FACTORS AFFECTING ACHIEVEMENT AT A JUNIOR HIGH SCHOOL ON THE PINE RIDGE RESERVATION, SOUTH DAKOTA

DISSERTATION

Presented in Partial Fulfillment of the Requirement for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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* * * * *

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ABSTRACT

This study examined the challenges facing a representative Native American School located in Pine Ridge Reservation, South Dakota. The study also investigated the relationship between school achievement (SAT Science score) and the scores on the Resiliency measure.

Past research on Native American education system has been focused on identifying risk factors associated with school failure and school dropout. It is now recognized that certain innate traits in children and certain factors in the environment enable children to cope with the problems in life and succeed. This quality has been designated as Resiliency.

The Resilience of the student was measured by using the “Resiliency Instrument” developed and validated by Cynthia Jew. The Resiliency questionnaire comprised of sixty items. The items were placed on a five point scale from 1 (strongly disagree) to 5 (strongly agree). The items on the questionnaire were grouped into four subscales for analysis, based on their appropriateness to the subscale. The subscales used were: Positive attitude; Independence; Goal; and Empathy. Pearson product-moment r, t-test, Regression, and ANOVA were used to analyze the data. A demographic questionnaire was administered to obtain background information. Seventy eight junior high students participated in this study. A questionnaire was given to teachers in the same school to obtain their perception of the challenges faced by the school (17 teachers participated).

The results indicate that the Goal subscale was positively associated with achievement. Resilient individuals have the ability to cope with their problems and focus on the future, and they prepare to attain the skills necessary to accomplish their goal.
relation was also seen for Positive Attitude subscale and achievement. There was a positive correlation between achievement and attendance, and a negative correlation for Incident reports (as a measure of disciplinary action) and achievement.

There are a number of factors that impact on the academic achievement of Native American students. Some of these are school related such as inadequate preparation, and lack of resources to enhance the learning process. Others are environmental factors outside the realm of the school such as family, community, and the economic situation.
Dedicated to the children of Oglala, South Dakota
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CHAPTER 1

INTRODUCTION

Native American student scores on standardized math and science tests are low when compared to the national norm. As stated in the foreword of the Kennedy Report, “The first American” has unmistakably become “The last American”, in terms of the chance for a full rewarding life (“U.S. Senate Committee on Labor and Public Affair,” 1969). Native American children have the highest dropout rate of all ethnic minority groups in the Nation (Bowker, 1993; Reyhner, 1991).

A Report from the National Commission of Excellence in education revealed that part of what is at risk in education today is the promise made on this continent that: “All, regardless of race and class or economic status are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost … to secure gainful employment and to manage their own lives, thereby serving not only their interest but the progress of society itself” (“National Commission on Excellence in Education,” 1963, p. 9). This policy has been held as desirable for all students. However, the National statistics of the Native American education records show otherwise, regarding the achievement levels of Native American students when compared to achievement levels of non-Native American counterparts (Reyhner, 1989).
The government has made sporadic efforts to improve the educational opportunities for Native American youth, but the efforts have been fruitless thus far. Research studies on Native Americans are meager. The few studies that are available are predominantly focused on the low academic performance, the high dropout rate, high unemployment, alcoholism and other social ills. Researchers attribute the academic failure to the economic and social conditions (Szazz, 1991). Administrators and teachers have also adopted develop this mindset. It is a convenient scapegoat to pass the blame and responsibility for the low academic performance to factors such as socioeconomic status, family, culture, and the student. All children, including Native American, attend school from kindergarten onwards. The students spend more time at school than at home with parents. Research has shown that all children are educable, and that the behavior of the school is the most critical factor in determining the quality of education for its students (Henke, Geis, Giambattista, and Rnepper, 1996).

Piaget’s developmental theory states that children go through definite stages of cognitive, development and these are universally accepted. Children make sense of their environment and form mental concepts of the reality—‘schemas’—to understand and interact with the world. The better the child’s schema, the better is the learning accomplished. The class environment and the teacher’s role in guiding students can help the children learn and progress to the next stage of development (Smith & Cowie, 1991).
Ausubel, an advocate of reception learning states that the most important factor in influencing learning is the individual’s present knowledge. Learning is made meaningful if concepts related to it are present in the cognitive structure. The teacher can help by determining what the student understands and by relating new knowledge to the current knowledge using many examples in the process to clarify the concepts (Odom & Kelly, 1998).

Similarly Vygotsky, a cultural theorist, notes that learning is influenced by the social and cultural association. Learners are aided in the learning process by the social environment necessary to allow a child to move forwards and build new competencies. The higher mental processes are mediated by socio-culturally evolved tools and signs, especially language, mediation tools, and knowledgeable adults. The quality of the tools, determine the pattern and rate of mental development. Therefore, schools that have poor equipment and tools to motivate students fail to produce quality education (Vandeer Veer, & Valiner, 1994).

Similar theories are presented by many researchers regarding learning. However, due to time constraints and curriculum demands, most schools, and especially schools on the reservation are unable to implement the optimal learning measures to improve student achievement. Student deficiencies and needs are not addressed. When test scores are low, schools end up blaming the socioeconomic status, the culture, the parents, and the child. This approach has not been productive, as evidenced by the continual low scores, not just for Native American students, but also for the inner city, some rural schools and even suburban schools.
The existing scores on standardized math and science tests Nationwide are low compared to other countries (Hurd, 2000). This has resulted in several initiatives to correct and improve the quality of science and math education. On the National level, the ‘Education Goals 2000 Program’ has been advanced. On the local level, proficiency testing has been instituted in an effort to raise student achievement (Goals 2000 Educate America Act; Riley, 1995, & National Educational Goal Panel, 1998). Currently under the Bush administration’s pledge “Leave no Child Behind”, efforts are being made to help even the children on the reservation. Time will tell if these efforts will have the desired results.

In 1998 I had an opportunity to visit the Pine Ridge Native American Reservation. I was impressed by the place, the stark barren terrain; the local customs; the cultural activities; the friendly caring people; and the simple life. Three years later, in 2001, I returned to teach at a Junior High School for the 2001-2002 School Year. I taught junior high math, I lived on the reservation, associated with the local people, attended all school functions as well as community activities and ceremonies. I experienced first hand the challenges faced by the school system. (limited funding, difficulty recruiting teachers, high student dropout, low score on standardized tests).

While I agree that researchers are justified in their conclusions regarding low academic performance, on the reservation, I think too much attention has been given to negative aspects. I am impressed by how well the children achieve in school despite depressing environmental factors.
My personal experience at the junior high school has been that Native American children are interested learners. A majority of the students did not do homework (their home environment is not conducive to school work). Yet, the students’ performance on quizzes and tests was acceptable. A few did exceptionally well, while the majority scored passing grades, and only a few of them had failing grades. There are many success stories, of students who graduated from schools on the reservation and are now prominent citizens in high positions; for example: Dave Archambault, the former president of Standing Rock College; Shirley Plume, the first women agent for the Bureau of Indian Affairs (BIA); Chuck Trimble an official in the Nixon administration; Tina Corago, founder and editor of the Newspaper ‘Indian Country Today’; Phyllis De Cory coordinator of Indian Education for the Diocese (Red Cloud Indian School); Birgil Kills Straight, past president of Oglala Lakota College. This is just a short list, there are many more successful Native American Indians who have succeeded despite the conditions on the reservation. I would like to focus on these special traits that enable children to reach their potential. My interest in pursuing this line of research is motivated by the desire to understand the factors in the school system, the community, and the students that contribute to school success. Accordingly, this research study will focus on: the current status of education; the challenges facing the school, the impact of community traditions and expectations on student performance; the effect of the economics of the reservation (unemployment, poverty, alcoholism, domestic violence etc.) on the student’s ability to perform at acceptable levels in the academic and social setting of the school on the reservation, and the factors or special traits that some children seem to posses that clearly enables them to overcome the problems they encounter.
Statement of purpose and Focus Questions

For many years research on Native Americans has centered on socioeconomic status, unemployment, poverty, alcoholism, school dropout, delinquency, disease, and other problems. Risk factors were identified and associated with school failure. Bernard (1994) stated that the identification of risks does not necessarily provide a clear sense of just what strategies one needs to implement to reduce the risks. Norman Garmezy (1974) believed that if researchers were to study the factors that move (at risk) students to survival and adaptation, the long range benefits to society might be more significant than attempts to curtail the risks. Since that time, a paradigm shift has occurred. The focus of researchers has changed from identifying risk factors and associating delinquent problems and school failure with the risk factors, to determining the strengths in the children that enables them to cope with the problems in their life and succeed. Research in the fields of vulnerability; invulnerability; and coping, have contributed to the development of the construct of “Resiliency.” Masten, Best, and Garmezy (1991) defined Resilience as the capacity for or outcome of successful adaptation despite challenging or threatening circumstances (p. 425). Children who are resilient somehow overcome impairment in normal development, self esteem deficits, identity issues, depression, delinquency, and academic problems (Steele, 1987). Rutter (1985) argued that children who develop resiliency do so as a result of an operation of protective factors and interactive process. “Protective factor’s, refer to those influences that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes to a
maladaptive outcome, and Interactive processes refers to the relationship between the developmental time at which a particular stressful situation occurs in one’s life and to the existing protective factors” (p. 600).

