic success. Researchers found: motivation, poor academic preparation, inadequate financial support, low achievement, lack of parental support, and lack of community support were identified in the literature as hindrances to educational achievement (Falk et al, 1984).

There is evidence that social integration is instrumental in decisions to persist to complete a four-year degree and that often without this social integration American Indian students withdraw from college. Social integration may not be as strong a factor as academic integration but it is important. Some researchers found that minority students at predominately white campuses often face overwhelming adjustment challenges (Voala, 1993). The foundation that Native American students build when initially attending tribal colleges is very important and enables the Native student to transition to a four-year university.

The student participants in the Native American Secondary Teacher Education Program at the North Dakota State University all had tribal college experiences and agreed that it was a valuable experience in making the transition (Wenzlaff & Biewer, 1996). Experiences at the tribal colleges allowed these students an opportunity to build the self-confidence they needed to transfer to a larger institution. The experiences and framework at the tribal colleges that contribute to increased self-confidence for the American Indian students included family support or "role model," mentoring programs, program peer groups, and the involved role of the professor at the larger institution (Wenzlaff & Biewer, 1996).

Research Design

Satisfaction Survey

The design for this study is a mixed methodology. This is a descriptive study of the services offered at colleges where the participants attended and this will be done by analyzing the responses to the Services Satisfaction Survey. This study will find out what services at the colleges were beneficial for students to successfully persist to complete a baccalaureate degree. There will be information to compare these responses between those who began at a tribal college and those who went directly to a four year institution. There will be an analysis of the open-ended responses that will specify other services that these students felt would have been beneficial when they attended college.

Satisfaction Survey Question Rationale

The instrument entitled Satisfaction Survey was designed to find out the student's satisfaction with the resources available to them while attending college. All of the information gathered will be based upon respondents' answers to the survey.

Boyer (1997a) reported: “Students at tribal colleges expressed high satisfaction with the staff, instructors, and curriculum. Furthermore, these students indicated that job training, affordability, personal interactions with faculty and staff, and support services were important factors in the satisfaction they felt with their college experience” (p. 20).

Researchers found motivation, poor academic preparation; inadequate financial support, low achievement, lack of parental support, and lack of community support were identified in the literature as hindrances to educational achievement (Falk et al, 1984).

Questions 1-20 of Services Satisfaction Survey (Appendix A) are based upon the research conducted by Boyer in 1997 and supported by Falk et al in 1984. All the questions seek to examine the responses by the participants in their satisfaction with the college educational services and how this affected their ability to obtain a degree. Therefore the survey questions were based on what was found in the review of the literature.

Interview Survey

This study compared the responses, elicited in the face-to-face interviews from American Indian students who first attended tribal colleges and graduated with a baccalaureate degree; with the American Indian students’ responses for students who went directly to a four-year institution, and successfully completed a baccalaureate degree.

Interview Question Rationale

The Interview Protocol was designed to examine the demographic information, personal barriers, and how the available education resources assisted the students. All the information gathered was based upon respondents’ educational experiences being examined (Appendix B).

This approach is valid in light of research by Tinto (1975), Matti (2000), and Ness (2001). In addition, Tinto’s longitudinal model of the persistence and withdrawal process was

developed by Tinto (1975; 1987) explained the college student withdrawal behaviors in the educational environment. Tinto's longitudinal model is based largely on degree of fit between the individual student and the institutional environment. Tinto's model concentrates on the impact of the institution and asserts that the quality of a student's interactions with the academic and social systems of the institution was related to whether the student persists or drops out.

Tinto's model argues that an individual's departure from an institution can be viewed as arising out of a longitudinal process of interactions between the individual with given attributes, skills, and dispositions (intentions and commitments) and members of the academic and social systems of the institution (Tinto, 1987; 1993). Building on Spady's work (1970; 1971), Tinto (1975; 1987; 1993) formulated a theory explaining the process that motivates individuals to leave college before graduating. Tinto's (1975; 1987; 1993) model suggests that students come to a particular college or university with a range of background traits (e.g. race, secondary school achievement, academic aptitude, family, education, and financial context). These background characteristics lead to initial commitments, both to the goal of graduation from college and to the specific institution attended. Together with background characteristics, these initial commitments are hypothesized as influencing, not only how well the student will perform academically, but also how the student will interact with and subsequently, become integrated into the institution's social and academic systems.

Other things being equal, the greater the individual's level of social and academic integration, the greater the individual's subsequent commitment to the institution and commitment to the goal of completing college and graduating will be. These subsequent commitments, in turn, are seen, along with levels of integration, as having a positive influence on persistence. However, Tinto's model suggested that both social and academic integration into a

university are necessary for students to persist until completion of their degrees. Tinto (1975) and many of those who tested his model empirically, such as; Fox et al (1986) used the concepts of social integration and academic integration to explain persistence. In addition to the theoretical model, previous research demonstrated the importance of variables such as involvement, academic and social integration and commitment to college persistence (Astin et al, 1985).

Interview Protocol questions 1-8 (See Appendix B).

The purpose of these questions was to gather general, self-explanatory information about the participants.

Interview Protocol questions 9-28 (See Appendix B).

These questions were based upon Matti (2000) and Ness (2001) findings. In addition, Matti (2000) found that there were significant differences in a number of factors such as demographic, environmental, academic, social integration, institutional, and goal commitment factors that affected a minority student's persistence in community colleges. The results also indicated that the demographic and environmental variables (e.g. the number of hours worked per week, the effect of hours worked per week on studying, the effect of family responsibility on studying, amount of hours spent studying, amount of time spent on campus, the time of day class meeting) were significant either by age, gender, and ethnicity. Other results indicated that the academic and social integration, and institutional and goal commitment factors were statistically significant by age, gender, and ethnicity (Matti, 2000).

Furthermore, the key organizational factors in the tribal college that affected the completion of students were the accessibility; meaning it was close to home and inexpensive. Organizational factors that prohibited the completion of students included transportation and a

full range of support services, including child care for evening classes. The institutional factors at the tribal college that affected students most were those related to faculty, staff, culturally relevant instruction, and planning for nontraditional age learners. Student felt the flexible, accommodating, and supportive style of faculty plus the use of alternative styles of teaching (other than lecture) made the learning environment unique and positive. Staff members were often compared to the staff from other colleges that students had attended and were described as much more student oriented and customer friendly (Ness, 2001). Thus the interview protocol questions were based on what was found in the review of the literature.

Sample

This was a purposeful sample. The participants were selected by the following criteria:

1. All participants were Native Americans in Montana.
2. Out of the sample of n= 44 students, one-half or 22 American Indian students who started their higher education at a tribal college and received an Associate's Degree were included in the study. This means that approximately 3 American Indian Students from each of the tribal colleges who received an Associate's Degree and then transitioned to a four-year institution and completed a baccalaureate degree were included in this study.
3. Out of the sample of n=44, one-half or 22 American Indian Students who started their higher education at a four-year institution (non-native) and completed a baccalaureate degree were include in this study. This means that approximately 3 American Indian Students from each of the tribal colleges areas who started their higher education at a four-year institution and completed a baccalaureate degree were included in this study.
4. The students who attended the tribal college must have earned the two-year degree (Associate's Degree).

5. The student must have achieved the minimum GPA while attending the tribal college in order to attain an Associate's Degree.
6. The student must have earned a four-year degree.

Research Questions

Qualitative

The qualitative research was guided by the following central question: How can Native American students who attend Tribal Colleges in Montana better utilize all the educational resources offered at the Tribal College? These resources include: mentoring programs, library services, financial aid assistance, distance learning programs, disability services, scholarships' applications process assistance, assistance in use of computers and the skills needed, tutors, student organizations, and academic counselors.

Quantitative

The quantitative research was guided by the following questions:

1. What is the relationship, if any, between the responses of Native American students who completed an Associate's Degree at the tribal college and a Bachelor's Degree at a four-year institution, and those Native American students who went directly to a four-year college and obtained a Bachelor's Degree?
2. What are the differences, if any, between the responses from Native American students who completed an Associate's Degree at the tribal college and a Bachelor's Degree at a four-year institution, and those Native American students who went directly to a four-year college and obtained a Bachelor's Degree?

Data Collection

Data was collected using the researcher designed College's Services Satisfaction Survey (Appendix A). All of the n=44 students completed this satisfaction survey.

Interviews were conducted using the interview protocol (Appendix B) with all participants in the study. The interview protocol was used to facilitate these interviews and the protocol questions were grounded in the literature review (question rationale).

Participants all earned baccalaureate degrees. One-half of the participants began their post-secondary education at a Tribal College receiving an Associate degree, and completed the Bachelor's Degree at a four year institution. One-half of the participants began their post-secondary education at a four year institution and completed the Bachelor's Degree.

Procedures

The data was compiled from the responses participants made when completing a College's Services Satisfaction survey and responses to Interview Questions.

Quantitative Instrumentation for Satisfaction Survey

A Likert Scale (1932) will be used for the College's Satisfaction Survey to obtain the participant's responses and then investigate what resources contributed to a student's completing a Bachelor 's Degree (Appendix A). The following were the steps involved in the development of the Likert Scale:

(a) Statements are written that express an opinion or feeling about an event, object, or person; (b) Items that have clear positive and negative values (in the developer's judgment) are selected; (c) The statement are listed, and to the right of each statement is a space for the respondent to indicate degree of agreement or disagreement, using a

four-point scale such as: SA Strongly Agree, A Agree, D Disagree, and SD Strongly disagree.

[Respondents were asked to circle or check their level of agreement with each item]. (Salkind, 2009).

Quantitative Analysis for Satisfaction Survey

Once, the survey was completed by the participants; the interviews were conducted and an analysis was undertaken. The data from the satisfaction survey were ordinal data and the frequencies for the College's Services Satisfaction Survey were compiled.

This survey elicited responses that are dichotomous variables thus a Discriminate Function Analysis (DFA) was conducted with the responses. This statistical test required a continuous variable and dichotomous variables. For this study:

The Dependent or Continuous Variable is the continuum of: Strongly Agree-Agree-Disagree-Strongly Disagree.

The Independent or Dichotomous Variables for this study was: Tribal College start versus Four-year College when first began college.

Null Hypotheses

H_0: There will be no statistically significant or experimentally consistent relationship in the responses of students who completed an Associate's Degree at the Tribal College and a Bachelor's Degree at a four-year institution and those students who went directly to a four-year college and earned a Bachelor's Degree.

H_0: There will be no statistically significant or experimentally consistent differences in the responses students who completed an Associate's Degree at the Tribal College and a

Bachelor's Degree at a four-year institution and those students who went directly to a four-year college and earned a Bachelor's Degree?

The effect size of the mean difference in the two groups will be found and evaluated as to whether there is truly a difference. The Discriminate Function Analysis (DFA) will produce a midpoint cutoff that will be a predictor as to what group the response is more likely to have come from.

A Priori

For this study an alpha of .05 (α=.05) will be considered an appropriate level of consistency. Thus a p-value of equal to or less than .05 ($\alpha \leq .05$) the researcher will reject the null hypothesis, while a p-value greater than .05 ($\alpha > .05$) will fail to reject the null hypothesis.

Qualitative: Instrumentation for Interview Protocol and Analyses

The researcher interviewed all participants face-to-face utilizing the Interview Protocol in Appendix B. The protocol was piloted before the formal study took place. The interview questions were grounded in the literature review.

The research analyses followed Strauss and Corbin (1990) series of data analysis steps for grounded theory that consisted of open coding, axial coding, selective coding, and the generation of a conditional matrix. The researcher in this process attempts to saturate categories through "constantly comparing" responses with responses until the categories emerged and led to the development of categories.

Coding Procedures

Open Coding. In open coding the researcher formed initial categories of information about the phenomenon being studies by segmenting information. Within each category, the investigator found several properties, or subcategories, and looked for data to dimensionalize, or

show the extreme possibilities on a continuum of the property (Creswell, 1998). Creswell (2003) indicated for the reader to more clearly understand the data, tables are often used when displaying the results of research. Tables 2-9 will enumerate the open coding results for the tribal college start participants and Tables 10-16 will enumerate the open coding results for the non-tribal college start participants.

Axial Coding. In axial coding, the investigator assembled the data in a different way than open coding. This is presented using a coding paradigm or logic diagram in which the researcher identified a central phenomenon (or a central category about the phenomenon) explored causal conditions (categories of conditions that influence the phenomenon), specified strategies (the actions or interactions that result from the central phenomenon), and identified the context and intervening conditions (the narrow and broad conditions that influence the strategies), and delineated the consequences (the outcome of the strategies) for this phenomenon (Creswell, 1998). Tables 18-25 enumerates the results for the axial coding for the participants who started college at a tribal college. Tables 26-33 elucidates the axial code findings for the participants who started college at a non-tribal institution.

Selective Coding. In selective coding the researcher identified a *story line* and wrote a story that integrated the categories in the axial coding model. In the phase, conditional propositions (or hypotheses) are typically represented (Creswell, 1998). This researcher evinced separate selective coding for both the participants who began college at a tribal institution and for those who began college at a non-tribal institution.

Verification of Grounded Theory

Verification is confirming and establishing the truth. Terms in qualitative research that speak to validity and verification are terms such as “trustworthiness,” “authenticity,” and

"credibility" and it is a highly debated topic (Creswell, 2003). This researcher utilized strategies including checking for accuracy through member checks. These checks enabled the participants to know their information was accurately presented in the findings. Also, the researcher through self-reflection clarified any bias brought to the study in order to be able to present an open and honest narrative that articulated the essence of the participants' responses.