A landmark study on resilience was completed by Werner and Smith (1982). In this 30-year longitudinal study of 698 infants born in 1955 on the Hawaian island of Kauai, the researchers sought to assess the long-term consequences of prenatal and perinatal stress, and to document the effects of adverse conditions on children’s physical, cognitive and psychological development. One third of this group of children did not suffer from adverse effects of their environment. The researchers were interested in discovering the factors that helped certain children among the high risk group of 201, to become resilient and go on to develop healthy personalities, and become successful.

Bernard (1994) wants researchers to avoid the pathology paradigm and blaming-the-victim syndrome. Resilient children succeed regardless of the challenges they face. As Garmezy (1974) stated, the resilient child is one who “works well, plays well, loves well, and expects well” (p. 3).

The purpose of this research study is to determine current status of education, the level of student performance, challenges facing the school district, the impact of the community traditions, and expectations on student’s academic performance at a representative Native American reservation school. This study will also attempt to identify the characteristics or special qualities that enable some students to rise above the debilitating environment.
I am interested in determining the factors that are problematic for school systems, and I am also interested in assessing the special traits or characteristics that enable students on the reservation to overcome the debilitating circumstances they face and to succeed despite these circumstances. I hope to shed some light on the steps one needs to take to help the students that are vulnerable to become more resilient. If the factors that contribute to student achievement or conversely, the factors that contribute to student dropout, are known then these issues can be addressed properly. Appropriate intervening programs to improve the effectiveness of the school, the teacher, the community and the student can be developed (Henderson & Milstein, 1996).

The study will address the following questions:

1. What are the challenges facing the school system?

2. Is there a relationship between Resiliency subscale scores and achievement (SAT Science scores), attendance (%), and incident reports (disciplinary action)?

3. Can success be attributed to observable classroom behavior such as class attendance, and the number of incident reports?

4. Are there significant gender differences between achievement scores, attendance, and incident reports?

5. Do Resiliency subscale scores vary in relation to Grade (class rank)?
Significance of Study

This study addresses the concerns of educators regarding the low test scores, and the high dropout rate among Native American students, and the factors associated with these problems. There is a pressing need for schools on reservations to provide a better education for children. It is therefore critical to have a clear understanding of the various factors that affect the quality of education in the school. It is important that we know the challenges facing the school; know the students and their needs; and also know what alternatives are available for providing the education that enables the child to succeed and stay in school. The results from this study will aid community leaders, school administrators, school board members, and teachers to make intelligent decisions concerning the various issues that have an impact on the school and the community.

If the factors that contribute to student achievement and student dropout are determined, then these issues can be addressed effectively. Many studies have touched on the dropout crisis, school failure, and the social and family conditions as contributory factors. Very few studies have focused on how best to remedy the situation, and even fewer have studied the special characteristics of the successful students and the procedures necessary to help all students achieve resiliency. The results from the ‘Resiliency’ questionnaire will be especially significant. Focusing on the special characteristics of successful students who make it against all odds would be very helpful in developing appropriate intervening programs to curtail the incidence of vulnerability.
School failure and school dropout rate have great impact on the child’s life as well as on society. Dropouts face higher rates of unemployment and underemployment. Developing programs that help children to be more resilient and succeed in school helps not only the child, school, and the community, but society as a whole will benefit if more students graduate and have job procuring skills.
The success of students in school depends on several factors. The key concepts that play a significant role relate to the family, the community, the school, and the student. An integration of the special attributes in each concept work to enhance a child’s success in school and in life, or a lack of these attributes leads to his/her failure, delinquency and ultimately to being a misfit in society. The relationship between these concepts is cyclical, failure in one leads to failure in the others, unless the individuals’ resilience enables them to overcome the odds.

The schools have a responsibility for teaching life skills as well as buffering the negative effects of the family, community, and the student’s personality, attitude, and behavior, and steer the child in the direction of positive outcomes. This is possible through the intervention of programs that guide, modify, and ameliorate the negative aspects. A promising and powerful intervention program is to instill the traits known to build resiliency in children.

This conceptual framework is in keeping with Native American philosophy. Everything the Native American does is in a circle, because the power of the world always works in circles. The sacred hoop of the Native American Nation is a circle with the flowering tree in the center of the hoop. The tree is nourished by the East which gives peace and light, the West gives rain, the South warmth, and the cold strong winds of the North gives strength and endurance (Black Elk, in Evans, 2002). Similarly, a child is nourished to adulthood through the nurturing of family, community, school and the strength of the student. All four are interconnected and affect each other. It is necessary to develop supportive partnerships across these four concepts.
The conceptual framework shows the interconnectedness and interdependency of the four concepts—family, student, community and the school. The framework emphasizes the coordinated efforts of multiple services and support systems that are needed to promote student achievement and success, and also build resilience in the individual, to overcome the debilitating effects of a deprived environment. The attributes of family, community, individuals (student) and schools that foster resilience as shown by researchers (Werner, 1989; Werner & Smith, 1982; Rutter, 1987; Garmazay, 1985; Bernard, 1993) are:

Family factors that aid resilience:

- Close bond with primary caretaker.
- Educated parents.
- Maternal competence.
- Supportive extended family.
- Small family size-less than four children.
- High warmth and low criticism.
- Unconditional love.
- Education is valued.
- Sets high expectations.
- Faith and strong religious orientation.

Family factors that impede resilience:

- Unstable family home.
- Substance abuse.
- Parent mental illness.
- Teenage parenthood.
- Uncaring primary caretaker.
- Poverty.

Community factors that aid resilience:

- Caring support for members of the community.
- Provides access to resources for meeting basic needs (housing, health care, recreation, employment).
- Opportunity for participation and leadership roles in community affairs.
- Sets norms of expected behavior.
Community factors that impede resilience:

- Poverty.
- No employment opportunities.
- No encouragement or support.
- Lack of community services (health, safety, child care, libraries, parks, museums).

Student factors that aid resilience:

- Easy going temperament.
- Above average intelligence.
- Good self-concept.
- Internal locus of control.
- Creative.
- Self-efficacy.
- Strong achievement motivation.
- Ability to distance oneself.
- Positive view of personal future.

Student factors that impede resilience:

- Authoritative parenting.
- Poor nurturing.
- Negative role models.
- Isolated from positive role models and peers.
- No positive recognition and feedback.
- Passive recipient.
- No opportunities to build self-confidence and self-concept.

School factors that aid resilience:

- Supportive caring teachers and staff.
- Successful school experiences.
- Unique talents of students recognized.
- Teach life skills (cooperation, decision making, problem solving, communication).
- Promotes close bonds.
- Sets and enforces clear boundaries.
- Encourages goal setting and mastery.
- Sets high expectations.
- Provides opportunities for participation in activities (designed to promote confidence, build self-concept, getting along with peers).
School factors that impede resilience:

Labeling of students is self-fulfilling prophesy, it destroys self-concept and confidence.
Time limitations due to curriculum requirements preclude bonding.
Class-room organization does not promote well being of students.
Students do not have input in class decisions or rules.
No opportunity to interact with other students (Text book learning).
Lack of resiliency “attitude” among teaching staff.
Lack of counselors or other caring adults.
Limitations

The findings of this study are intended to be directly applicable only to the population of Native American students enrolled in a BIA contract school, on the Pine Ridge reservation, South Dakota. The study does not include private or public schools. Thus specific characteristics of this population may limit the generalization of the findings. The study is also limited by the survey methodology. According to Jaeger, (1988) survey research may have limitations due to:

1. Respondent and teacher attitudes towards surveys.
2. Respondent and teacher attitudes towards research.
3. Fatigue in completing surveys.
4. Differences in interpretation of individual questions.

These limitations have been addressed in the administration of the instrument. The purpose of the research was explained to both students and teachers. Teachers were interested and excited about determining the means to improve the quality of education. Students were excited to be contributing information towards research that would benefit their community, and were eager to participate as subjects.

In order to minimize fatigue the demographic questionnaire and the resiliency questionnaire were administered on two separate days. The classroom teacher was available to answer any questions the students may have, or explain the items they had doubts about.
CHAPTER 2
REVIEW OF LITERATURE

This section will discuss the history of education for Native Americans; their achievement in school; and resiliency research.