In addition, the researcher through self-reflection clarified any bias through self-reflection brought to the study, in order to be able to present an open and honest narrative that articulated the essence of the participants' responses.

Interpretation of Interview Data

The purpose of the interviews was to explore the similarities and differences in the participants' responses in using certain educational resources at a tribal colleges and non-tribal colleges. The qualitative data were organized into the following pre-set themes which formulated the sub-themes from the interview responses. These pre-set themes were derived from the literature review and synthesized from the literature for the questions' rationale.

The researcher combined all the emerging themes and patterns for the Interview Protocol responses. According to Creswell (1994) qualitative research is comparing, cataloging, and classifying data for understanding.

The responses of the Native American graduates of tribal colleges were compared to the responses garnered from American Indian graduates who did not attend a tribal college prior to successfully completing a baccalaureate degree.

Permissions

Letters to all seven tribal college presidents were sent and permission to conduct research with students from their community and Tribal College was secured (Appendix D). The final

results of this research will be shared with the tribal college administrations and to various stakeholders in an effort to guide them in assisting Native American students in becoming more successful in the four-year college environment.

This study followed the research protocol of The University of Montana Institutional Review Board and was conducted using their guidelines. In addition, this study was conducted within the guidelines of the Institutional Review Boards requirements at the seven Montana Tribal Colleges.

Role of the Researcher

"Qualitative research is interpretive research. As such, the biases, values, and judgment of the researcher become stated explicitly in the research report" (Creswell, 1994, p. 147). This show of openness is considered to be useful and positive, according to Locke, Spirduso, and Silverman (1987). The researcher will keep all information provided by the participants confidential. The researcher remained unbiased and guaranteed confidentiality to the participants. The study included participants from Montana's seven tribal college including Blackfeet Community College.

Since the researcher is an administrator at the Blackfeet Community college; the researcher has a specific contextual understanding the American Indian culture. The researcher has been working in administration at this tribal college for seven years. Prior to that time she was a teacher in an elementary school. Regardless of the fact that the researcher is Native American the data were analyzed objectively even when the researcher had acquaintance with a few of the individuals.

The participants signed a consent form agreeing to willingly be a part of the study (Appendix C). To protect the participants and to have minimal risks to those involved in the study; no names are reported for this study.

Summary

In Table 1 shows the applicable statistics regarding Native Americans and Alaskan Natives.

Table 1. *Education Trends and Statistics in Native American and Alaska Natives*

	Native American	White	Asian	Native Hawaiian/ Pacific Islander	Blacks	Hispanics
Did not complete High School	20%	9%	12%	11%	-	40%
Did not receive High School Diploma/Nor working towards one	12%	3%	2%	-	-	-
Obtained Graduate Degree	5%	11%	21%	No Difference	-	No Difference
Unemployment Rate on Reservations in 1997	11%	5.5%	5.5%	-	11%	-
Unemployment Rate/Did not complete High School	29%	12%	-	-	19%	9%
Enrollment at Colleges/Universities 2006 18-24 year olds	26%	41%	58%	-	33%	27%

Source: National Center for Education Statistics, Status and Trends in the Education of American Indians and Alaska Natives: 2008.Gitter & Reagan, 2002; Census of Population, 1990; Current Population Survey, 1997.

Native American students between the ages of 18-24 enrolled at colleges and universities in 2006 are a lower percentage compared to their counterparts, but a small difference when compared to Hispanic students. This American Indian population has a lower percentage rate of students who have obtained baccalaureate degrees. These milestones when not completed over a life time, contribute to the poverty, high unemployment, self-concept and a number of other problems the American Indians face.

The future for the American Indians will be bleak if there is not a way found to increase education levels in the Native American population. In a world economy it is important that

educational opportunities for all segments of society to be available and accessible. Not only will the United States workers, goods and services be competing with other U.S. businesses and organizations, but with other countries' work forces as well (Schweke, 2004). Employment and career opportunities for the 21st Century are demanding more, not less, education for people (Schweke, 2008). Without the benefit of Bachelor's degrees, individuals (both American Indian and Non-American Indian) will begin to have fewer and fewer career, employment and other opportunities in the 21st Century.

As Pavel et al (1998) found Native American students who have attended a Tribal Colleges and then transferred to a four-year institution; he/she is 75% more likely to complete the Baccalaureate Degree. It is important then to find out how the American Indian students feel about the services offered at the Tribal Colleges. Tribal Colleges are so important to helping the American Indian students enter into the higher education arena that whatever can be done to make the Tribal Colleges 'the best they can be' is vital. If some services are more helpful or some need to be adapted for the American Indian students, that information was discovered after analyses of the data received on the Tribal College's satisfaction survey and the interview questions.

CHAPTER FOUR - FINDINGS

Introduction

The design of this study required two different types of data reduction and interpretation. The researcher conducted the first phase of the study, the qualitative-grounded theory, and used interviews as the primary method of garnering data following an interview protocol. At the heart of the data analyses in qualitative research, were the coding processes that resulted in the data being organized into various categories. This study is a mixed-methodology, pre-dominantly a qualitative approach using the grounded theory tradition. According to Creswell (2003),

> in using multiple methods of collecting data and multiple forms of analyzing the data, the complexity of these designs call for a more clear and precise procedure for the study. This procedure is developed to help meet the need of the researcher to understand designs out of complex data and analysis. (p. 194)

The researcher conducted the second phase of the study, the quantitative, survey questionnaire and reports the results in a narrative as well as shown in Table 34 imbedded in the text with the final discriminate function analysis results. According to Creswell (1994),

> quantitative research is testing a theory composed of variables, measured with numbers and analyzed with statistical procedures. On the other hand, qualitative research is an investigative process that slowly makes sense of a social phenomenon by comparing, cataloging, and classifying the object of the study (Miles et al, 1984 as cited in Creswell). Both quality and quantity are categories. Both quantitative research and qualitative research are forms of research in which both are dealing with a problem that a researcher is trying to solve. (p. 197)

In addition, Creswell (1994) writes,

> Quantitative research is objective and singular apart from the researcher whereas qualitative research is subjective and multiple as seen by participants of the study. The quantitative researcher is independent from that being researched whereas the qualitative researcher interacts with that being researched. In the research process the quantitative researcher believes that the process of research is deductive, has cause and effect relationship, and states generalizations leading to prediction, explanations, and understanding. In contrast, the qualitative researcher believes that the process is inductive, identifies emerging themes, involves patterns, theories developed for understanding, and is correct and reliable through verification. (p. 145)

Phase One: Qualitative

The nature of qualitative study allows for flexibility in sorting through the information. Analysis is the interplay between the research and the data (Strauss & Corbin, 1998). Tesch (1990) offered eight steps to guide the researcher in data analysis:

1. Get a sense of the whole. Read the transcriptions carefully.
2. Select an interview and weigh its meaning –jot thoughts in the margin.
3. Read all documents and list all topics that have emerged.
4. Take this list, go back to the data and abbreviate the topics as codes and write the code next to the appropriate segments. See if new categories or topics emerge.
5. Find the most descriptive wording for your topics and turn them into categories by grouping topics that relate to each other.
6. Make a final decision on the abbreviation for each category and alphabetize these codes.

7. Assemble the data material belonging to each category in one place and perform preliminary analysis.
8. If necessary recode existing data (Tesch, 1990, pp. 142-145).

Qualitative Interviews

The qualitative research was guided by the following central question: How can Native American students who attend Tribal Colleges in Montana better utilize all the educational resources offered at the Tribal College? These resources included: mentoring programs, library services, financial aid assistance, distance learning programs, disability services, scholarships' applications process assistance, assistance in use of computers and the skills needed, tutors, student organizations, and academic counselors.

Grounded theory is when the researcher attempts to derive a theory by using multiple stages of data collection and the refinement and interrelationship of categories of information (Strauss & Corbin, 1990). Two primary characteristics of this design are constant comparison of data with emerging categories, and theoretical sampling of different groups to maximize the similarities and the differences of information.

Strauss and Corbin (1990) provided a series of data analysis steps for grounded theory that consists of open coding, axial coding, selective coding, and the generation of a conditional matrix. The researcher in this process attempts to saturate categories through "constantly comparing" responses with responses until the categories emerged and led to the development of categories.

Coding Procedures

Open Coding. In open coding the researcher formed initial categories of information about the phenomenon being studies by segmenting information. Within each category, the

investigator found several properties, or subcategories, and looked for data to dimensionalize, or show the extreme possibilities on a continuum of the property (Creswell, 1998). This data is enumerated in imbedded tables in the text. Table 2 enumerates the open coding process. Tables 3-9 show the data garnered during open coding for participants who began their college experience at a tribal college. Tables 10-16 show results of the data derived from open coding for participants who began their college experience at a non-tribal college.

Axial Coding. In axial coding, the investigator assembled the data in new ways subsequent to open coding. This data is presented using imbedded tables in the text, a coding paradigm in which the researcher identified a central phenomenon (or a central category about the phenomenon) explored causal conditions (categories of conditions that influence the phenomenon), specified strategies (the actions or interactions that result from the central phenomenon), and identified the context and intervening conditions (the narrow and broad conditions that influence the strategies), and delineated the consequences (the outcome of the strategies) for this phenomenon (Creswell, 1998). Table 17 specifies the process that was undertaken to code the data using the axial process. Table 18 summarizes the Causal Conditions and the Phenomena that were evinced from the data. Tables 19-25 illustrate the specific phenomenon and the context for the participants who began college at a tribal institution of higher education. Tables 26-33 specify the phenomenon and context for participants who began college at a non-tribal institution of higher education.

Selective Coding. The narrative report for this study has been developed through the inductive process of open coding, axial coding, and selective coding. The selective coding process afforded a holistic view of the seven phenomena and their properties for both the participants who began college at a tribal college and those who began college at a non-tribal

institution of higher learning. This holistic process recognized the interrelationship between the core category and the seven phenomena. The story line utilizes the findings from the various analyses that resulted during the axial coding process and focused on the seven phenomena. Describing the story line allows for the creation of a theoretical model or in essence a grounded theory. In selective coding the researcher identified a *story line* and wrote a story that is **bolded** and shows the integration of the categories in the axial coding model. In this analysis, conditional propositions (or hypotheses) are typically also represented (Creswell, 1998).

Interpretation of Interview Data

The purpose of the interviews was to explore the similarities and differences in the participants' responses in using certain educational resources at a tribal colleges and non-tribal colleges. The qualitative data were organized into the following pre-set themes which formulated the sub-themes from the interview responses. These pre-set themes were derived from the literature review and synthesized from the literature for the questions' rationale.

Tribal College Participants' Responses

Open Coding

Open coding involved the making of comparisons and the asking of questions (Strauss & Corbin, 1990). Utilizing an open coding methodology, data collected from this study were initially broken down into discrete parts and examined for relationships. This process revealed the following seven general categories: (a) Barriers,(b) Success,(c) Challenges, (d) Clubs, (e) Family support, (f) Family member with college experience, and (g) Military experience. These areas are supported by descriptive narratives derived from the data collected from the participants who initially attended a tribal college before transferring to a four year institution to

persist and earn a baccalaureate degree. Table 2 is a schema to visualize this open coding process.

Table 2
Open Coding Process

Categories	Properties	Dimension
Barriers Successes Challenges Clubs Family Support College in Family Military Experience	Driven by the data	Driven by the data

These seven categories were examined for their properties and dimensional range. Strauss and Corbin (1990) stated that the process of open coding stimulate the discovery not only of categories but also of their properties. Properties, within the open coding process, have been defined by Strauss and Corbin (1990) as "attributes or characteristics pertaining to a category" (p. 61). Properties were also analyzed to determine their dimensional range. The first of these seven categories to be examined were barriers.

***Barriers*.** The responses from those participants who initially attended a tribal college included the following in relationship to some of the barriers they encountered in pursuing higher education. Table 3 illustrates the category of Barriers for participants who initially started college at a Tribal College.

Table 3
Barriers and Dimensional Range participants who initially attended a tribal college

Category	Properties	Dimension
Barriers to College	Financial	(4) financial assistance
		(18) minimal assistance
	College	(6) minimal advising
		(16) no advising
	Personal	(9) minimal experience
		(13) very inexperienced

Each property and dimensional range of the category Barriers was supported with descriptive narratives. These narratives were compiled from data collected from each participant in this study and are listed in the table preceding the narrative. After data for each property have been reported in narrative form, the data is related to the literature review. This stage of the open coding process begins with the property: "Financial" and references Table 2.

Financial. Subjects expressed their experience with financial barriers while attending college and how it affected their ability to remain in college. One subject reported their experience with struggling to find permanent housing while attending college. A few subjects had a difficult time in not having childcare for their children. One person reported: "Trusting somebody with your kids is hard." One subject reported not having any transportation for more than one year and another female subject experienced health concerns which made concentrating on college a difficult task.

College. Subjects expressed their experience with not knowing the registration process which made the initial experience with college challenging. One subject reported not having an

academic plan which would have been helpful in guiding the student in the academic process. One subject reported: " I felt the tribal college would be more helpful than a four year college."