History of Education

To understand the present status of education on the reservation, it is important to have a historical perspective of the Native American experience with the education system. This may shed some light on the problems facing schools on the reservation.

Prior to the arrival of the Europeans, Native Americans had their own schools. The Cherokees for instance, had their own written language, newspapers, constitution, representative government, and tax supported schools (Havighurst, 1967). During the colonization of America, many European Nations were involved in bringing Christianity and Western civilization to the various Native American tribes.

In 1568, Jesuit missionaries were the first to establish schools for Native Americans, they taught Christianity and French. The Franciscans, who were mostly of Spanish origin, were involved with the Southwestern tribes in California, New Mexico, Arizona, and Texas. The Roman Catholic missionaries were active throughout the Midwest and Northwest. The Protestants established schools mostly in the East. Funds were obtained from abroad for Christianizing and civilizing of the Native Americans.
Dartmouth College was founded for the education of Native Americans. Harvard was established for educating Native Americans as well as the Europeans. Hampton Institute and The College of William and Mary set up special branches for Native Americans. However, the schools educated only European children (Berry, 1968).

During the 1770s Secretary of war Henry Knox began recommending assimilation programs among Native Americans. Thomas Jefferson and other prominent Americans supported such programs. They believed that if Native Americans could be molded in their image, the bitter conflicts between the two cultures would end. As such, Native Americans were sent to boarding schools and indoctrinated into the European culture. To wean them from Tribal laws and customs they taught the students the principles of American history, American government, and were forbidden to use their language.

From 1778 to 1871 the federal government entered into several treaties with the Native American tribes. These treaties provided for the cessation of land to the federal government, in return the government promised to establish schools; provide health, technical and agricultural services. The education of Native Americans was entrusted to missionary groups, and the funds were provided by the federal government. When the constitutionality of financing church groups to provide education was questioned, the government created the Bureau of Indian Affairs (BIA) in 1836, and designated the responsibility of educating the Native American to the BIA (Evans, 2002).
The Fort Larami treaty of 1868 was one of the last treaties agreed upon between the U.S. Government and the Lakota Sioux Nation. It established the Sioux reservation as the permanent home of the Lakota Sioux. It covered all of what is now western South Dakota, including the Black Hills. In 1871 Congress prohibited further treaties with the Native tribes (Bowker, 1993).

In 1887, Congress passed the Dawes Severalty Act which became the framework for European settlers to occupy the reservation land. Under this Act, each Native American was provided 160 acres of land, and the surplus land was sold or leased to the European settlers. The proceeds from this sale or lease were supposed to be used for the education of Native Americans, but in reality very little money was used for this purpose. The Native Americans lost millions of acres of their land. This was the beginning of great bitterness between the federal government and the Native American tribes.

In 1918, Congress passed a new act that eliminated the responsibility of the federal government for the education of large numbers of Native American children who were of less than one fourth Native American Heritage, further exacerbating the Native American problems.

In 1928 Lewis Miriam (Commissioner of Indian Education) and other specialists, published a study of the problems faced by Native Americans on the reservation. This study, entitled “The problem of Indian Administration” (known as the Miriam report) criticized the federal government’s handling of Indian affairs, and the education. The Miriam report singled out allotment as the main reason for poverty among Native Americans. It blamed congress for failing to appropriate sufficient fund, and the BIA for neglecting the Native American needs. The report recommended the establishment of
adequate secondary schools, and loan programs for higher education. It also recommended eliminating boarding schools for elementary children and increasing the number of day schools (Miriam et al., 1928). John Collier became the new Commissioner of Indian Affairs in 1933; he believed that day schools were better for children than the boarding schools. His philosophy was that schools are the center of community activity where adults and children learn and help each other. He expanded the curriculum, hired better teachers and supported bilingual education (Fuchs & Havighurst, 1973).

In 1934, Congress passed the Johnson O’ Malley Act that provided funds for the education of Native American students in public schools, better qualified teachers and administrators, medical aid, agricultural assistance and social welfare. The money spent by the federal government to improve the standard of living for the Native American on the reservation was resented by many, and in 1953 Congress passed the House Concurrent Resolution 108. Senator Arthur Watkins (Utah) a major spokesman for the resolution expressed the philosophy of termination policy thus: “we should end the status of the Native American as wards of the government and grant them all the rights and prerogatives pertaining to American citizenship” (Prucha, 1975, p 239).

In 1950 Meyer became the new Commissioner of Indian Affairs. He made termination a national policy. He scheduled tribes for termination and relocation, the Native Americans who were relocated outside the reservation had trouble finding jobs, and life in the city was worse than on the reservation. Meyer reversed all the good achieved by Collier (Prucha, 1975).
In 1965, Congress passed the Elementary and Secondary Education Act to meet the needs of special education students. In 1968, President Johnson, asked Congress to put an end to the termination policy and support involvement of Native Americans in Native American affairs. During the 60s and 70s Native American educators, became active in promoting the rights of Native Americans. In 1969, a report on the federal policy towards Native Americans was issued by the special senate subcommittee on Native American education.

This committee was chaired by Robert Kennedy and Edward Kennedy, the report entitled “Indian education a national tragedy, a national challenge” states:

The dominant policy of the federal government toward the Native American has been one of coercive assimilation … resulting in … the destruction and disorganization of Native American communities and individuals; a desperately severe and self-perpetuating cycle of poverty for most Native Americans. The coercive assimilation policy has had disastrous effect on the education of Native American children … which resulted in … the classroom and school becoming a kind of battleground where the Indian child attempts to protect his integrity and identity as an individual by defying the purposes of the school; … a dismal record of absenteeism, dropouts, negative self-image, low achievement, and ultimately academic failure for many Indian children … (U.S. Senate Committee on Labor and Public Welfare, 1969 p 157).

In response to the Kennedy report, Congress passed the education Act of 1972. The Act provided for parental and community participation; encouraged the establishment of contract schools; stressed bilingual and bicultural programs and adult education. Provided funds for the training of teachers for BIA schools with preference given to Native Americans.
During President Regan’s administration however, budget cuts affected the Native American programs, including education. Since 1975, Native American education has suffered a steady decline (Lakota Times, Sept. 2, 1999).

Achievement

Early researchers have attributed low achievement among Native American students to inferior mental abilities. Since 1935, however, most researchers have supported the theory that Native American children are mentally as competent as the children in other ethnic groups (Fuchs & Havighurst, 1973). A study of Oglala Sioux students indicated that the students performed satisfactorily until the sixth grade, after the sixth grade there was a decline in student performance (Bryde, 1969). This phenomenon was labeled by Bryde (1969) as the “Crossover Phenomenon,” he believed that early adolescence is an extremely difficult time for Native Americans because the cultural differences become evident during that stage of development, the resulting personality disturbances block achievement. Havighurst (1981) found that Native American children were well prepared for school during the elementary years, but thereafter they showed a steady decline in grades four to six. Lin (1985) reported that 64% to 74% of Native American students score below the national norm on standardized achievement tests. Wax and Wax (1968) reported that the Tribal leader’s and student’s extended families encouraged students to stay in school and that the “forces causing the student to dropout of school were those of cultural disintegration, exemplified by alcohol abuse, dysfunctional families, and high rates of unemployment –forces similar to those that cause non-Indian students to dropout” (p. 260),
Lin (1985) found that Crow boys expressed a “concern for and motivation toward education” equal to that of white students (p. 9). Research points out to the low academic performance of Native American students and most of them cite poverty, cultural differences, unstable homes, drug abuse, and teen pregnancy as key determinants of low achievement in schools (Walker, 1989). Cummins (1994) stated that:

Indian students throughout North America have experienced disproportional school failure in educational systems organized, administered, and controlled by members of the dominant group . . . Education failure is regarded by the dominant group as the natural consequence of the minority groups’ inherent inferiority. With regard to the American Indian, This victim-blaming is legitimized by pointing at high rates of alcohol abuse, poor hygiene, and lack of middle class child rearing practices, all of which are viewed as manifestation of the minority groups’ deficiency. (p. 3).

There are three general correlates that relate to poor achievement and lack of success for Native American students, these are: Personal problems; Family background; and school factors. (Bowker, 1993)

**Personal Problems**

Substance abuse is a serious problem among Native American youth. Research conducted by Colorado State University reported that more than a third of the adolescents use alcohol and marijuana on a regular basis, compared to only 5% regular users among non-Native Americans (Hodgkinson, 1990). Adult substance abuse is common on the reservation. Native American youth are exposed to negative role models from an early age. Two studies in Montana found alcohol to be a major factor in the high dropout rate among Native American males (Edwards, R & Edwards, D, 1988).
Success in school is often highly correlated to self-concept and self-identity. Research generally indicates that Native American students have lower self-esteem than students from other racial/ethnic groups and they have more difficulty in establishing ethnic and tribal identity and pride in their Native American Heritage. Abdel-Mawgood & Hatch (1973) stated that Native American students feel despair, disillusionment, alienation, frustration, hopelessness, powerlessness, rejection, and estrangement, all elements of negative views of the self. Other researchers have discovered that Native American youth had far less conviction that they could affect their own environments and futures, while others have suggested that Native American children are unable to cope with feelings of helplessness and hopelessness and therefore drop out of school before graduation (Collardaci, 1983). Hodgkinson (1990) reported that 19% of eighth grade students expect they will drop out of high school.

Abdel-Mawgood and Hatch (1973) found that self-concept of Native American students was lower than that of non-Native American and was an accurate predictor of academic success. Wilson and Black (1978) stated that the ability to control one’s environment is directly related to self-esteem. Since Native American children have little control over their educational environment and perceive their teacher’s expectations of them as low, they often perform accordingly. Performance then reinforces their negative self-image. Havighurst (1981) concluded in a national study of Native American youth that the great majority of Native American youth saw themselves as competent individuals within their social world. Their study showed that Native American youth look to their futures with optimism and hope and that there is no evidence that they suffered from feelings of alienation, frustration, and hopelessness.
Tempest’s (1985) study of Navajo students supports finding of (Havighurst, 1981). Navajo students saw themselves as more positive than their teachers saw them. Bandura (1977) described identity formation in adolescence as dependent upon a youth’s ability to integrate identification from previous experiences with his/her current drive, abilities and opportunities. He mentioned that vital to obtaining a sense of self identity formation was the assurance that there is consistency between an individuals’ self image and the image others have of the individual.

**Family Background**

Family structure and family socialization practices appear to be important determinants of achievement, motivation, and educational attainment (Rosen, 1961). There has been little effort to examine these factors from a Native American perspective. Research indicates a high correlation between school achievement and socioeconomic status (SES) of the family. Many Native Americans are classified in the lower economic brackets. Poverty and unemployment rates of Native Americans are among the highest in the Nation. According to the 1980 U.S. census records, the median income for a Native American family was $13,600 (over $6000 less than the National median. Nearly fifty percent of the men on the reservation are unemployed. It was reported that 59% of the adult Native American population had neither a high school diploma nor GED. Of the adults over the age of twenty five, 16% had less than five years of schooling (U.S. Dept. of Commerce, 1983).
Solo (1997) states that certain conditions at home help foster school success. He observed that children who succeed in school are predominantly from middle and upper class families. Some of the home conditions that helped promote success in school are: Close family relationships that help build positive self-image; helping children read at home; parental involvement in school; having high expectations for children’s schooling; clear rules and standards for child’s behavior; household responsibilities; dealing with stress and problems positively, and encouraging children to work hard.

Dysfunctional families aggravate children’s problems and ability to adjust to school requirements. Many children suffer from unpredictable home environments that include loss in their family through divorce, separation, arrest of parents, domestic quarrels, and alcohol abuse (Block & Block 1981). Fifty percent of child abuse and eighty percent of child neglect are related to alcohol abuse. Research indicates that where parental involvement is lacking, so too is student achievement. Reyhner (1991) found that parent and community involvement, along with peer support are critical to educational success. If family, schools and communities work together and demonstrate caring active participation, children will have a greater opportunity to develop into socially competent, problem solving, autonomous youngsters with a clear sense of purpose.

**School Factors**

Graduating from high school and going to college are generally accepted as indicators of successful growth. This is one way to evaluate school’s effectiveness. Research illustrates that dropping out of school or transferring between schools is a significant problem for Native American schools.
Bowker (1993), states that as many as 50% of the students currently enrolled in school may not graduate. Studies have found dropout rates that range from 20% to 52% (Deyhle, 1989 p. 27). In his study of Navajo Indians in High School, Deyhle reported 59% graduated, while 18% were in school for 12 years but did not graduate. A significant proportion of American Indian/Alaska Native children drop out or transfer between schools at a higher rate compared to other ethnic and racial groups (Swisher & Hoisch, 1992, p. 4). The transfer rate for students in the BIA schools ranges from 10% upwards to 30% in the high school (Latham, 1985). Latham (1990) also found that transfer students typically have the most academic and behavioral problems. Latham (1985) examined data from review of literature, questionnaires to schools, BIA offices, and school officials of BIA and public school officials that receive support from the federal Johnson O’ Malley Act of 1934. He found a mean annual dropout for high school grades of 32% for students in the BIA schools and Contract schools, and 24% for American Indian/Alaska Native (AI/AN) students of federally recognized tribes enrolled in public school programs (p. 28). Transfers occur throughout the school year; they disrupt classroom routine and affect the learning process. This problem is exacerbated during the “count week”, the period when the federal government provides funding for each student. Many schools actively recruit students into attending during the count week, and then ignore them once funding is secured (Latham, 1985 p. 27).
Since the passage of the Indian education Act in 1972, many improvements in Native American education have been made but the dropout rate now is similar to the period preceding 1969. The Kennedy report of 1969, found a 40% dropout rate among BIA schools. Today, the dropout rate is still a major concern for schools on the reservation (U.S. Senate Report No. 91-501, 1969).

The reasons for dropout are not well understood. Wax (1967) states that students leave school for various reasons, but very rarely due to trouble with studies. Most often cited reasons are: loneliness and conforming to school regulations. Wax describes the dropping out experience among Oglala Sioux boys. Wax (1967) claims that “neither the dropout nor the process of dropping out are well understood” (p. 247). According to Wax, students leave school for different reasons, under different conditions. She stated: “Many state explicitly that they do not wish to leave school and see themselves as “pushouts” or “kickouts” rather than as “dropouts” (p. 247). Wax interviewed 153 youth between the ages of 13 and 21. Thirty five percent of youth dropped out before the end of the ninth grade. The reasons for leaving were: lonely place. abuse from other students- in a heterogeneous school population. For many, school was “all right” but conforming to regulations was too difficult (p. 254).

Collardaci (1983) examined 46 of 424 students who dropped out. The student responses were categorized into three areas (teacher/student relationship, school content, and lack of parental support). The responses showed that 37% felt teachers did not care about them; 44% felt schools did not teach what they want in life; and 44% stated problems at home and lack of parental support (p.19). Collardaci (1983) studied the correlates for dropping out among Navajo students. Academic problem seemed to be a
minor factor in dropout behavior. The reasons given by students for dropping out were: bored with school, retention due to absenteeism, and problems at home. Eberhard (1989) identified several phenomena correlated to dropping out. The most significant was that there was an 88% dropout rate among students who were retained between grade levels.

Dehyle (1992) found student dissatisfaction, feelings of mistrust, alienation, academic difficulties, and family responsibilities as some of the reasons for student dropout. Dehyle agrees with Collardarci (1983) that lack of assistance was the chief reason for student’s feelings that the teachers did not care. They explained a good teacher is one who “cares”; bad teacher is one who tells students what they do wrong. Teachers have stereotypical views of students, and low expectations from them, this has been identified as a contributing factor for attrition (Bowker, 1993).

Mobility of the family plays a negative role in achievement and dropout rate. Hodgkinson (1990) concluded that missing large number of days contributed to the high dropout rate for Native American students. Fuchs and Havighurst (1973) conclude that the reason school achievement is unimportant to students or parents are that neither can directly relate education to the future opportunity for success. Blumhagen (1984) reached similar conclusions that Native American students see no relevancy to staying in school and future benefits.

Mahood (1981) states that poor reading ability is the most significant reason for dropping out of school. Poor reading ability leads to school failure and repeated failures result in withdrawal from school. Bass and Tonges (1970) found lack of basic communication skills (speaking, listening, reading, and writing) were a major factor. “Researchers agree that one of the most significant sources of dropping out of school is
poor reading ability. Poor reading ability leads to school failure, and repeated failure lead
to feelings of being a ‘born loser’ which in turn lead to feelings of either compensatory
aggressiveness or withdrawal. Neither behavior is particularly conducive to survival in
schools. When success in school is no longer seems likely, they are forced to leave”
(Mahood, 1981, p. 56). Reyhner (1991) identified the following factors: Factory like
schools, irrelevant curriculum, uncaring teachers, inappropriate assessment and lack of
parental support.