Personal. Subjects in the study expressed their personal experience with attending college at a young age and not knowing how to deal with certain situations. A few women reported that becoming a mother at a young age made going to college more challenging than if they did not have children. One female subject reported her experience with being involved in a violent relationship. She reported: "I returned home; that is where I felt safe. If I had custody of my son; we were protected there." One subject expressed their experience with putting barriers on self and how this could have been prevented by making better choices.

Success. The responses from those participants who initially attended a tribal college included the following in relationship to successes they encountered in pursuing higher education. Table 3 illustrates the category of success for participants who initially started college at a Tribal College.

Table 4
Success and Dimensional Range for participants who initially attended a tribal college

Category	Properties	Dimension
Success	Advising	(12) excellent advising
		(10) good advising
	Personal	(2) excellent assertiveness
		(20) good assertiveness

Advising. This stage of the open coding process begins with the properties: "Advising" and references Table 4. Subjects in this study expressed their experience with advising and how this affected their experience in college. Several subjects reported that having a good advisor was important. This subject reported: "I was fortunate they were helpful." Other subjects reported the

importance of having direction, a mentor, and student support services at the college to assist in their experience led to a positive experience and their success.

Personal. Subjects in this study expressed their experience with having to work extra hard to do well in college. Several participants did their own advising ; one subject reported: "I advised self and I knew already what classes I had to take." The subjects expressed that having to work hard and advise self-contributed to their success in college.

Challenges. The responses from those participants who initially attended a tribal college included the following in relationship to some of the barriers they encountered in pursuing higher education. Table 5 illustrates the category of challenges for participants who initially started college at a Tribal College.

Table 5
Challenges Faced and Dimensional Range for participants who initially attended a tribal college

Category	Properties	Dimension
Challenges	College	(7) very minimal academic counseling
		(15) no academic counseling
		(4) very minimal mentoring
		(18) no mentoring
	Personal	(3) Very minimal academic plan
		(19) no academic plan

College. This stage of the open coding process began with the property: "College" and references Table 5. Subjects in this study expressed their experience with having no academic counseling and felt this would have made a difference in their experience when enrolling in college. Subjects reported that having a mentor would have helped them do better in college. Not having these resources made going to college more challenging for certain subjects.

Personal. Subjects expressed their challenges with not having an academic plan. This outline would have been beneficial in their experience with college. One subject reported: "I think the lack of assistance in providing the academic plan; no direction there." For several subjects in this study they found this difficult in not having some kind of direction to guide them in their program of study.

Clubs. The responses from those participants who initially attended a tribal college included the following in relationship to participating in clubs while pursuing higher education. Table 6 illustrates the category of club participants for those participants who initially started college at a Tribal College.

Table 6
Clubs Participation and the Dimensional Range for participants who initially attended a tribal college

Category	Properties	Dimension
Club Participation	Native American Groups	(16) in campus groups
		(6) not in campus groups
	Socialization	(9) sense of belonging
		(13) not belonging
	Support	(4) stipend
		(18) no stipend

Native American Groups. This stage of the open coding process began with the property: "Native American Groups" and references Table 6. Subjects in this study expressed their positive experiences with club participation on campus. In being a part of certain groups, several subjects expressed their satisfaction when connecting with Native American students, and in peer mentoring groups among the students. Several subjects reported: "It made going to college more enjoyable." "You feel part of the school/community." "It was a good support system." The

subjects reported that being in a club helped them to connect and bond with other Native American students. This outlet was beneficial to all students who joined a group on campus.

Socialization. Subjects in this study expressed their experience in socializing with other students: this led to exploring other educational possibilities; gave them a sense of belonging to the campus community; and encouraged them to participate in enjoyable events. One subject reported: "I knew what was going on; on campus." The subjects expressed how important it was to connect not only to other Native American students but the campus as a whole.

Support. Subjects in this study expressed their experiences with other groups. Some groups offered stipends to the students which in return gave them an additional incentive to continue to do well in college. One female subject reported: "We got a small stipend and so that was helpful and then all the other ones helped me build up a support group."

Family Support. The responses from those participants who initially attended a tribal college included the following in relationship to family while pursuing higher education. Table 7 illustrates the category of family support for those participants who initially started college at a Tribal College.

Table 7
Family Support and the Dimensional Range for participants who initially attended a tribal college

Category	Properties	Dimension
Family Support	Support	(16) family support
		(6) no family support
	Personal	(11) assertiveness
		(11) no assertiveness

Support. This stage of the open coding process begins with the property: "Support" and references Table 6. Subjects in this study expressed their experience with family support while attending college. Many of the subjects had family support in the areas of moral, childcare, financial, and a few subjects did not have any support from family who were unable to help. One subject reported: "I had a lot of support from my mother." The subjects who had family support were motivated to do well in college, but students who did not have family support still had the drive to do well in college too.

Personal. Subjects in this study expressed their experience with not having family support while attending college. Although this was a challenge; the subjects who did not have family support remained motivated to attain higher education. One subject reported: "There was not moral encouragement but I found my own way." Subjects who did not have the family support still found a motivating force to find a way to pursue higher education.

College in Family. Table 8 shows the results of comments from the participants who had a family member who had experience in college. The dimensions of this category ranged from some with college experience to others who did not have college experience in family (extended family or community).

Table 8
College in Family and the Dimensional Range for participants who initially attended a tribal college

Category	Properties	Dimension
College in Family	College experience	(21) some family members have college experience
		(1) no family members with college experience

College in Family. This stage of the open coding process begins with the property: "College in Family" and references Table 8. Some participants had a family member with college experience and others did not have family members with college experience. One subject reported: "Both of my parents went to college but neither one of them finished." Although some family members did not finish college; many of the subjects expressed their motivation to complete their degree. Other subjects who had a family with college experience expressed the same motivation.

Military Participation. Regarding military participation and the dimensional range for participants who initially attended a tribal college. The responses shown in Table 9 ranged from some who had military experience to some who did not have military experience.

Table 9
Military Experience and the Dimensional Range for participants who initially attended a tribal college

Category	Properties	Dimension
Military	College	(2) had financial assistance
		(20) had no financial assistance
	Personal	(2) some participants have military experience
		(20) no military experience

College. This stage of the open coding process begins with the property: "College" and references Table 8. Subjects in this study reported that having military experience allowed them the opportunity to get financial assistance to attend college. One subject reported: "The GI bill was available." Financial assistance from the military was helpful to this subject.

Personal. Several subjects reported that they had military experience and other subjects did not have military experience. One subject reported: "The military helped me with the

decision to go to college." Many subjects from this particular group did not have military experience.

Non-Tribal College Participants' Responses

Open Coding

In this section there were seven general areas that were commented on by the participants. The areas of responses were: (a) Barriers, (b) Success, (c) Challenges, (d) Clubs, (e) Military experience, (f) Family support, and (g) Family member with college experience. These areas are supported by descriptive narratives derived from the data and collected from the participants who initially attended a non- tribal college to persisted to earn a baccalaureate degree.

Barriers. The responses from the non-tribal college participants included the following in relationship to some of the barriers they encountered in pursuing higher education. Table 10 illustrates the category of barriers for participants who initially started college at a non-Tribal College.

Table 10
Barriers and Dimensional Range participants who initially attended a non-tribal college

Category	Properties	Dimension
Barriers to College	Financial	(7) had financial barriers
		(15) no financial barriers
	College	(3) had academic obstacles
		(19) minimal academic obstacles
	Personal	(2) had some college awareness
		(20) minimal college awareness

Each property and dimensional range of the category Barriers is supported with descriptive narratives. These narratives are derived from data collected from each subject in this study and are listed in the table preceding the narrative. After data for each property have been reported in narrative form, the data were then related to the literature review. This stage of the open coding process begins with the property: "Financial" and references Table 10.

Financial. Subjects in this study expressed their experience with financial barriers in pursuing higher education. One subject reported: "We overcome them by trying to get a part time job… and I did work study then at the time it was my first time away from home. I learned a lot trying to do everything on my own." Other subjects experienced financial barriers and got by with meager resources.

College. Subjects expressed their experience with academic obstacles such as feeling a sense of culture shock, being an older student, leaving the reservation for the first time, and being required to take remedial courses. A few subjects encountered only minimal academic obstacles. One subject reported: "I had no personal barriers; no because both my parents went to college and I always knew I was going to college."

Personal. Subjects expressed their experience with personal barriers such as being a young student, looking for guidance on campus, and finally lack of moral and financial support. Very few subjects had a good transition into a non-tribal college but a majority of the subjects had reported they did. Finally, one subject reported: "I guess when you are ready to go to college you put your whole mind, body, and soul into going to college but if you are not ready then obstacles overcome you."

Success. The responses from the non-tribal college participants indicated certain variables contributed to their successes as they were pursuing higher education. Table 11 illustrates the category of success for participants who initially started college at a non-Tribal College.

Table 11
Success and Dimensional Range for participants who initially attended a non-tribal college

Category	Properties	Dimension
Success	Advising	(5) had effective advising
		(17) had minimal advising
	Personal	(4) had effective academic guidance
		(22) had minimal academic guidance

Advising. Subjects in this study expressed their experience with staff helpful in providing direction, having a set academic plan, and having a mentor. Several of the subjects had advisors and had a good experience for their advising experience. One subject reported: "It was helpful; I found it helpful in providing direction. Helpful in providing direction in pursuing my degree program."

Personal. Subjects expressed their experience in being a mentor, meeting in small groups on a regular basis, and had Native American peers. Having this support made the experience for many of subjects a good one. Very few of the subjects did not have academic guidance from peers and other students. One female subject reported: "I support any kind of programs that help Indian students at the university level and I understand trying to better prepare you know even at high school, tribal college, community college level; trying to better prepare them for what they are going to face."

Challenges. The responses from the non-tribal college participants indicated certain variables that were challenges. Table 12 illustrates the category of challenges for those participants who initially started college at a non-Tribal College.

Table 12
Challenges Faced and Dimensional Range for participants who initially attended a non-tribal college

Category	Properties	Dimension
Challenges	College	(2) had minimal advising
		(20) had no advising
		(2) had very minimal mentoring
		(20) had no mentoring
	Personal	(1) had assertiveness
		(21) had no assertiveness

College. Subjects in this study expressed their experience with no mentoring, no advisor, and ineffective counseling when a student relied on the counseling in their pursuing higher education. Subjects who had an advisor expressed their satisfaction with college. One subject reported this on the experience:

> My advisor he is the one that did my plan of study he explained each class. We had group meetings about the classes; he explained everything. He laid everything out; he was awesome. He was also part of Indian country; he was a real significant person.

Personal. Subjects expressed their experience with not being a confident person and having to help yourself. Some subjects in this study were more assertive in their educational experience than others. One subject reported:

> You got to ask questions; you got to talk to people. People are not going to hold you by the hand. They are going to make you come; you know you just. You got to take care of yourself so to speak.

Several subjects did follow this path in getting help but others had a more difficult time in taking the lead in this area.

Clubs. The responses from the non-tribal college participants mentioned their involvement in clubs. Table 13 illustrates the category of club participation for those participants who initially started college a non-Tribal College.

Table 13
Club Participation and the Dimensional Range for participants who initially attended a non-tribal college

Category	Properties	Dimension
Club Participation	Native American Groups	(13) had assertiveness
		(9) had minimal assertiveness
	Socialization	(5) involved in groups
		(17) not involved in groups

Native American Groups. Subjects in this study expressed their experience with being in a Native American group on campus. Several subjects expressed their experience with the groups that led them to resources that were available to minority students. They had the ability to connect with other Native American students which allowed them to relate to other students who were facing the same obstacles. One subject reported: “It helped me to socialize with the people in my degree area because a lot of them helped each other with our projects.” Another person noted: “I found other students who were facing the same obstacles as me who were in more of the science based courses.” The two subjects had to take charge of their educational experience

to find other resources that resulted from being in a campus club. “I was in AISES; it was in AIRO where they were both research opportunities. I was in those programs.”

Socialization. Subjects in this study expressed their experience in joining clubs which help them to feel more connected. They had study sessions with other students, the ability to interact with other students, and felt a sense of family which all resulted from joining clubs. One subject reported: “It helped me to feel more connected. That is true; it also opened up some opportunities for scholarships that I may not have been aware of.” The ability to socialize helped the subjects to not only connect to other Native American students but to connect to other resources from being in a campus club. Another subject reported: “Totally helped me; interact and you know totally networking, mingling, and socializing.”

Family Support. The responses from the non-tribal college participants indicated the support they received from their family in pursuing higher education. Table 14 illustrates the category of family support for those participants who initially started college at a non-Tribal College.

Table 14
Family Support and the Dimensional Range for participants who initially attended a non-tribal college

Category	Properties	Dimension
Family Support	Positive Support	(19) had support (3) had no support

Family Support. Subjects in this study expressed their experience with having family support and not having family support. One subject reported:

> Both my parents were living; they helped with moral and financial support. I would talk about quitting and they would come see me. My dad’s dream was to have one of his children to have four year degree and I did that when he was alive; he cried it was awesome.

A few subjects did not have family support one subject reported: “Both parents deceased while attending college.” Although his parents were deceased; this subject continued even further and has finished a master’s degree in journalism.

College in Family. The responses from the non-tribal college participants about members of family having college experience. Table 15 illustrates the category of college in family for those participants who initially started college at a non-Tribal College.