**Resiliency**

Schools today face difficult challenges in assuring success for all students. The major
concern for school teachers and administrators is the high number of at risk students who
are chronic underachievers, behaviorally maladjusted, and potential school dropouts.
Experts in the fields of psychology, sociology, and education differ in their assessment of
students labeled “at risk”. Some maintain that today “all youth are born at high risk”
(Glen and Nelson, 1983 p 49). Dryfoos (1990) estimates, that 25% of the ten to seventeen
year olds are at high risk, and an additional 25% are at moderate risk. While Moles and
Lewis (1991) believe that today’s teens are doing well in comparison to previous
generation and that only a small percentage are at risk. There is a tendency to equate the
term “at risk” or “high risk” with socio economic status, educational failure, or unstable
family situations. “In the 1980s in this contry, the Damage Model seeped down from the
professional to our popular culture in a big way . . . How can we escape the pessimism of
the damage Model prediction? . . . we need to hear less about our susceptibility to harm
and more about our ability to rebound from adversity when it comes our way.” (Wolin &
Wolin, 1993, p. 20). This led to a new interest in research, away from the ‘pathology model’ to the ‘wellness model’ Resiliency research focuses on the factors that keep people healthy and competent . . . “explore the well springs of individual strength” (Higgins, 1994, p. 2). In the longitudinal study of children of “risk” Bernard (1991) found that a “certain percentage of high risk children developed various problems, a greater percentage of the children became healthy, competent, young adults” (p. 2). A number of studies contradict or challenge the notion that poverty, stress and risk inevitably doom people. Longitudinal studies of the same group of children from infancy or preschool years through adolescence and adulthood have shown that at risk children do not necessarily end up with problems (Block & Block, 1981; Murphy & Moriarty, 1976; Werner & Smith, 1982). Several research findings also show that children developed coping skills that enabled them to do well in school in spite of chronic poverty and discrimination (Clark, 1991; Grandora, 1982; Garmezy, 1981; Werner & Smith, 1982; Winfield, 1991). Research done on the coping patterns of children exposed to severe stress such as in wars or natural disasters revealed that some of these children displayed tremendous strength and successfully adapted to life (Ayala-Canales, 1984; Fraser, 1974; Haskin, 1980; Moskovitz, 1983; Rosenblatt, 1983; Wallerstein & Kelly, 1980). Coles (1986) in the “Moral life of children” tells the Story of Ruby an African American child who was escorted by federal marshals to a segregated white school. Prayers helped her persevere, she prayed for the people who protested. Coles (1986) sees religious belief as a key factor in the development of resilience in many of the poor children. There is ample evidence of children who despite difficult lives grew up into healthy, successful citizens. For instance Jean Jacques Rousseau, Rudyard Kipling, Richard Nixon, Eleanor Rosevelt,
John Muir, Loren Eisley, George Orwell all had unhappy childhood (Steele, 1986, p 291). All these individuals are survivors and achievers. Some researchers have called these individuals invulnerable (Anthony, 1974) others consider them to be stress resistant (Garmazy, Masten, & Tellegen, 1984). Werner and Smith (1982) in their longitudinal study on the Hawain island of Kauai found the individuals to be vulnerable but invincible.

The concept of invulnerability is fairly recent. Garmazy has been a key figure in developing it (Garmazy, 1974, 85; Garmazy, Masten, Nordstrom, & Ferrarese, 1979). Garmazy and Neuchterlein (1972) used the concept to describe a small group of African American children from the ghetto who had adjusted to the stress of poverty and prejudice and succeeded in school. Werner and Smith (1982) conducted a longitudinal study of 698 children born on the island of Kauai. These children were from homes of poverty, family instability, parents with little education, and health risks. Thirty percent of the sample had serious behavior and/or learning problems in school up to age 18. Yet, there were others from the same background who developed into competent individuals despite the barriers. Rutter (1985) found that children of mentally ill parents, teenage parents, children in foster care, and abused children achieved success as adults. Nearly half of them did not repeat that pattern in their own lives.

The idea of resiliency, that people can bounce back from negative life experiences, has emerged from this research. Resiliency has been defined by many researchers in many different ways. Most seem to define resilience within the context of positive individual responses to adverse circumstances, or to adapting to stressful life experiences. Rutter (1987) used the term resilience to describe the phenomenon of
maintaining adaptive functioning in spite of serious risk hazards. Masten, Best & Garmazy (1991) referred to resilience as “the capacity for or outcome of successful adaptation despite challenging or threatening circumstances” (p. 425). Robinson (1992) defined resilience as the successful development of children despite stressful childhoods. Bernard (1994) considered resilience the natural outcome of healthy human development in which the personality and environmental influences “interact in a reciprocal, transactional relationship” (p. 1). Higgins (1994) describes resilience as the “process of self-righting and growth” (p. 1). Wolin & Wolin (1993) define resilience as the “capacity to bounce back, to withstand hardship, and to repair yourself” (p. 5). Rirkin & Hoopman (1991) resiliency can be defined as the capacity to spring back, rebound, successfully adapt in the face of adversity, and develop social, academic, and vocational competencies despite exposure to severe stress. Richardson & Nixon (1990) define resilience as “the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption that results from the event (p. 34).

Resiliency researchers emphasize that resiliency is a process, and it varies over the person’s life. Individuals differ in their vulnerability and their ability to bounce back. Some individuals have genetic tendencies that contribute to their resilience such as an outgoing personality or physical attractiveness, or an even temperament that endears them to people around them (Werener & Smith, 1992). Higgins (1994) claims that most of the traits associated with resiliency can be learned. Resiliency combines the interaction of two conditions:
1. Risk factors: Stressful events that increase the vulnerability of individuals.
2. The presence of personal, familial, and community protective factors that counter the affect of stress. (Jessor, 1993; Masten, Best, & Garmezy, 1991; Rutter, 1987).

It is the balance between stressful events and the protective factors that contributes to an individual’s resiliency. “Resilience and protective factors are the positive counterparts to both vulnerability, which denotes an individual’s susceptibility to a disorder, and risk factors, which are biological or psychological hazards that increase the likelihood of a negative developmental outcome in a group of people.” Werner & Smith, 1992, p. 3). Garmazy (1983) defined “protective factors” as “those attributes of persons, environments, situations, and events that appear to temper predictions of psychopathology based upon an individual’s at-risk status” (p. 73). Rutter (1985) refers to ‘protective factors’ as “influences that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes to a maladaptive response” (p. 600). Bernard (1991) defined ‘protective factors’ as positive action strategies that build resiliency in youth. Werner & Smith (1989) have identified three clusters of protective factors that differentiated the resilient group in their study from the high risk youth who developed serious problems in childhood and adolescence.

“These three are: 1). At least average intelligence and dispositional attributes that elicited responses from family members and strangers such as robustness, vigor, and an active sociable temperament. 2). Affectionate ties with parent substitutes such as grandparents and other siblings, which encouraged trust, autonomy, and initiation. 3). An external support system (church, youth group, school)” (p. 192).
Resiliency is a complex phenomenon that depends not only on the child and his/her characteristics, but also the characteristics of the environment in which the child lives. The characteristics of resilient children and that of the environment have been investigated by many researchers.

**Personal Attributes**

A resilient person has a healthier self-concept than a non-resilient person (Werner & Smith, 1982; Garmezy, 1985; Rutter, 1987; Luther, 1991). A study of high risk children by Rutter (1984) showed that the more resilient individuals had internal locus of control, and they exercised personal control over their lives. Resilient children are friendly, conscientious, and responsible. They are cognitively superior and have higher academic success (Garmezy & Rutter, 1987; Werner & Smith, 1992). They have realistic goals, and have the ability to distance themselves from dysfunctional situations (Anthony, 1987; Hawkins, Catalano, & Miller, 1992).

Resilient children are known to have four attributes:

1. **Social competence**: Resilient children tend to establish positive relationships with both adults and peers. They have mild temperament and adapt well to different situations.
2. **Problem solving skills**: Resilient children score higher on intelligence test. Have the ability to think abstractly, and find solutions to cognitive and social problems.
3. **Autonomy**: Have sense of one’s own identity, they are independent, resourceful, and have some control over their environment.
4. Sense of Future: Resilient children plan, have high aspirations, persistence, confidence, and believe their efforts will bring success. (Bernard, 1993; Wang, Haertel, & Walberg, 1997).

**Environmental Attributes**

The community, family, and school have impact on a child’s resiliency. Opportunities to participate in activities, sports, community functions and involvement in community projects and even care of younger siblings helps to improve self image and self worth, and builds resilience (McMillan & Reed, 1994; Werner, 1984). Studies show that school environment has a definite impact on resiliency. It fosters resiliency by placing reasonably high standards on students, giving them responsibilities, and enforcing fair and consistent discipline (Wang, Haertel, Walberg, 1997). Resilient children like school, they find support in school, they bond with people, they work cooperatively, and their self esteem is high (Bernard, 1991; Pines, 1984; Werner, 1984). Research evidence demonstrates that a nurturing school climate has the ability to curb risk factors. Opportunity to participation in school activities, caring support, and positive expectations can protect high risk children from adversity (Bernard, 1994; Gabarino, et al., 1992). Research shows that schools are critical environments for individuals to develop the capacity to bounce back from adversity. All children can become more resilient if they are taught skills, encouraged to succeed and are rewarded with praise (Garmazy, 1991).
The role of teachers in helping children overcome adversity has not been researched extensively. Werner (1990) found that among the children on the Island of Kauai, the most positive role model in their lives (other than family) was a favorite teacher. Noddings (1988) found that children will work harder and complete assignments for people they love and trust. Good experiences in the classroom help mitigate stresses at home.