Table 15
College in Family and the Dimensional Range for participants who initially attended a non-tribal college

Category	Properties	Dimension
College in Family	College Experience	(20) had some members with college experience (2) had no college experience

College Experience. Subjects in this study expressed their experience with having family with college experience and not having family with college experience. One subject reported that he was: “First generation to go to college.” Other subjects had no family with college experience but they continued to finish a minimum of a four year degree.

Military. The responses from the non-tribal college participants indicated if they were in the military. Table 16 illustrates the category of military for those participants who initially started college at a non-Tribal College. Table 16

Military Experience and the Dimensional Range for participants who initially attended a non-tribal college

Category	Properties	Dimension
Military	College	(5) had financial support (17)had no financial support
	Personal	(3) had some military experience (19) had no military experience

College. Subjects in this study expressed their experience with having military experience or not having military experience. One subject reported: “My GI bill reduced my debt so I got to go; I was fortunate to graduate.” Other subjects did not have military experience but continued to go to college.

Personal. Subjects expressed their experience with how being in the military affected their lives to other subjects who were not in the military. One gentleman reported:

> Changed my life completely; it showed me basically that I could accomplish things, effort, discipline, and seeing things through. As a single parent; I really wanted to make an impact on my children’s live and show them that if I could do this then you can do this. Lead by example.

Other subjects did not have this experience but continued to go to college.

Tribal College

Axial Coding

Through the previously mentioned process of open coding, data have been examined resulting in the identification of seven categories. Using this process of axial coding, the data were de-contextualized into segments and those segments analyzed. After their analysis, the segments were re-contextualized in new ways. Following the process outlined by Strauss and Corbin (1990), the re-contextualized of this data identified properties for each category. The properties were then listed with their dimensional range.

Analyzing the re-contextualized data revealed phenomena relate to a causal condition and the properties of that phenomenon. These relationships and properties emerged from axial coding process and are referred to as: “Causal Condition,” “Phenomenon,” “Context,” “Intervening

Condition," "Action/Interaction," and "Consequence." These terms are briefly explained below. For a more in-depth study of context and its features, see Strauss and Corbin (1990).

Causal Condition. Causal conditions are events that lead to the occurrence or development of a phenomenon (Strauss & Corbin, 1990). The causal condition for all categories, in this study, is the overall educational experience of each individual at a tribal and non-tribal college. It is the experience of the individual that leads to the occurrence or development of each phenomenon.

Phenomenon. A phenomenon is a central idea or event (Strauss & Corbin, 1990). The phenomenon for this study is each category that emerged during the open coding process. Seven specific phenomena emerged: (a) barriers, (b) success, (c) challenges, (d) clubs, (e) family support, (f) family member with college experience, and (g) military experience for each individual.

Context. According to Strauss and Corbin (1990), context is "the specific set of properties that pertain to a phenomenon along a dimensional range" (p. 96). Each phenomenon in this study is linked to the context of that phenomenon which emerged as the data were separated into segments and then put back together in a process referred to as re-contextualization by Tesch (1990). For the purpose of this study, each context has an intervening condition.

Intervening Condition. Strauss and Corbin (1990) referred to an intervening condition as a structural condition that pertains to a phenomenon. Intervening conditions are influenced by actions and/or interactions.

Action/Interaction. Strategies that are employed by individuals to manage, handle, carry out, or respond to a phenomenon are referred to by Strauss and Corbin (1990) as action/ interaction strategies.

Consequence. Strauss and Corbin (1990) defined consequences as outcomes or results of action and interaction. For this purpose of this study, consequences are listed directly below the action/interaction statements.

Table 17

Axial Coding Process

causal condition → phenomenon → context → intervening condition → action/interaction → consequence

This process is an analytical flow beginning with the relationship of a causal condition to a phenomenon. Phenomena are then related to context, which identify specific features of each phenomenon. Strategies employed to respond to specific phenomenon are listed under action/interaction. These strategies are affected by the intervening conditions. The process concludes with consequence which is the result of action and interaction.

The first procedure in axial coding is the identification of a causal condition and the phenomena of that causal condition. Table 18 presents the causal condition and phenomena identified during the axial coding process of this study.

Table 18

Causal Condition and Phenomena

Causal Condition	Phenomena
educational experiences	barriers to college success challenges club participation family support family member with college military experience

Each phenomenon has emerged from the synthesis of various contexts and the features of each context. For the purpose of this study, the features of each context have been labeled: intervening condition, action/interaction, and consequence.

To better understand the analyses that has taken place so far in the axial coding process, each phenomenon and the context of that phenomenon is presented in a "Table." Tables 19-25 indicate the axial coding for participants who began higher education at a tribal college. Following the tables for each phenomenon is the context of that phenomenon and the features of each context. The features of each context include: "Intervening Condition," "Action/Interaction," and "Consequence." The first phenomenon to be explored in this stage of axial coding process is "Barriers to college."

Phenomenon of Barriers to College

The phenomenon of barriers to college has emerged from the syntheses of three contexts. Table 19 lists the phenomenon of barriers to college as well as the three contexts from which the barriers to college phenomenon emerged for participants.

Table 19

The Phenomenon of Barriers to College in Context

Phenomenon	Context
barriers to college	Participants experienced financial barriers in pursuing higher education.
	Participants encountered academic barriers in college.
	Participants experienced personal barriers in pursuing higher education.

Listed below are the three contexts for the phenomenon of barriers to college and the features of each context.

Barriers Context #1: Participants in this study experienced financial

barriers.

Intervening Condition

- Participants viewed attaining higher education as a realistic goal.

Action/Interaction

- Participants managed to get through the financial hardship.

Consequence

- Participants reached their educational goals.

Barriers Context #2: **Participants in this study experience academic barriers.**

Intervening Condition

- Participants had wanted more academic experiences.

Action/Interaction

- Participants sought out assistance in the academic processes.

Consequence

- Participants overcame the academic deficiencies.

Barriers Context #3: **Participants in this study experienced personal barriers.**

Intervening Condition

- Participants encountered various personal problems.

Action/Interaction

- Participants managed to get through the personal hardships.

Consequence

- Participants were able to persist in college.

Table 20
The Phenomenon of Success in Context

Phenomenon	Context
success	Participants in this study experience positive advising and mentoring. Participants in this study took ownership of their experience and educational goals.

Success Context #1: **Participants in this study experienced positive advising and mentoring.**

Intervening Condition

- Participants would not let misinformation deter them.

Action/Interaction

- Participants were assertive and asked for help.

Consequence

- Participants experiences contributed to their persistence to obtain a baccalaureate degree.

Success Context #2: **Participants in this study took ownership of their experience and educational goals.**

Intervening Condition

- Participants realized they needed educational assistance.

Action/Interaction

- Participants were assertive and either figured it out with help or alone.

Consequence

- Participants assertiveness contributed to their college success.

Table 21

The Phenomenon of Challenges in Context

Phenomenon	Context
challenges	Participants experienced challenges in not having academic counseling and no mentoring program. Participants experienced challenges in not having an academic plan.

Challenges Context #1: **Participants experienced challenges in not having academic counseling and no mentoring program**.

Intervening Condition

- Participants required more assistance and direction than others.

Action/Interaction

- Participants did not experience the assistance that was needed.

Consequence

- Participants encountered challenges in pursuing higher education but still continued with education.

Challenges Context #2: **Participants experienced challenges in not having an academic plan.**

Intervening Condition

- Participants were not offered any assistance in creating an academic plan.

Action/Interaction

- Participants proceeded to take classes even though they had no specific plan for their study

Consequence

- Participants experienced challenges in not knowing the program of study; feel they could have benefited from a plan yet still persisted in education.

Table 22

The Phenomenon of Club Participation in Context

Phenomenon	Context
club participation	Participants in this study felt they were successful in college by joining Native American clubs, peer mentoring groups. Participants in this study felt they were successful in college by socializing with other Native American students. Participants had academic and personal support from other Native American students.

Club Participation Context #1: **Participants in this study felt they were successful in college by joining Native American clubs and peer mentoring groups.**

Intervening Condition

- Participants Native culture is important and the interrelationships they have with other Native students with cultural values similar to theirs.

Action/Interaction

- Participants sought out campus activities and resources that involved other Native students.

Consequence

- Participants felt less isolated because of clubs and peer mentoring groups and interacting with other Native American students.

Club Participation Context #2: Participants in this study felt they were successful in college by socializing with other Native American students.

Intervening Condition

- Participants culture values family and is community centered.

Action/Interaction

- Participants felt a need to try to recreate similar relationships on campus.

Consequence

- Participants met their needs for family by socializing with other Native American students on campus.

Club Participation Context #3: Participants in this study had academic and personal support from other Native American students.

Intervening Condition

- Participants felt a kinship with other Native students similar to relationships they had at home with family and community both personal and academic.

Action/Interaction

- Participants sought out peer assistance from other Native students both for academic and personal situations that arose.

Consequence

- Participants benefited from these interactions and relationships.

Table 23

The Phenomenon of Family Support in Context

Phenomenon	Context
family support	Participants in this study had supportive families while attending college. Participants found their own way.

Family Support Context #1: **Participants in this study had supportive families while attending college.**

Intervening Condition

- Families and community are very important to Native students.

Action/Interaction

- The participant's families were supportive to them while in college through various means (letters, phone conversations, connections, resources).

Consequence

- The participant's educational experience was more positive with the support from family and it helped them to focus on their studies.

Family Support Context #2: **Participants found their own way.**

Intervening Condition

- Family and community are basic to Native cultures.

Action/Interaction

- Family support was not available but other groups were available.

Consequence

- These other relationships helped sustain the student in their endeavors to continue in education.

Table 24

The Phenomenon of College in Family in Context

Phenomenon	Context
college in family	Participants had college experience in family. Participants did not have family members with college experience.

College in Family Context #1: Participants in this study had college experience in family.

Intervening Condition

- The participants had an awareness of college experience because they had friends, family, extended family, or community members they related to who had good college experience.

Action/Interaction

- Participants viewed higher education as important because of the close connections to those who had experienced college.

Consequence

- Participants had a positive experience and persisted to earn a baccalaureate degree.

College in Family Context #2: Participants in this study did not have family members with college experience.

Intervening Condition

- The participants did not have an awareness of college experience from family, extended family, friends, or community members who had experienced college.

Action/Interaction

- Participants needed to find an intrinsic reason to continue with their education.

Consequence

- Participants remained in college.
- Participants with no family or close community members with college experience felt they worked harder at attaining higher education.

Table 25

The Phenomenon of Military Experience in Context

Phenomenon	Context
military experience	Participants in this study were in the military and were able to take advantage of the GI bill. Participants were not in the military.

Military Experience Context #1: **Participants in this study were in the military and were able to take advantage of the GI Bill.**

Intervening Condition

- Participants viewed this experience as a possible option to attain education.

Action/Interaction

- Participants made the choice to join the military.

Consequence

- Participants had the additional resources that were due them because of the GI Bill and helped them pay for college.

Military Experience Context #2: **Participants in this study were not in the military.**

Intervening Condition

- Participants may have not considered the military or did not view this as an option to attain education.

Action/Interaction

- Participants had to find other options to pay for school.

Consequence

- Participants remained in college.
- Participants were not eligible for military benefits.

Axial Coding

This process is an analytical flow beginning with the relationship of a causal condition to a phenomenon. Phenomena are then related to context, which identify specific features of each phenomenon. Strategies employed to respond to specific phenomenon are listed under action/interaction. These strategies are affected by the intervening conditions. The process concludes with consequence which is the result of action and interaction.

The axial coding was completed for the tribal college participants in the previous section and the researcher followed the same process for non-tribal college participants.

The first procedure in axial coding is the identification of a causal condition and the phenomena of that causal condition. Tables 26-33 indicate the axial coding results for participants who began higher education at a non-tribal college. Table 26 presents the causal condition and phenomena identified during the axial coding process of this study.

Table 26

Causal Condition and Phenomena

Causal Condition	Phenomena
educational experiences at non-tribal college	barriers to college success challenges club participation family support family member with college military experience

Table 27 indicates the phenomenon of barriers that emerged from the axial coding for the non-tribal college participants and the context that emerged.

Table 27

The Phenomenon of Barriers to College in Context

Phenomenon	Context
barriers to college	Participants experienced financial issues in pursuing higher education. Participants encountered academic barriers in college. Participants experienced personal obstacles in education.

Barriers to College Context #1: Participants in this study experienced financial issues.

Intervening Condition

- Participants viewed attaining higher education as a reasonable goal.

Action/Interaction

- Participants managed to get work through the financial hardship.

Consequence

- Participants reached their educational goals.

Barriers to College Context #2: Participants in this study experienced academic barriers.

Intervening Condition

- Participants had wanted more academic experiences.

Action/Interaction

- Participants sought out assistance in the academic processes.

Consequence

- Participants overcame the academic deficiencies.

Barriers to College Context #3: Participants in this study experienced personal barriers.

Intervening Condition

- Participants encountered various personal problems.

Action/Interaction

- Participants managed to get through the personal hardship.

Consequence

- Participants were able to persist in education to obtain a baccalaureate degree.

Table 28 indicates the phenomenon of success that emerged from the axial coding for the non-tribal college participants and the contexts that emerged.

Table 28

The Phenomenon of Success in Context

Phenomenon	Context
success	Participants experienced good advising. Participants had a good experience with personal experiences at college.