Successful schools had consistent and fair discipline, high expectations for students, caring teachers and staff, effective feedback from teachers with praise, giving student’s positions of responsibility, and providing opportunities for meaningful participation.

Family is the most important environmental factor that has long lasting influence on the child. Children with parents that care, and who have a stable, loving and caring home environment, and they establish close bonds, feel that life is predictable and good. Supportive family, a structured environment with clear rules that are enforced, love and praise for the child aids in building resiliency. Resilient children develop high self concept and self image, they are independent, set realistic goals, they are problem solvers, and are self-reliant. From grade school onwards resilient youngsters had teachers who were positive role models for them. Even children in concentration camps were inspired to resilience by the influence of a special caring person (Werner, 1970).
CHAPTER 3
METHODOLOGY

This chapter presents a restatement of the problem; the research design; the setting; the community; instrumentation; data collection; and a description of data analysis.

Restatement of the Problem

Schools on the Pine Ridge reservation are plagued by high dropout rates and relatively low scores on standardized national tests. Research studies attribute this phenomenon to the low socioeconomic status, cultural differences, unemployment, alcoholism and other social ills of poverty (Bowker, 1993). According to McInerney and Swisher (1995) research on Native American population has provided very little information that leads to changes in educational practices for Native American students. This is further compounded by the fact that many researchers assume that cultural characteristics are a factor. Several research studies in resiliency have shown that, a significant number of children reared in the most adverse circumstances develop into competent and productive adults (Cowen, Wyman, Work, & Iker, 1994; Werner, 1989; Werner & Smith, 1982).
This study focuses on the current status of education; the challenges faced by the school system; the impact of the community on educational success; and the determination of the traits and characteristics of resilience in students that enable them to overcome their debilitating environment and succeed despite all odds against it. Knowledge of the factors that contribute to success and retention in school is crucial. Understanding the problems faced by reservation schools permits administrators of schools to place emphasis on areas that will help students to remain in school, and find means to motivate them to achieve. If the mechanisms and processes by which vulnerable children develop into competent and productive adults are understood, it is possible to develop educational programs to foster these traits in all children to strengthen their confidence, self-esteem, and resilience.

Participants

The participants in this study were junior high students (grades 6-8), at a representative Native American school on the Pine Ridge reservation, South Dakota. All the students are Native American, Lakota Indians. They all speak English at school and at home, some speak Lakota with their parents and grandparents. The students participated in this survey on a voluntary basis without any compensation. Teachers were also willing participants. The researcher worked as math teacher during the 2001-2002 school year, for grades 7-8, and lived on the reservation during the school year. The trailer home was across from the school, it was very convenient and it was great to be
able to walk to school and not have to fight the traffic. The researcher participated in local functions, associated with local people, attended community events such as Pow Wows, basketball games, birthday parties, weddings and funerals.

The researcher also took part in school activities, Spring Festival, school fair, picnic, field trips, teacher meetings, teacher in-service. The researcher associated with all teachers K-12, as well as the support staff (secretaries, kitchen help, janitors, and school bus personnel), the principals and school board members. Every one was very friendly, helpful, and most generous. The researcher made mental notes of her observations and conversations, and later transcribed them. The researcher chose not to make notes in front of the people, as this might prevent candid discussions. The teachers, students, principal and everyone the researcher spoke to were informed of the interest in collecting data for research. They had no objection and went out of the way to procure the information requested.

Setting

Pine Ridge reservation is located in the Southwest corner of South Dakota. Fifty miles east of the Wyoming border; and between Black Hills to the west, Badlands to the north, and Nebraska to the south. The topography of the reservation includes Badlands, rolling grassland hills, dry prairie, and areas dotted with pine trees, cottonwood trees, and bushes of choke cherry and blackberry. The Pine Ridge reservation is divided into eight school districts: Eagle Nest, Pass Creek, Wakpamni, LaCreek, White Clay, Medicine Root, Porcupine, and Wounded Knee. The Junior High School (grades 6-8) where the research was conducted is located in Shannon County.
Community

The school is located in a small town, and like all other towns on the reservation, it experiences economic and social distress, high unemployment, substandard housing, few job opportunities, alcoholism, drug abuse, domestic abuse, and violence.

The population of Shanon County is 12,466. Nearly half (49.9%) are male and 50.1% are female. The teenagers account for 11.4% of the population, while the young adults 24-34 years are 13.3%. People between ages 45-54 are 8%, and 65-74 years the figure is 3.2%; 85 and over it is 0.3%. Majority of the people in Shanon County are Native Americans. The people of European ancestry account for 4.5% and a very low number (0.1%) are African Americans. The school enrolment for students 3 years and over is 4956, in Shannon County. Elementary school (grades 1-8), has an enrollment of 2732 students. The high school has 931 students. Only 26.4% have high school diploma, 9.3% have less than 9th grade education, 20.7% have 9-12 years of schooling but, no diploma. Associate degree holders are 8.1%, and 7.5% have a bachelor’s degree. Some (4.6%) pursue a professional degree (US census, 2000).

The town has one small convenience store that sells basic items such as bread, milk, candy, pop, pencils, and other sundries. There is a small post office, where one can purchase stamps or send money orders. There is no mail delivered to homes, people collect their mail from personal mail boxes at the post office. Fifteen miles from school is the town of Pine Ridge, where the center of the Tribal Government is located, as are the BIA headquarters, the department of public safety (tribal police), court house, law offices, Indian Health Service Hospital, housing department, community high school, junior high school, Catholic Mission school (Red Cloud), a large post office that is
housed in a brick building. The building also houses the youth center, employment office and an auditorium (Billy Means Hall) where most of the important community events take place. Pine Ridge has a large family owned convenience store, which offers carry outs, as well as meals on the premises, served by neat, well groomed Native Americans. The store sells gas, and just about everything else one might need. There is a large Native American owned and operated grocery store and department store. There are a few fast food places. There are no public libraries, theaters, movie houses, motels, banks or public transportation.

The local community has close knit family ties, everybody knows everyone. They are very helpful and take care of each other. The elders are respected and taken care of. Many of the children are raised by grandparents if their parents are working outside the reservation or the parents are deceased. The community members try to maintain traditional values, and encourage cultural activities and traditional ceremonies and food. The children however, are influenced by the mainstream American culture through music, television, movies and sports. All the children speak English, even at home. A few know the Lakota language and are able to speak with their grandparents and other elders in the community. Many of the households are headed by women, who lack time and resources for active involvement in the care and education of their children. The majority of the parents have not completed middle school. However, they want their children to go to school and do well. Various government programs help with Head Start, kindergarten, and programs for mothers, adolescents, and dropouts. They also have job training programs at the local community college. Native American children have many responsibilities at home, from an early age, including care of younger siblings and older
grandparents. They cook and even drive a car (some at 10-12 years of age). Because of all the responsibilities they assume at home, the children appear more grown up than their age.

A large percentage of the people on the reservation belong to the Catholic church, but there are also places of worship for Episcopalian, Presbyterian, Seventh Day Adventists, and a Native American church.

Unemployment continues to be a source of social problems. The only jobs available are with the governmental organizations, hospitals, schools, police and the casino. But there are not enough jobs for all. Seventy to 80% percent are unemployed. Alcoholism is another major problem in the community. Alcohol is prohibited on the reservation, but is available outside the reservation. The town of White Clay in Nebraska where alcohol is sold is within walking distance from the reservation. The Tribal officials’ efforts to have the State of Nebraska close the liquor stores have failed. Alcohol consumption by the Native Americans contributes to serious problems on the reservation, including domestic violence, child abuse, and fetal alcohol syndrome. It is also a major cause of fatal automobile accidents. All along the highway and local roads are markers where fatal accidents have occurred, reminding drivers of the hazard of alcohol consumption and driving. The markers are placed by the State of South Dakota. Families of the deceased leave crosses and flowers at the markers.

School

The elementary school (K-12) where the research was conducted is a BIA contract school. The junior high (grade 6-8) building is five years old, and has a nice science room.
with large picture windows, work tables with electric outlets, gas outlets, and sinks for lab work and for conducting experiments. The classroom also has a nice hood for work with chemicals, and a safety shower. However, due to lack of funds, experimentation or activities are not included in the standard school science curriculum. The sparse vegetation also precludes science projects in the natural environment. Science teaching out of necessity is textbook based. They have some microscopes, but no prepared slides, or material to prepare slides. Observing microorganisms in pond water is the extent of the microscope use.