Success Context #1: **Participants in this study had positive experiences with the advising staff.**

Intervening Condition

- Participants would not allow misinformation to discourage them.

Action/Interaction

- Participants were assertive in seeking out resources and assistance.

Consequence

- Participants experiences contributed to their determination to obtain a four year degree.

Success Context #2: **Participants in this study had a positive experience with being a mentor and being in a peer mentoring group.**

Intervening Condition

- Participants realized their own capabilities along with needing additional educational assistance.

Action/Interaction

- Participants received assistance and were a mentor to other students.

Consequence

- Participants experience contributed to their persistence in college.

Table 29 indicates the phenomenon of challenges that emerged from the axial coding for the non-tribal college participants and the contexts that emerged.

Table 29

The Phenomenon of Challenges in Context

Phenomenon	Context
challenges	Participants experienced not having an advisor or mentor.
	Participants experienced personal challenges.

Challenges Context #1: Participants in this study did not have an advisor or mentor.

Intervening Condition

- Participants were not introduced to an advisor or mentor.

Action/Interaction

- Participants did not experience the assistance that was needed.

Consequence

- Participants experienced academic challenges in not having an advisor or mentor and they could have benefited from these resources.
- Participants still persisted in education to obtain a four year degree.

Challenges Context #2: Participants in this study experienced personal challenges.

Intervening Condition

- Participants encountered various personal issues.

Action/Interaction

- Participants found help to accommodate the hardships they encountered.

Consequence

- Participants were able to overcome personal problems and persist in college.

Table 30 indicates the phenomenon of club participation that emerged from the axial coding for the non-tribal college participants and the contexts that emerged.

Table 30

The Phenomenon of Club Participation in Context

Phenomenon	Context
club participation	Participants in this study participated in Native American clubs, peer mentoring groups and felt these associations helped them to be successful in college. Participants in this study felt they were successful in college by socializing with other Native American students. Participants were not involved in any clubs.

Club Participation Context #1: **Participants in this study participated in Native American clubs, peer mentoring groups and felt these associations helped them to be successful in college.**

Intervening Condition

- Participants Native identity is important and having interrelationships with other Native students with cultural values similar to theirs.

Action/Interaction

- Participants sought out campus activities and resources that involved other Native students.

Consequence

- Participants felt less isolated because of clubs and peer mentoring groups and interacting with other Native American students.

Club Participation Context #2: **Participants in this study felt they were successful in college by socializing with other Native American students**.

Intervening Condition

- Participant culture is centered on family and community based activities.

Action/Interaction

- Participants needed to have similar relationships on college campus.

Consequence

- Participants were successful in meeting their needs for family in socializing with other club members.

Club Participation Context #3: Participants in this study were not involved in clubs.

Intervening Condition

- Participants were not in any clubs.

Action/Interaction

- Participants made the personal choice not to join a club due to do various reasons.

Consequence

- Participants did not have this college experience yet still persisted in education.

Table 31 indicates the phenomenon of challenges that emerged from the axial coding for the non-tribal college participants and the contexts that emerged.

Table 31

The Phenomenon of Family Support in Context

Phenomenon	Context
family support	Participants experienced positive family support.
	Participants experienced no support from family.

Family Support Context #1: Participants experienced positive family support.

Intervening Condition

- Families are very important to Native students.

Action/Interaction

- Participants received positive support from their families while in college thorough various means (letters, phone conversation, connections)..

Consequence

- Participants college experience was more positive with the support from their family.

Family Support Context #2: **Participants in this study did not have family support.**

Intervening Condition

- Family and community are essential to Native cultures.

Action/Interaction

- Family support was not available but other groups were available.

Consequence

- The important relationships helped the student to continue in college.

Table 32 indicates the phenomenon of college in family that emerged from the axial coding for the non-tribal college participants and the contexts that emerged.

Table 32

The Phenomenon of College in Family in Context

Phenomenon	Context
college in family	Participants did have some family with college experience. Participants did not have family members with college experience.

College in Family Context #1: **Participants in this study did have some family with college experience.**

Intervening Condition

- The participants had an awareness of college experience because they had family, friends, extended family, or community members they could relate to.

Action/Interaction

- Participants viewed higher education as important because of the close connection to those who had experienced college.

Consequence

- Participants had a positive experience and persisted to a baccalaureate degree.

College in Family Context #2: **Participants in this study did not have family members with college experience.**

Intervening Condition

- The participants did not have an awareness of college experience from family, friends, extended family, or community members who had college experience.

Action/Interaction

- Participants needed to find their essential reason to continue with their education.

Consequence

- Participants remained in college.
- Subjects worked harder at attaining higher education as a result of not having family with college experience.

Table 33 indicates the phenomenon of military experience that emerged from the axial coding for the non-tribal college participants and the contexts that emerged.

Table 33

The Phenomenon of Military Experience in Context

Phenomenon	Context
military experience	Participants had help with college debt.
	Participants learned discipline and the experience had a positive impact on kid's lives.
	Participants had no military experience.

Military Experience Context #1: **Participants had help with college debt.**

Intervening Condition

- Participants looked at joining the military as a possible option.

Action/Interaction

- Participants made the choice to join the military.

Consequence

- Being in the military helped with college debt.

Military Experience Context #2: **Participants in this study learned discipline and the experience had a positive impact on kid's lives.**

Intervening Condition

- Military could lead to a career.

Action/Interaction

- Participants made the choice to join the military.

Consequence

- Participants had learned discipline and this made a positive impact on kid's lives.

Military Experience Context #3: **Subjects in this study were not in the military.**

Intervening Condition

- Military was not an option.

Action/Interaction

- Participants did not enlist in the military.

Consequence

- Participants were not eligible for military benefits.
- Participants still persisted in education.

Tribal College Participants

Selective Coding

Using the microanalysis of the axial coding process, data were examined in a macro analysis approach for the selective coding process. This process allows a person to gain the complete benefit and viewing the data more holistically in the analyses during the selective coding process. From this more objective position, data were interpreted within the construct which developed through the open and axial coding processes. In addition, the researcher also used these aforementioned processes to contribute to complex analyses of the data, and in this section interconnected themes in a storyline and eventually developed them into a theoretical model (Creswell, 2003).

The narrative report for this study has been developed through the inductive process of open coding, axial coding, and selective coding. The selective coding process afforded a holistic view of the seven phenomena and their properties. This holistic process recognized the interrelationship between the core category and the seven phenomena. The story line utilizes the findings from various analyses that resulted during the axial coding process and focused on the seven phenomena. Describing the story line allows for the creation of a theoretical model or in essence a grounded theory (Creswell, 2003).

Within this story is the context of each phenomenon. To assist with this story line, concepts that are related to the context of the phenomena are identified with *italicized* and **bold** typeface. This story line and the interrelationships of the phenomena are presented in narrative form in the following section: "Native American Students Persisting in Higher Education."

Native American Students Persisting in Higher Education-Tribal College start

There were Native American students who wanted to attend college and began their quest for higher education in a Tribal College and received an Associate Degree. They then continued their higher education and completed a Baccalaureate Degree. In these endeavors they encountered some challenges. These students viewed attaining higher education as a realistic goal and a personal goal which would lead to a better quality of life. This opportunity to attend college afforded both personal and professional gains and satisfaction.

An initial obstacle that the students encountered was ***financial barriers.*** However, the students managed to get through the financial hardship and continued to reach their educational goals. Other challenges in this timeframe included ***academic and personal barriers.*** The students sought more academic experiences. Those who found assistance in the academic process were

more able to overcome academic difficulties with this help. Participants also overcame personal issues in their lives which allowed them to persist in college.

The students had success in their personal experiences while in college. Some students experienced ***positive advising and mentoring.*** These students would not let misinformation deter them and discovered they had to be more assertive in asking for help. This understanding eventually led to these participants being persistent in college and was instrumental in helping them obtaining an associate degree and eventually a baccalaureate degree. Other students knew they needed educational assistance but without help offered they ***took ownership of their educational experience and educational goals***. In the end, their ability to figure out on their own their venture into higher education enabled their college success.

In exploring the students' experiences with college; academic challenges often emerged and sometimes were complicated by the personal obstacles mentioned earlier. The students ***experienced challenges in not having academic counseling and not being involved in a mentoring program.*** This type of assistance was needed and without it eventually led to additional challenges, and yet, they persisted with their education. Some of these students were not offered assistance in creating a plan of study. Without this mentoring they were tentative regarding their classes and experienced uneasiness in ***not having an academic plan.*** The students proceeded although they had no specific plan for their degree program. Although, the students experienced challenges in not having help to assure them of their program of study, felt they could have benefited from a plan, yet still persisted in education.

In needing to fulfill more of their personal needs; some of the students sought out campus activities and resources that involved other Native students. ***Students felt they were successful in college by joining Native American clubs and peer mentoring groups.*** The students felt less

isolated because of clubs, peer mentoring groups, and the opportunity to interact with other Native American students. These students' culture values family and is community centered so the students felt a need to try to recreate similar relationships on campus. ***They felt they were successful in college by socializing with other Native American students.*** Subjects sought out peer assistance from other Native students both for academic and personal situations that arose. ***Subjects in this study had academic and personal support from other Native American students.*** In developing these relationships the students felt a kinship with other Native students similar to relationships they had at home with family and community in both personal and academic environments. Having these relationships contributed to their ability to persist in higher education.

Some students in this study had supportive families while attending college. Family and community are very important to Native American students. The students' families were supportive to them while in college through various means. The students expressed their satisfaction with receiving letters, phone calls, and other resources, including moral support, from family. The students' educational experience was more positive with the support from family and it helped them to focus on their studies. Other students ***found their own way.*** For these students, family and community are basic to Native cultures. Although family support was not available to these students; other groups were available to them. Having these other relationships helped sustain the student in their endeavors to continue in education.

The students expressed the importance of obtaining higher education because of the close connections to those who had experienced college. ***Students had college experience in family;*** therefore they had a personal awareness of college experience from family, extended family, friends, or community members who had good college experiences. This provided the students

with a positive experience entering college and they persisted to earn an associate and then a baccalaureate degree. On the other hand, other students ***did not have family members with college experience.*** These students had no personal awareness of college experience from family, extended family, friends, or community members about college. These students needed to find an intrinsic reason to continue with their education but remained in college. The students who did not have a personal awareness of college experience found their own way at attaining higher education.

Some of the students made a conscious decision to join the military. Students viewed this experience as a possible option to enable then to be able to financially afford higher education. ***Students were in the military and were able to take advantage of the GI Bill.*** The students who joined the military had the opportunity to receive additional resources to help them pay for college. Other students ***were not in the military***. Students may have not considered the military or did not view this as an option to enable them to attain education. The students remained in college and found other options to help pay for college.

Articulating the story line during the selective coding process revealed the interrelationships between the phenomena. During the final combination of data during the selective coding process, a core category emerged. This core category is labeled *"Native American Students Persisting in Higher Education,"* and it is related to the seven phenomena that were examined during the axial coding process. It is important to note that once the core category has emerged (from holistic analyses of the phenomena) the phenomena are now referred to as subcategories. The terminology changes to reveal the relationship between the core category and its subcategories (previously referred to as phenomena). The core category and its interrelationships with the subcategories form the basis of the narrative report.

Core Category

The core category is based upon the interrelationships between the subcategories that emerged from the selective coding process. The core category is related to the following seven subcategories: (a) barriers, (b) success, (c) challenges, (d) club participation, (e) family support, (f) college in family, and (g) military experience. These seven subcategories are also related to each other and were driven from the review of the literature.

Subcategories

Under the heading of each subcategory, the interrelationships between the subcategories are briefly discussed. The first subcategory is "Barriers."

Barriers. Subjects in this study self-reported the barriers they encountered while attending college. The students routinely mentioned their desire to continue with college. Therefore it appears that there is a direct connection between the subcategory "Barriers" and the subcategory "Success." It stands to reason that there is a relationship between barriers and a person's desire to overcome obstacles. Barriers are also a factor in a person's desire to overcome hurdles and be successful in the midst of adversity.

Success. Success has a direct connection to the subcategory; Barriers. Students who were motivated and committed to earn an associate and then a baccalaureate degree took ownership of their experiences and educational goals by possessing assertiveness to seek out resources. Being successful at accomplishing a goal is rewarding in so many aspects of a person's life and often leads to other attainable goals.

Challenges. Challenges were presented in different ways to the students in this study. The students self-reported academic challenges that they faced when going to college. It is the person's desire, commitment, and dedication to persist through challenges that make a person

work harder towards living a better life not only for the person but their children. Challenges come in many sizes but having the desire to overcome the hardships is what makes the accomplishment rewarding in the end. Therefore it appears that there is a direct connection between the subcategory “Challenges” and the subcategory “Barriers.”

Club Participation. Club participation has a direct connection with the subcategory Barriers. The students in this study who were a part of certain campus clubs were encouraged to socialize and have relationships with other Native American students. These interrelationships made them feel worthy and important. There is a relationship between club participation, and the reality that it helped these students overcome barriers that may have deterred them from having a positive college experience.

Family Support. Family support has a direct correlation with the subcategory Barriers. The family support provided to the students in this study was critical. The family supporting the student while in college increased the person’s ability to focus on school and have a positive experience with college. Family support is also a factor in a student’s ability to persist in college.