The school building for the lower grades (K-5) is very old and has been declared unsafe, but it is still in use. It has asbestos ceiling which is encapsulated (sealed for safety). The plumbing is old, and the walls have mold residue. The gym, located in the elementary school building doubles as the cafeteria for breakfast and lunch, as well as the auditorium for school functions and community activities such as the Pow Wow, and occasionally for funeral services. The school serves free breakfast and lunch to the students. The food is nourishing, well balanced and prepared fresh every day. The children are given meat, fresh vegetables, fruit and milk. For many children this is the only decent meal they get. The school has an indoor and outdoor basketball court and a fairly decent playground.

Programs such as Lakota studies, special education, counseling, and the maintenance department are housed in temporary trailers on the school grounds. Across from the school are a few houses and trailers for the teachers and staff members. Very few non-Native American teachers live on the reservation. They prefer to stay outside the reservation and drive to work every day, some drive 100-150 miles a day.
The overall atmosphere in the school is one of caring and love. Every Monday morning the school starts with a prayer session Lakota style, with drums and Lakota singing to welcome the students and pray for their safety and success.

At the end of the week, on Friday morning the prayers are to protect the children over the weekend and guide them in their life. During the prayer meetings they also give recognition to students who achieved in sports, dance, or academics. Teachers are given recognition also. And once a month they honor the students, teachers, and staff member’s birthdays. The Lakota people have a very charming custom of having the honoree’s come to the front of the auditorium and the rest of the students and staff, walk past single file and shake hands with the special person, while the student drum group plays the honor song.

The school is a safe secure place, with caring adults, good food, clean restrooms, and programs for the students such as ‘gifted and talented’ field trips, trips to the city, as well as counseling services. The children are encouraged to participate in sports, music, dance, and other activities. The uniforms and shoes for sports, and the dance outfits are provided by the school and the tribal council. All children are helped and encouraged to succeed in school. However, after the fourth grade there appears to be a steady decline in academic performance. Some students are allowed to graduate from the eighth grade even if their scores indicate otherwise. The students are assigned extra makeup work, to enable them to pass. Parents do not like their children held back, especially in the eighth grade. Eighth grade graduation is a big affair with “cap and gown” ceremony and a
banquet for students, parents, and teachers. For many this is the end of their schooling. They attend high school but eventually drop out. In Shannon County, the high school graduation including GED is only 26.4%. (U.S. census, 2000)

This brief account of the social, economic, and school climate gives some indication of what children on the reservation face. To understand the poor performance of the schools compared to schools outside the reservation one needs to also look at the history of Native American education (detail given in the review of literature) and the great injustices suffered by the people. It is easy to say that was the past, they need to deal with the present and there is help available for the Native Americans. However, it is not simple. The current generation of students, have parents and grandparents who remember the ordeal of boarding schools, the separation from families, the denial of use of their language, customs or clothing, even preventing men from wearing their hair long, the forced transfer to cities where life was worse than on the reservation. Many are still faced with unfair treatment by the government and some members of the dominant society. Some of this distrust, resentment, and anger at the government and the dominant group might influence the children, who fail to see education as a way out of the cycle of poverty.

Native Americans comprise less than 2% of the United States population. As such, they do not generate much interest by researchers, educators, government officials, or the general public.
**Instrumentation**

Three instruments were used to collect the information necessary to answer the research questions. The demographic questionnaire was used to obtain background information on junior high students’ (grades 6-8) (Appendix C). A resiliency questionnaire, to test the relationship between resiliency and school achievement, was given to junior high students (Appendix D).

The junior high teachers were given a questioner to obtain their perspectives on the issues that hinder student achievement (Appendix E). In addition, information from student’s school records including SAT scores, attendance, (%) and incident reports were collected.

The resiliency questionnaire was developed and validated by Jew (1991). The resiliency measure is based on the cognitive appraisal theory of resiliency posited by Mrazek and Mrazek (1987). The theory states that responses to stress are influenced by the characteristics an individual possesses, the individuals’ ability to evaluate the situation, the ability to process and understand the situation, and to react in a positive way. Mrazek and Mrazek (1987) identified twelve factors (or characteristics); six skill factors that foster resiliency and six personal abilities that foster resiliency. Jew (1991) used these factors in her instrument. These twelve factors are:

**Skill factors:**
1. Precocious maturity: The child’s ability to behave as a pseudo adult.
2. The conviction of being loved: The child’s ability to believe he/she is worthy of being loved.
3. Idealization of an aggressor’s competence: The child’s ability to recognize the aggressor’s competencies, and identify with these traits in a way that enhances self-esteem.
4. Cognitive restructuring of painful experiences: The child’s ability to reprocess past negative events in a way that will make them more acceptable or congruent with current views.
5. Positive projective anticipation: The child’s ability to project himself/herself into the future and fantasize how life will be when the difficult times are over.

6. Optimism and hope: The child’s ability to orient life in a way that fosters survival.

Personal abilities:

1. Rapid response to danger: The child’s ability to recognize and adapt to the requirements of the immediate social setting in order to avoid harm.

2. Disassociation of affect: The child’s ability to distance himself/herself from intense feelings.

3. Information seeking: The child’s desire to learn as much as possible about the hazards, in his/her immediate environment.

4. Decisive risk taking: The child’s ability to assume responsibility by making some crucial decision with the consequences that could result in considerable personal risk.

5. Altruism: The child’s ability to gain pleasure from giving to others.

6. Formation and utilization of relationship for survival: The child’s ability to create relationships that will result in crucial help and support in times of crises (In Jew, 1991, p. 27)

Jew (1991) devised 65 items to measure these twelve factors. Items were placed on a five-point Lickert scale 1 (strongly disagree) to 5 (strongly agree). Subjects were asked to rate the items as to whether they agree or disagree with the item. Content validity of the items was evaluated by a panel of five experts. “The panel of experts consisted of a child psychiatrist, two child psychologists, and the original authors (a child psychiatrist, and social worker) of the article, on which the resiliency scale is based (p. 42). The panel of experts examined a pool of 7-11 items per factor and five items were selected for each factor. Five more items that dealt with the overall concept of resiliency were added bringing the total items to sixty-five (Appendix D).

Jew (1991) conducted three studies and collected data were used to validate the resiliency measure. In the first study 408 ninth grade students from a metropolitan school district were administered the resiliency questionnaire. The academic records of students
were correlated with the resiliency total score and subscale scores to determine construct validity. Factor analysis was used to test if the items on the measure grouped by protective factor.

Jew (1991) found that the items clustered into four factors rather than the twelve hypothesized by Mrazek and Mrazek (1987), she labeled them as: Optimistic orientation, Independence, Future orientation, and Other person awareness.

In the second study, fifty students from the original 408 students in the first study were picked randomly (Cronbach’s alpha was used to test the reliability of the instrument, it was .61). This study was undertaken to assess the test-retest reliability of the resiliency measure. The resiliency instrument was administered to the subjects, and twenty three weeks later the same students were given the resiliency instrument again.

In the third study, thirty students were selected from Cleo Wallace Center, a residential day treatment and hospital facility that specializes in child and adolescent care. This study was done to investigate whether the resiliency measure was sensitive in differentiating children who differed in psychological, social, and academic functioning.

For the present study 60 items from the questionnaire by Jew (1991) were selected for the Resiliency instrument. These items were grouped into four factors (subscales) based on the relevancy of the item to the subscale. The subscales are Positive attitude, Independence, Goal, and Empathy. Factor analysis was not conducted since the sample size was small (n = 78). Jew (1991) conducted the factor analysis when she validated the instrument. The instrument was used with no changes, except five items that were not relevant to the current population were dropped.
Data collection

Initially, an application was submitted to the Human Subjects Review Committee, at the Ohio State University, Columbus, Ohio. The committee accepted the project with minor modifications, and granted permission for the research project to proceed. The researcher met with the teachers personally, explained the nature of the study, and the instruments to be used, and requested help from the science teachers in collecting the data. The researcher gave the teachers a written description of the study and copies of the questionnaires to be used. The teachers were more than willing to cooperate. They were interested in being part of a study that could be used to improve the quality of education at the school.