College in Family. College in family has a direct relationship with the subcategory Barriers. The students who had the awareness of college experience through members of their family or other persons they considered “family” had a good college experiences. The students who did not have college experience in their family had to work harder at persisting in college, sought out other crucial people who took the family’s role, but all the students remained in college. Therefore it appears that there is a direct connection between the subcategory “College in Family” and “Barriers.” All students viewed the goal as reasonable and persevered through the obstacles.

Military Experience. Military experience has a direct connection to the subcategory Barriers. The students in this study who were not eligible for military benefits did not let this hinder their opportunity of going to college. Military experience is also a factor in a student's choice to go to college.

Non-Tribal College Participants

Selective Coding

For the non-tribal college participants the microanalysis of the axial coding process was used, data were examined in a macro analysis approach for this selective coding process. This process allows a person to gain the complete benefit of the data by viewing the data more holistically during the selective coding process. From this more objective position, data were interpreted within the construct which developed through the open and axial coding processes. In addition, the researcher also used these aforementioned processes to contribute to complex analyses of the data, and in this section interconnected themes in a storyline and eventually developed them into a theoretical model (Creswell, 2003).

The narrative report for this study has been developed through the inductive process of open coding, axial coding, and selective coding. The selective coding process afforded a holistic view of the seven phenomena and their properties. This holistic process recognized the interrelationship between the core category and the seven phenomena. The story line utilizes the findings from various analyses that resulted during the axial coding process and focused on the seven phenomena. Describing the story line allows for the creation of a theoretical model or in essence a grounded theory (Creswell, 2003).

Within this story is the context of each phenomenon. To assist with this story line, concepts that are related to the context of the phenomena are identified with *italicize* and **bold**

typeface. This story line and the interrelationships of the phenomena are presented in narrative form in the following section: *"Native American Students Persisting in Higher Education."*

Native American Students Persisting in Higher Education-Non tribal College start

Students want to attend college although some challenges are presented to them along the way. The students viewed attaining higher education as a realistic goal and accomplishing a personal goal which would lead to a better quality of life. This opportunity presents personal and professional gains and satisfaction.

One of the obstacles that the students encountered while attending college was ***financial issues.*** The students managed to get through the financial hurdles and continued to reach their educational goals. Other challenges that the students faced included ***academic and personal barriers.*** The students wanted more academic experience. Those who found assistance with the academic process were able to overcome academic difficulties with this help. In order to persist in college, they also had to overcome personal problems that arose.

The students had success in their personal college experiences. Other students encountered ***personal issues*** but the student worked through the hardship to overcome the personal problems and persisted in college. Not only did the students encounter personal issues but academic challenges were reported too.

Some students experienced ***positive advising and having a mentor, while some were encouraged by being a mentor or being in a peer mentoring group.*** The students identified their own capabilities and were able to help other students while being helped. The students would not let misinformation discourage them, although they had to be more assertive in seeking out other resources. This eventually enabled them to persist in obtaining a four year degree.

There were students who ***experienced challenges in not having a mentor or advisor*** which the student feels would have been a helpful resource.

Some of the students sought out campus activities and resources that involved other Native students. ***Students felt they were successful in college by participating in Native American clubs, peer mentoring groups, and felt these associations helped them to be successful in college.*** Students articulated that Native American identity is important and having interrelationships with other Native students with cultural values similar to theirs was a must. ***They felt they were successful in college by socializing with other Native American students.*** These students needed to have similar relationships to family and community recreated on the college campus, and having these relationships contributed to their ability to persist in higher education. Other students ***were not involved in clubs*** but still continued with college.

Students experienced positive family support. Families are very important to Native students. The students received various means of support from their families which included phone calls and letters. In having this family support; the student had a more positive experience with college. Some subjects ***did not have family support.*** These students sought out other resources and groups but they remained in college.

Students in this study did have some family with college experience. Some of the students had a personal awareness of the college experience from their friends, family, extended family, or community members who had college experience. These students felt they had a more positive orientation knowing other Natives who had successful ventures in higher education. Other students ***did not have family members with college experience.*** The students had to work harder and needed to find an essential reason to continue with their education.

Some of the students made the decision to join the military and the ***students had help with college debt.*** Students viewed this experience as a possible option to help with their education. ***Students in this study learned discipline and the experience had a positive impact on kid's lives.*** Other students ***were not in the military.*** The students did not enlist in the military but remained in college and found other resources to help pay for college.

Articulating the story line during the selective coding process revealed the interrelationships between the phenomena. During the final combination of data during the selective coding process, a core category emerged. This core category is labeled *"Native American Students Persisting in Higher Education,"* and it is related to the seven phenomena that were examined during the axial coding process. It is important to note that once the core category has emerged (from holistic analyses of the phenomena) the phenomena are now referred to as subcategories. The terminology changes to reveal the relationship between the core category and its subcategories (previously referred to as phenomena). The core category and its interrelationships with the subcategories formed the foundation of the narrative report.

Core Category

The core category is based upon the interrelationships between the subcategories that emerged from the selective coding process. The core category is related to the following seven subcategories: (a) barriers, (b) success, (c) challenges, (d) club participation, (e) family support, (f) college in family, and (g) military experience. These seven subcategories are also related to each other.

Subcategories

Under the heading of each subcategory, the interrelationships between the subcategories are briefly discussed. The first subcategory discussed is "Barriers."

Barriers. Subjects in this study self-reported the barriers they encountered while pursuing a college degree. The students routinely reported their desire to finish college. Therefore it appears that there is a direct connection between the subcategory “Barriers” and the subcategory “Success.” It stands to reason that there is a relationship between barriers and a person’s aspiration to overcome obstacles in order to complete a four year degree.

Success. Success has a direct connection to the subcategory; Barriers. Students who were driven to earn a four year degree helped other students and this helped them to feel worthy to their personal commitment of pursuing higher education. Although challenges were presented to the students; they found other means to satisfy their needs of having a good experience with college.

Challenges. The students’ encountered challenges while attending college. In addition to other personal challenges; the students self-reported they faced academic hurdles. The students worked through the hardships to remain on task to complete a four year degree. Therefore it appears that there is a direct connection between the subcategory “Challenges” and the subcategory “Barriers.”

Club Participation. Club participation has a direct connection with the subcategory Barriers. The students in this study were a part of certain campus clubs which led to the opportunity to have interrelationships with other Native American students on campus. It stands to reason that there is a relationship between club participation and a student’s ability to take a risk to be a part of the campus community centered activities.

Family Support. Family support has a direct correlation with the subcategory Barriers. The family support provided to the students in this study was very important. The family supporting the student while in college increased the person’s ability to focus on their studies

which led to a good college experience. Family support is also a factor in a student's persistence to remain in college.

College in Family. College in family has a direct relationship with the subcategory Barriers. The students who had college experience in their family had a level of college awareness. The students in this study who did not have college experience in their family had to dig deep to find a valuable reason to remain in college. Therefore it appears that there is a direct connection between the subcategory "College in Family" and "Barriers." All students viewed their educational goals as achievable and persisted in college.

Military Experience. Military experience has a direct connection to the subcategory Barriers. Military experience is also a factor in a student's choice to go to college. Participants who had joined a branch of the military had the benefits of the GI Bill and for some was an incentive to attend college. This helped them overcome a financial barrier. The students in this study who were not eligible for military benefits did not let this obstacle prevent them from attending college. The students found other means to help pay for college. The students who joined the military learned discipline from this experience and this made a positive on their kid's lives. Military experience is also a factor in a student's choice to go to college.

Summary

The qualitative procedures of open, axial, and selective coding were applied to the data collected from semi-structured interviews with an interview protocol. These analyses produced the findings reported in this chapter. During the open coding process, several themes emerged from the data collected in the semi-structured interviews with the subjects of this study. These themes were de-contextualized into segments during the initial stages of axial coding. The data segments were then re-contextualized according to relationships that emerged during the micro

analysis procedures in axial coding. Concluding the axial coding process, analyses procedures identified seven phenomena from the data as well as components of each phenomenon.

The final analysis included the applications of selective coding on the re-contextualized data. Selective coding was a macro analysis of the data. Presenting the results of this macro analysis in a narrative form allowed a "core category" to emerge from this phenomenon identified during the axial coding process. At this stage of the analysis, the phenomena are referred to as "subcategories" of the "core category" as they are related to the "core category." These "subcategories" are interrelated and form the foundation for the grounded theory. The grounded theory was articulated in the form of a narrative report. This narrative report occurred at the conclusion of the selective coding process and was titled for both groups of participants: *"Native American Students Persisting in Higher Education."*

In Chapter Five, the findings from this study are summarized. This summary includes the findings from open, axial, and selective coding processes. Beginning with "Holistic Analysis" the findings are examined to answer the three questions: (a) How can Native American students better utilize all the educational resources such as a mentoring programs, financial aid, library service, distance learning programs, disability services, and knowledge in the scholarship application process, gain good computer skills, tutors, student organizations, and academic counselors that are available at *all Colleges* in order to persist to complete a four-year degree? (b) What is the relationship, if any, between the responses of students who completed an Associate's Degree at the tribal college and then completed a Bachelor's Degree at a four year institution, and those students who went directly to a four-year college and obtained a Bachelor's Degree? and (c) What are the differences, if any, between the responses for students who completed an Associate's Degree at the tribal college and then completed a Bachelor's Degree at

a four year institution, and those students who went directly to a four-year college and obtained a Bachelor Degree?

Phase Two: Quantitative Findings

Donna Mertens (1998) wrote, “Surveys can be thought of as methods used for descriptive research or as data collection methods used within other research designs.” A simple descriptive approach was undertaken to collect the data. Simple descriptive is a one-shot survey (questionnaire) administered to describe the characteristics of a sample at any given point in time. This research strategy was utilized in the second phase of this research- the quantitative.

A descriptive narrative and the embedded Table 34 enumerates the results of running a Discriminate Function Analysis on the answers the participants gave on the survey/questionnaire.

The quantitative research was guided by the following questions:

1. What is the relationship, if any, between the responses of students who completed an Associate‘s Degree at the tribal college and a Bachelor’s Degree at a four-year institution and those students who went directly to a four-year college and obtained a Bachelor’s Degree?
2. What are the differences, if any, between the responses students who completed an Associate’s Degree at the tribal college and a Bachelor’s Degree at a four-year institution and those students who went directly to a four-year college and obtained a Bachelor’s Degree?

A survey design provides a quantitative or numeric description of some fraction of the population-the sample-through the data collection process of asking questions of people (Fowler, 1988). This data collection, in turn, enables a researcher to generalize the findings from a sample

of responses to a population. The researcher manipulates one or more independent variables and determines outcomes (McMillan & Schumacher, 1989).

According to Creswell (2009), quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. The final written report has a set structure has a set structure consisting of introduction, literature and theory, methods, results, and discussion (Creswell, 2003). Like qualitative researchers, those who engage in this form of inquiry have assumptions about testing theories deductively, building in protections against bias, controlling for alternative explanations, and being able to generalize and replicate the findings.

Interpretation of Survey Data

Table 34
Discriminate Function Analysis Results

Question	Q1	Q2	Q3	Q 4	Q5	Q 6	Q 7
p	0.9583	0.3266	0.3046	0.1277	0.236	0.5927	0.595
f-ratio	0.002766	0.985075	1.080119	2.41457	1.445405	0.290546	0.286892
	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14
p	0.5746	0.2571	0.6337	0.1293	0.281	0.2449	0.5356
f-ratio	0.319959	1.320031	0.230424	2.393895	1.192536	1.390679	0.390202
	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	
p	0.527	0.6463	0.1266	0.9371	0.0544	0.1847	
f-ratio	0.406995	0.213603	2.428889	0.006312	3.915357	0.166681	
	Q 9 &19	**Q 4 & 19**					
p	**0.0469**	**0.0544**					
f-ratio	3.30104	3.07053					

For this study an (α=.05) will be considered an appropriate level. Thus, a p-value of equal to or less than .05 ($\alpha \leq .05$) the researcher will reject the null hypothesis, while a p-value greater

than .05 (α>.05) will fail to reject the null hypothesis. Creswell (2009) states a null hypothesis represents the traditional approach: it makes a prediction that in the general population, no relationship or no significant difference exists between groups on a variable. The wording is, "There is no difference (or relationship) between the groups" (p. 134). The alternative hypothesis is when a researcher makes a prediction about the expected outcome. The research outcomes findings allow the researcher to reject the null hypotheses or fail to reject the null hypotheses.

Table 34 illustrates the survey responses in the Discriminate Function Analysis (DFA) is a statistical function that evinced a predictor coefficient that allows the reader to be able to predict from the response whether the individual belonged to the tribal college or non-tribal group of participants. A Discriminate Function Analysis was run on all questions and only one questions showed statistical significance at the *a priori* alpha of .05 (α=.05). That question was question 19 on the survey "The financial aid department increased my skills in the scholarship application process."

The Discriminate Function Analysis test found in Question 19 on the questionnaire (The financial aid department increased my skills in the scholarship application process?) p =.05 finding statistical significance base on the *a priori* α= .05. Students who rated this above 2.1 (mid-range cut off) or indicated "agree" or "strongly agree" [increase skills assisted by financial aid in the scholarship application process] answer were more likely to come from the Tribal College. Those students who ranked this below the 2.1 or indicated a "disagree" or strongly "disagree" [no increase in skills assisted by financial aid in the scholarship application process] answers were more likely to come from a non-Tribal College. Finally, the responses for questions 1-18 and 20 were not found to be statistically significant.

In addition, a correlation was run on many of the questions and only two set of correlations based on the answers to the questions were found to be with in the *a priori* alpha of .05 (α=.05). When correlating Question 19 and Question 9 (19: "increase of skills assisted by financial aid in the scholarship application process" and 9: "distance learning programs were effective at the college") found statistical correlational/ multivariant significance p =.0469 between the two groups. The non-tribal students were more likely to disagree with both questions. Native American participants who started higher education at a non-tribal institution did not believe they increased their skills, assisted by financial aid, in the scholarship process, nor did they believed that distance learning programs were effective at the institution they attended. While the Native American participants, who started higher education at a tribal college, were more likely to agree with the two questions on the survey. These aforementioned Native American participants perceived they had increased their skills, assisted by financial aid, in the scholarship application process and also felt the distance learning programs were effective at the college they attended.

Furthermore, in correlating Question 19 and Question 4 (19: "increase of skills assisted by financial aid in the scholarship application process" and 4: "academic counselors were knowledgeable at the college") found statistical correlational/multivariant significance p =.05 at an *a priori* alpha of .05 (α=.05) between the tribal college participants and the non-tribal college participants. The tribal students were more likely to agree with the two questions meaning they had increased skills, assisted by financial aid in the scholarship application process, and academic counselors were knowledgeable at the Tribal College. While the non-tribal college participants were more likely to disagree with the two questions on the survey. These Native American participants didn't have increased skills, assisted by financial aid in the

scholarship application process, and didn't believe the academic counselors were knowledgeable at the non-tribal college they attended.

Null Hypotheses Analyses

There were two null hypotheses for this study. The outcomes from the responses produced the following:

Null Hypothesis 1

H_0: There will be no statistically significant or experimentally consistent relationship in the responses of students who completed an Associate's Degree at the Tribal College and a Bachelor's Degree at a four-year institution and those students who went directly to a four-year college and earned a Bachelor's Degree. This research found [question 19] a relationship between tribal and non-tribal participants' responses to the question of having "increased skills assisted by financial aid in the scholarship application process" and found statistical significance thus these findings rejected null hypothesis 1.

Null Hypothesis 2

H_0: There will be no statistically significant or experimentally consistent differences in the responses students who completed an Associate's Degree at the Tribal College and a Bachelor's Degree at a four-year institution, and those students who went directly to a four-year college and earned a Bachelor's Degree. This research found differences between the tribal and non-tribal participants' responses to the question 19: "increased skills aided by the financial aid for scholarship application process," and question 9: "distance learning program was effective at the college." This study also found differences between tribal and non-tribal participants' answers to question 19: "increased skills aided by the financial aid for scholarship application process," and question 4: "the academic counselors were knowledgeable at the college."

Having found statistical significance within the *a priori* parameters set prior to this research this null hypothesis 2 is rejected.

Finally, the responses for questions 1-18 and 20 were not found to be statistically significant thus failed to reject the null hypothesis 1. The other combinations for null hypothesis 2 other than questions 19 and 9 and questions 19 and 4; the researcher will fail to reject the null hypothesis 2.

CHAPTER FIVE

INTERPRETIVE SUMMARY, POSTULATIONS, IMPLICATIONS AND RECOMMENDATIONS

Qualitative

The inductive process of qualitative research is not guided by firm rules and procedures. This is strength of the qualitative paradigm as it allows for the exclusive abilities of the researcher to interact with the data facilitating the new understanding of a phenomenon. Chapter Five summarizes the findings from Chapter Four of this mixed methodology study. This outline includes holistic view of the core category "Native American Students Persisting in Higher Education" as well as the seven subcategories (a) barriers, (b) success, (c) challenges, (d) club participation, (e) family support, (f) college in Family, and (g) military experience. The purpose of this summary; the seven phenomena will now be referred to as "subcategories" of the "core category" since they are directly related to the core category. This approach to the summative analysis moves away from the micro analysis, that identified each phenomenon, to a macro view; one that recognizes their original labeling of categories. The difference now is that this holistic view acknowledges the interrelationships that exist between all the categories that surfaced from the detailed analyses procedures that were applied to the qualitative data for this study.

The first section of this chapter to be discussed is *Holistic Analysis* which describes the qualitative process of articulating a grounded theory by utilizing a micro-to-macro viewpoint on the previously analyzed data. This section concludes with an explanation of the interrelationships of the categories and their relation to the literature. It is followed by an exploration of the three questions and sub-questions that frame this study. The holistic view of the qualitative data reveals three postulations from the findings reported in chapter four. The postulations and their explanations are restricted within the section *Postulations*. Implications for practitioners and

future research are described and conclude chapter five. The summary begins with an explanation of the qualitative procedures employed during the open, axial, and selective coding processes (Creswell, 2004).

Summary

Holistic Analysis

A synthesis of the analyses applied to the original qualitative data produced a grounded theory concerning the "Native American Students Persisting in Higher Education." This grounded theory is a culmination of several analyses procedures. Following a format suggested by Strauss and Corbin (1990), this procedure included qualitative processes of open coding, axial coding, and selective coding. The grounded theory for this study is based upon the seven categories. These categories surfaced during the axial coding process. During the selective coding process; an eighth category emerged that included the original seven categories. This encompassing category is referred to as the "core category." For the purpose of this study; the core category is the "Native American Students Persisting in Higher Education." The core category is important because it is integrated with the following seven subcategories: (a) barriers, (b) success, (c) challenges, (d) club participation, (e) family support, (f) college in family, and (g) military experience. Together; these seven categories formed the basis of the grounded theory which was presented in chapter four.

By analyzing the data from the micro perspective (during the axial coding phase) and then re-examining the data from the macro perspective (during the selective coding phase), a grounded theory began to emerge. Reporting the grounded theory through a story line which uses rich, thick descriptions allows the viewer to look at the phenomenon in a manner not previously imagined. The Native American student persisting in higher education and their assertiveness

and determination to be successful was revealed through this process. A holistic view of the data which was generated from various analyses conducted in this study and revealed that students encounter obstacles but was still persisting in higher education.

Exploration of Research Questions

Analyses of the collected data from the semi-structured interviews illuminated categorical relationships among the core category "Native American Students Persisting in Higher Education" and the seven subcategories of (a) barriers, (b) success, (c) challenges, (d) club participation, (e) family support, (f) college in family, and (g) military experience. Analyzing these categorical relationships as well as the components of those relationships provided an exciting and helpful perspective on the three research questions that frame this mixed methodology research design. These research questions were:

- How can Native American students better utilize all the educational resources such as a mentoring programs, financial aid, library service, distance learning programs, disability services, and knowledge in the scholarship application process, gain good computer skills, tutors, student organizations, and academic counselors that are available at Colleges in order to make a thriving transition to a four-year college?
- What is the relationship between the responses of students who completed an Associate's Degree at the tribal college and a Bachelor's Degree at a four year institution and those students who went directly to a four-year college and obtained a Bachelor's Degree?
- What are the differences between the responses for students who completed an Associate's Degree at the tribal college and a Bachelor's Degree at a four year institution and those students who went directly to a four-year college and obtained a Bachelor's Degree?

The following section refers to these questions in a holistic approach derived from the qualitative process of open, axial, and selective coding. These processes are described in the previous section and articulated in chapter four. This approach begins to build a picture of how students persist in higher education. The first question addresses the educational resources that were utilized.

How can Native American students better utilize all the educational resources?

Participants in this study were selected because they were Native American, attended a tribal college or a non-tribal college and persisted in earning a four year degree. The participants reported that they had used some or all of the educational resources available to them. Participants reported that the educational resources were important to their success of completing higher education. Not only did the participants report utilizing educational resources at the institution, but family and culture played a major role in their persisting in college.

What is the relationship between the students' responses?

The participants reported similar obstacles that they encountered during their personal goal of completing higher education. The core category had a direct connection with the seven subcategories as stated in chapter four: (a) barriers, (b) success, (c) challenges, (d) club participation, (e) family support, (f) college in family, and (g) military experience. The participants described their experiences with each subcategory that formed the foundation of the grounded theory "*Native American Students Persisting in Higher Education*" that emerged from each subcategory. A relationship exists between subjects' ability to persist through the hardships and fulfill their need of completing a four year degree. All of the

participants reported their determination to complete a four year degree which bolstered in their commitment to continue with college and not give up.

What are the differences between the students' responses?

Participants in this study-both those beginning higher education at a tribal and those beginning their education at a non-tribal college- reported minimal differences in the responses to what that they encountered during their personal goal of completing higher education. In fact, the data converged at many points regarding the seven subcategories queried.

The differences included how they overcame and dealt with particular obstacles. The core category had a direct relationship with the seven subcategories that contributed to their success and had the possibility of hindering their ability to remain in college. It is with the various personal skills of the participants (sometimes with support) that allowed the participants to persist in higher education. The two groups had different experiences with the distance learning program, skills with their financial aid process, and the knowledge of academic counselors. Again, there are minimal differences in the participant's responses but all the responses are directly connected to the subjects' resilience to be driven to persist in higher education.

It is essential that any examination of the previous questions include a synergistic process that recognizes the interrelationships of the components of each category. The three research questions, **"How can Native American students better utilize all the educational resources?" "What is the relationship between the students' responses?" and "What are the differences between the students' responses?"** cannot be answered in an adequate manner unless the core category and the seven subcategories are examined in a holistic

manner. This holistic approach allows for the evolution of interrelationships that combine to illuminate the construct of *Native American Students Persisting in Higher Education* to earn a baccalaureate degree.

Holistic Analyses Related to the Literature

Re-contextualized data from the semi-structured interviews have been examined to answer the three research questions that frame this study. These data have been supported in the existing literature on Native American students who persisted in obtaining a baccalaureate degree. Recently, the trend in the past ten years seem to indicate that more American Indians are attending postsecondary and earning a four year degree at some point in their lives (Pavel et al, 1998).

Tinto's model of student persistence and withdrawal processes was developed for residential colleges which focus on the elements of student academic and social integration as key variables underlying student persistence. In Tinto's theory, it is argued that the more a student integrates himself/herself into the social and academic life of campus, the more the student becomes committed to the goal of graduation, and develops loyalty to the individual institution, and the greater are the chances that the student will persist and graduate (Mutter, 1992). In this study, often students who were involved on the campuses discovered that they were able to overcome a variety of obstacles and challenges.

Postulations

This study has produced three major postulations that will be discussed in this section. The three postulations have been labeled: (a) Native American students completing higher education, (b) Native American students earning a four year degree, and (c) The significance of

higher education. These themes are a result of holistic analyses of the reported data evolving from the qualitative processes of open, axial, and selective coding.

Native American Students Completing Higher Education

All participants in this study expressed a desire and commitment to complete higher education. Participants in this study perceived earning a four year degree as a realistic goal and persevered through obstacles to be successful at reaching their goal of a baccalaureate degree. The participants perceived themselves as having the ability to graduate with a four year degree. The success was not only because of their determination but having family support (or re-created family support) and having family member with college played a major role in the accomplishing this personal goal. All the participants, regardless of whether they initially began college at a Tribal College or a non-tribal college, articulated a need for family support or community support and re-created this on their campuses. They recreated the family and feeling of belonging through joining clubs, peer groups, peer counseling, and other socialization.

A less widely known student retention theory is the Family Education Model (FEM) developed by HeavyRunner and DeCelles (2002). Their research was conducted at five institutions in Montana; Fort Peck Community College, Stone Child College, Salish Kootenai Community College, Blackfeet Community College, and the University of Montana, Department of Social Work. It is an Indigenous-based model on student persistence in higher education that explicitly concentrates on Native American students. Similar to other retention/attrition models, the FEM is based on principles of education and social work. Because it is a model that promotes action, it also offers strategies for dealing with Native American student attrition. A central feature of the model that expands explanatory power as it relates to Native American students and its purposeful inclusion of the core cultural factors suggested by Pavel and Padilla (1993).

The participants in this study expressed their extensive family support while in college and the importance of having family also committed to their goal of attaining higher education. The entire family has to nurture and support each other for the participant to be successful in college.

Native American Students Earning a Four Year Degree

The participants in this study all earned a four year degree. The participants were determined to complete this degree. According to Brown and Lavish (2006), Native American people who attend college suggested that they perceive a connection between a good education and a good job/future. Although many believed a good life and future to be contingent on securing a good education, others regarded education as an opportunity to help family/community and to escape the high unemployment rate on a reservation.

The Significance of Higher Education

All participants expressed their desire to have a better quality of life for themselves and their children. The participants in this study all expressed the importance of obtaining higher education for intrinsic and extrinsic rewards and for personal and professional reasons. Persistent poverty in remote rural areas is an enduring problem in both advanced and developing nations. In the United States, persistent rural poverty is especially evident in areas containing American Indian tribal lands, many of which are also afflicted by poverty-related problems, such as high rates of infant mortality and substance abuse (Leichenko, 2003).

The participants had varied backgrounds and goals including earning a four year degree; all participants were driven by living and providing a better life as they expressed in their interviews. The participants in this study perceived earning a four year degree as a motivating factor that would help them to accomplish their educational goals and in turn their personal

goals. American Indians have experienced a large degree of difficulty in the labor market. They have lower levels of labor-force participation, higher levels of unemployment and lower wages than the rest of the population, as well as generational poverty rates that exceed the rest of the United States (Gitter & Reagan, 2002).

Quantitative Analysis

In utilization of the Discriminate Function Analysis there was minimal data found to be statistically significant within the parameters set *a priori.* However, what was found is that the financial aid departments for the participants who started at a tribal college were more likely to have increased the students' skills in the application process for scholarships. Those students in this study who started college at a non-tribal college were less apt to have increased their skills and were less likely to have received assistance from financial aid in the application process for scholarships. Another finding was that the participants who started at a tribal college were more positive that they had increased skills with financial aid assistance to apply for scholarships and that the distance learning programs were effective. Where those participants who started at a non-tribal college did not agree that they had increased skills with financial aid assistance to apply for scholarships and did not believe that the distance learning programs were effective in the institution they attended.

Some of the non-tribal participants did not have a good experience with the distance learning program, did not have adequate skills in the financial aid process, or did not agree that the academic counselors were knowledgeable in their area. The other tribal college participants expressed their satisfaction with the distance learning program and they had increased skills in the financial aid process. The non-tribal college participants struggled with their particular

experience but persisted in higher education. The tribal college participants persisted in higher education too. Finally, the overall value did not find a difference in the responses.

Qualitative and Quantitative Results

It is interesting to note that the qualitative data, in their higher education journey voices the participants' concerns for finances regardless of the institution of higher education they attended. Participants indicated finances could have been a stumbling block and/or a road block to persisting to a four year degree. The quantitative data points to increased skills acquired by more often the tribal college participants with the help of financial aid for scholarships that did assist them. This mentoring was seen in the qualitative data as positive. In addition, peer and academic advising /mentoring were also noted in the voices of the participants as a function that would have been very helpful. The triangulation of the financial information and the mentoring and advising information is noteworthy.

Implications and Recommendations for Higher Education Institutions and Practitioners

Higher education practitioners, when made aware of the outcomes derived from this research will be able to envision what Native American students encountered in their quest for and successful completion of a four year degree. These participants' personal experiences in higher education can provide readers/practitioners an opportunity to examine their own views about Native Americans attaining higher education. An overriding need for Native students is to have environments where re-creation of "family" is possible. This opportunity better enables these Native students to persist in higher education and be successful at earning a four year degree.

In addition, other Native Americans and non-natives may want to reflect on their personal views about participating and persisting in higher education. The Native American participants

in this study expressed a desire to provide a better quality of life for their children and themselves. Also, they articulated that they wanted to enjoy the personal gains of being successful in higher education. When Native American students are succeeding in higher education, practitioners should note the educational and other resources and support that contributed to this success.

Higher education institutions that use these responses in this study to increase Native American student successes in higher education will first need to explore the student's personal commitment level to obtaining a four year degree. Findings from this study are supported by Tinto's Model; a solid fit between an individual student and the institutional environment is an important first step. According to Tinto (1975; 1987; 1993) the model argues that an individual's departure from an institution can be viewed as arising out of a longitudinal process of interactions between the individual with given attributes, skills, and dispositions (intentions and commitments) and members of the academic and social systems of the institution. Each student has particular background and they use their individual skills to strive to reach the realistic goal of completing higher education. If there is not a fit between an individual student and the institution; an individual may feel like their educational goals are not being met. All higher education institutions need to maximize their services to meet every different need of each student; the institution will need to continue to recognize and assist Native American students' aspirations of being successful in higher education.

It is a recommendation of this study that higher education institutions utilize the study's findings to create and maintain a culture on campus that will interweave the important factors that enable Native American Student to persist in higher education. The factors found in this study that enable Native American students to persist in higher education include:

1. To ensure that environments on campus accept and celebrate the Native American student's unique culture which will enrich the learning and living community for all.

2. To ensure that opportunities for recreating "family" groups are an integral part of the campus.

3. Provide a gathering place to smudge, pray, access to specific resources, cultural, and pow-wow information.

4. To ensure that assistance with acquiring financial aid is offered and made available to the Native American students by providing hands-on sessions in filling out financial aid forms online.

5. To ensure that Native American Students receive assistance with acquiring scholarships offered and made available to the students by providing hands-on session in the application process.

6. To ensure that availability and access to peer mentors is a service offered to Native American students by fellow peers and students in particular degree program(s).

7. To ensure that availability and access to academic advising mentors is a service offered to students by providing students with daily or weekly one-on-one sessions.

Recommendations for Future Studies

Researchers interested in promoting a new perspective for those Native American students who are considering attending college should focus on the person's individual attributes and perceptions of higher education. Specific areas that are in need of additional research include:

- Native American student's personal attributes necessary to persist in higher education.
- Native American students' perceptions of higher education.

- A Native American student's access to needs-based financial assistance.
- Native American first generation students' experiences in higher education.
- Collaboration between tribal and non-tribal colleges in offering four-year degree distance learning program(s) and examining the transition from the tribal college.
- Increasing the keyboarding skills of the Native American students.
- Native American women in the military and their experiences with higher education.
- Grade point averages of Native American students who complete their degree program. An investigation into number of credits taken, number of years to complete the particular degree, total college debt, and number of family members in their households including minor children.
- Native American student's entrance into college and the critical thinking required to be successful.
- Is their specific instrumentation that would better meet the needs of specific Native American college students?

Higher education institutions are responsible for educating our students and ensuring that all their educational needs are met so that students have a positive experience along with doing well in their studies. Native American students view higher education as a possibility of fulfilling their personal and professional goals and needs. These institutions must continue to align their efforts with the students' efforts so that the student's needs are being met on campuses. This will result in the student's endless personal and educational commitment to the institution increase the Native American students' participation in higher education.

Finally, it is recommended for both tribal and non-tribal institutions in order to encourage successful persistence to a four year degree for Native American students, they must include:

(a) creating a rich inclusive environment so the student feels a sense of belonging , (b) an emphasis that the institution is committed to their completing college, (c) presenting and having available relevant cultural activities, (d) create an environment where family based relationships can be recreated,(e) availability and assistance with acquiring financial aid and scholarships, (f) availability and access to peer mentoring groups, and (g) appointing advisors from the first day a student arrives on the campus.

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Appendix A

College's Services Satisfaction Survey

After I have conducted the interview with the participant; the participant will fill out the satisfaction survey while the researcher is present to clarify any of the questions. These are generally services provided and the participant will rate the services they utilized while enrolled at college.

Attended Tribal College initially: _____

Attended Four-year Non-Tribal College initially: _____

Directions: Indicate to what extent you agree or disagree with the statements listed below by circling one of the following:

SA means that you strongly agree with the statement. (value = 4)

A means that you agree with the statement. (value = 3)

D means that you disagree with the statement. (value = 2)

SD means that you strongly disagree with the statement. (value = 1)

NA means the question is not applicable. (value = 0)

Item and Rating

1. The child care was adequate at the college.

   SD D A SA NA

2. I was confident my child was in good hands at the day care

   SD D A SA NA

3. The academic counseling was effective at the college.

   SD D A SA NA

4. The academic counselor/s was/were knowledgeable at the college.

   SD D A SA NA

5. The tutoring service/s was/were effective at the college.

   SD D A SA NA

6. The tutor/s was/were always available and willing to help me at the college.

   SD D A SA NA

7. The club/s helped me become involved in the college and graduate. .

   SD D A SA NA

8. The club/s helped me to be comfortable with college life at a college.

   SD D A SA NA

9. The distance learning program/s was/were effective at the college.

   SD D A SA NA

10. I enjoyed my distance learning experience at college.

    SD D A SA NA

    Type of Distance Learning: _____

11. The computer lab/s was/were adequate at college.

    SD D A SA NA

12. The computer lab/s always had a monitor and station available.

    SD D A SA NA

13. The computer lab/s always had a lab monitor in person available to assist students.

SD D A SA NA

14. The mentor program was effective at college.

SD D A SA NA

15. I could always rely on my mentor/s at a college.

SD D A SA NA

16. The library services was/were effective at college.

SD D A SA NA

17. The financial aid department was/were effective at a college.

SD D A SA NA

18. The disability service(s) was/were effective at a college.

SD D A SA NA

19. The financial aid department increased my skills in the scholarship application process at a college.

SD D A SA NA

20. My computer skills have increased since attending a college.

SD D A SA NA

Appendix B

Interview Protocol

The interview will be conducted before the satisfaction survey.

Participant began higher education at a Tribal College: _____

Participant began higher education at a Four-year College: _____

1. What is your age? A. 18-29 B. 30-39 C. 40-49 D. 50-59 E. 60-69 F. 70-79
2. Do you have children? Yes or No. If so, how many?

   _____

   _____
3. At the time that you that you first enrolled in college; did you have children? If so, how many children?

   _____

   _____
4. What was your age at the time you were enrolled at the tribal college?

   _____

   _____
5. What was your age at the time you were enrolled at a four-year institution?

   _____

   _____
6. What was your marital status at the time when you were enrolled at the tribal college?

   _____

   _____

7. When you attended a four-year institution what was your marital status?

_____

_____

8. At the time you were attending college; were your parents still living? What kind of support (financial, moral, child care, etc) did they give you?

_____

_____

9. Are you currently employed? Yes No

_____

_____

Did you work at the time you attended the tribal college? Yes No

Did you work at the time you attended the four-year institution? Yes No

10. Where were you born? In what tribe are you enrolled?

_____

_____

11. What is your gender? Female or Male
12. What was your enrollment status at the tribal college? Full-time Part-time.
13. What was your enrollment status at the four-year institution? Full-time Part-time.
14. Were you eligible for financial aid? Scholarships? Tuition cost? What aid did you actually accept?

_____

_____

15. Did you feel like you encountered barriers in pursuing higher education? What were the barriers?

_____

_____

16. How did you overcome them? What did you learn from this experience?

_____

_____

17. If child care was available; did you enroll your child in this service? What is your relationship to the child?

_____

_____

18. How did your academic counseling contribute to your college success?

_____

_____

19. What tutoring services did you utilize at your college?

_____

_____

20. Please circle the clubs that you participated in.

Indian Club	Basketball	Cross-Country	AIBL
Chess Club	Drama Club	Golf Club	Student Council

Please list any other groups that you participated in that **are not** listed.

_____

_____

21. How did being a club member enhance your educational experience? Did it help you to earn a two-year certificate, two-year degree or a four-year degree?

_____

_____

22. How did the library services assist you in your educational experience?

_____

_____

23. Did you enroll in any distance learning courses? If so, how did this help you in completing a degree?

_____

_____

24. Are you the first person in your family to attend college? What is the highest grade you completed? And/or what is the highest degree completed? What did you major in?

_____

_____

25. Did your parent/s attend college? Did your grandparent/s attend college? What is the highest grade each group completed? What is the highest degree each group completed?

_____

_____

26. Did your sister or brother attend college? What is the highest grade completed? What is the highest degree completed?

_____

_____

27. If you have children; has your son or daughter attended college? What is the highest grade completed? What is the highest degree completed?

_____

_____

Appendix C

Student Consent Form

I _____, have agreed and I am willing to be a participant for this study. I understand that my personal information such as name will be kept confidential by the researcher.

I understand the risks will be minimal.

- If I enrolled directly into a four-year college then I will participate in an interview and survey.
- If I enrolled at a tribal college prior to transferring to a four-year college then I will participate in an interview and survey.
- I will have read all survey and interview questions prior to both of the instruments.

Participant Signature _____

Date _____

Researcher _____

Date _____

Appendix D

Permission Form to Interview and Survey

Students at Tribal College

Date:

Dear President _____,

My name is Cheri Kicking Woman and I am a doctoral student at the University of Montana. I am an enrolled Blackfeet member from Browning, Montana and I am the Continuing Education Coordinator for the Blackfeet Community College. I am working on my doctoral dissertation and I would like to request your permission to interview and survey Native American students that were enrolled at your institution in the last five years. In order for me to acquire representative data I will be interviewing at the very most 4 Native American students who attended your Tribal College and four-Native American students who went directly to a four-year college.

My research will concentrate on students who attended the tribal college successfully transferred to a four-year institution and received a baccalaureate degree compared to students who enrolled directly into a four-year institution. The focus of my research is to see what services offered at the TCU were helpful for students. None of my research will identify you or your institution by name: rather, the research will reported as aggregate data. The participants' responses will be kept in strictest confidence. This data will be available to you when my dissertation is complete.

I thank you in advance for giving me this opportunity to collect this data in assisting Native American students to be persistent in higher education.

Sincerely,

Cheri Kicking Woman

Appendix E

Student Participation Form

January 8, 2010

Dear Student:

My name is Cheri Kicking Woman and I am enrolled member of the Blackfeet Tribe in Browning, Montana. I am a doctoral student at the University of Montana and an employee for six years at the Blackfeet Community College.

I am currently working on my doctoral dissertation titled:

The Tribal College Movement: Ensuring that Native American Students Successfully Complete an Associate Degree and Persist to earn a Four-Year Degree

My study involves students who attended a tribal college and students who did not attend a tribal college. So, I would like to request your permission to conduct an interview and survey with you in regards to your experience of not attending a tribal college and the challenges you may have encountered in pursuing higher education.

I thank you in advance for taking the time to read my letter and if you are interested in participating in this study; please email me at ckick_178@hotmail.com or call me at 406-338-5441 ext. 218.

Sincerely,

Cheri Kicking Woman