Before the data collection began, all the students at the junior high were invited to a meeting to explain the nature of the study and their role in the study. The purpose of the research was explained. They were told that I was a graduate student at The Ohio State University and I was conducting a research study as part of Graduate Program requirement. I informed them that I was interested in knowing more about how the school system on the reservation operated, and what measures one could take to assure success for all students. Their participation as volunteers was requested. Student/Parent consent forms (Appendix B) were given to the students to take home and obtain their parent’s permission for the student to participate in the research study. It was emphasized that participation was voluntary and that they could withdraw from the study anytime they choose to do so. The researcher contacted the parents by phone and in person, to ensure they all understood their child’s participation in the study and to request their cooperation in having students return the consent forms to the researcher, or class teacher. Once all
the consent forms were turned in, the students were given the questionnaires. The resiliency questionnaire was given on one day, and the demographic questionnaire the next day, during the regular science period. It was reemphasized that their participation was voluntary. They were informed that the information they gave would be confidential. Students were asked not to use their names on the questionnaire, but only the code number. The class science teacher assigned a code number to each student (using the attendance register as a guide). Students used this code number on the demographic questionnaire and the resiliency questionnaire, so that there was no confusion that the data pertained to the same student. This code number also corresponded with the grades and the SAT test scores. Students who were absent were given the questionnaire on they return to school, during their study period. However, despite efforts by the researcher and the teacher, it was not possible to get 100% student completion of questionnaires. Some students are chronically absent and repeated efforts to involve them failed. After trying for four weeks the researcher decided not to include them in the study. Some questionnaires had to be eliminated as these students did not have SAT scores on record. Hence, only 80% of the student’s had a complete set of data. The teachers were given a questionnaire to obtain their perspective on the challenges faced by the school. The teachers were requested not to put their name on the questionnaire. Seventeen teachers out of thirty six returned the questionnaire.

Research Design

A non-experimental correlation design was employed, since the information regarding the variables were not subject to manipulation and were obtained from an
existing natural setting (a local school). This type of research is appropriate when one wants to look for, and describe relationships that may exist among naturally occurring phenomenon, without trying in any way to alter these phenomena.

Regression analysis was undertaken to determine if there is an association between the independent variables and the dependent variable school achievement (SAT science score) rather than if a causal relation exists between them. The independent variables used are grade, Attendance (given in percent), number of Incident reports and the resiliency subscales: Positive Attitude; Independence; Goal and Empathy. It is important to know the factors that keep students productive and successful in school, especially since the student dropout rate and failure is high on the reservation.

Data were obtained by survey methodology. This type of research allows for objective analysis of data that are gathered from direct sources (Jaeger, 1988). Survey research has four common characteristics:

First: Survey researchers are seeking specific information about a large group.

Second: The group participation in the survey is well defined.

Third: The survey researchers are looking for information concerning the present state of a group.

Fourth: It is crucial to ask appropriate people for the information (Jaeger, 1988).
**Data Analysis**

A complete and thorough review of literature in the field was done (detailed discussion in Chapter 2). Based on this review it was decided, that since the focus of the study is on the current status of education, the problems facing the school system, and the characteristics of the successful students in the present environment, emphasis will be on the variables pertaining to these issues.

**Variables**

The dependent variable chosen for this study is the SAT science scores (criterion or outcome). The Independent variables are: Gender, Class rank (grade), Attendance (%), number of Incident reports (a measure of disciplinary action) and scores on the Resiliency subscales (Positive Attitude, Independence, Goal, and Empathy). The variables of socioeconomic status, family education, unemployment level, alcoholism, family income, home environment, etc. which have been reported in literature to be contributing factors to the success or failure of students will not be stressed, since all students on the reservation face a more or less similar background. Besides, these issues are not within the schools capacity to change. The researcher was interested in seeing what the school under the present circumstances can do to enhance learning and success for its students.

The resiliency variable and sub-scales had been tested by Jew (1991) to determine dimensions within each subscale. The questionnaire was used without modification, except for this study only 60 items that were appropriate in the context of this study were selected. The items were grouped into four subscales for the purpose of analysis. The
items selected were appropriate for each subscale. The reliability of the questionnaire for
the current study was determined by generating Cronbach’s alpha coefficients for each
subscale. The Cronbach’s alpha for the Positive Attitude subscale with 17 items was
.80; the alpha for subscale Independence with 16 items was .74; the alpha for Goal
subscale with 12 items was .76; and the alpha for Empathy subscale with 15 items was
.75 (Table 4.3). Based on these findings, it was decided to use the subscales in the
analysis of this study.

Frequency distributions were generated for student’s background data (Gender,
Grade [class rank], SAT scores, Attendance, and Incident reports using the Statistical
Package for Social Sciences 11.5 (SPSS) and were reported in tabular form (Table 4.1.,
and 4.2). Overall means and SD for subscales on the resiliency measure was generated
using SPSS statistical program and reported in tabular form (Table 4.4). The extent to
which the independent variable, Resiliency subscale scores, Attendance, and Incident
reports related to the dependent or criterion variable (achievement) was determined using
Regression analysis.
CHAPTER 4
ANALYSIS OF DATA

This chapter presents results from the analysis of data. Results are presented in two sections: The first section presents the demographic characteristics of the respondents’, and the second section presents the results of data analysis.

Characteristics of Respondents

All of the children at the junior high school (grades 6-8) have more or less similar economic background, which is low. Many children live in trailer homes in housing projects or on privately owned land away from the school area. Some have regular brick or stone houses, or wood frame homes. All children are bussed to school. The roads are not paved, except for the main streets. When it rains the roads are quite unmanageable, and buses get stuck, leading to school delays.

The frequency distributions for the demographic data were generated using SPSS and are presented in Table 4.1. All junior high students are Lakota (Sioux), with various degrees of European ancestry.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>35</td>
<td>44.9</td>
</tr>
<tr>
<td>F</td>
<td>43</td>
<td>55.1</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>30.8</td>
</tr>
<tr>
<td>7</td>
<td>27</td>
<td>34.6</td>
</tr>
<tr>
<td>8</td>
<td>27</td>
<td>34.6</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Sch. Retention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>65</td>
<td>83.3</td>
</tr>
<tr>
<td>Once</td>
<td>10</td>
<td>12.8</td>
</tr>
<tr>
<td>Twice</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>School Transfer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>40</td>
<td>51.3</td>
</tr>
<tr>
<td>Once or more</td>
<td>38</td>
<td>48.7</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Language Spoken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English only</td>
<td>55</td>
<td>70.5</td>
</tr>
<tr>
<td>Eng./Lakota</td>
<td>21</td>
<td>26.9</td>
</tr>
<tr>
<td>Lakota only</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Living with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both parents</td>
<td>27</td>
<td>34.6</td>
</tr>
<tr>
<td>Single parent</td>
<td>39</td>
<td>50.0</td>
</tr>
<tr>
<td>Relatives</td>
<td>12</td>
<td>15.4</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1 Descriptive Demographic Data

There are seventy-eight students in the junior high. 44.9% are male students and 55.1% are female students. The sixth grade class has 30.8% of the student body, seventh grade 34.6%, and the eighth grade 34.6%. The number of students who were retained during the earlier grades ranged from 2-6 students, some were retained twice. A majority (83.3%) of the students were never retained.
Students transfer between schools throughout the year. The number of students who never transferred was 40 (51.3%). All students speak English at school, and most speak English at home. Twenty-one students (26.9%) speak both English and Lakota at home. While two students (2.6%), speak only Lakota at home. Half of the student body (50.0) at the junior high is from single parent homes, 34.6% live with both parents, and 15.4% live with relatives. The family composition is large and the average number of children per household is 5.8. The number of siblings ranged from 1 to 12.

All students plan on going to high school, some to college, but they do not have definite career plans at this stage. However, all want to work, and the jobs mentioned most frequently were police officer, professional basket ball player, some mentioned teacher and lawyer, and one student said doctor.

The mean scores for Science GPA, SAT (reading, language, math, and science), Incident reports, and Attendance (%), are given in Table 4.2.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Gender</th>
<th>n</th>
<th>GPA</th>
<th>SAT/S</th>
<th>SAT/R</th>
<th>SAT/L</th>
<th>SAT/M</th>
<th>IR</th>
<th>Att.(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>F</td>
<td>14</td>
<td>2.4</td>
<td>19.6</td>
<td>40.9</td>
<td>25.4</td>
<td>34.0</td>
<td>1.4</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>10</td>
<td>2.0</td>
<td>21.4</td>
<td>47.9</td>
<td>26.2</td>
<td>34.5</td>
<td>4.5</td>
<td>87</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>14</td>
<td>2.4</td>
<td>18.4</td>
<td>42.6</td>
<td>23.4</td>
<td>28.0</td>
<td>2.9</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>13</td>
<td>2.3</td>
<td>21.1</td>
<td>46.5</td>
<td>24.9</td>
<td>33.2</td>
<td>2.9</td>
<td>87</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>15</td>
<td>2.6</td>
<td>17.7</td>
<td>44.3</td>
<td>25.1</td>
<td>29.1</td>
<td>2.2</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>12</td>
<td>2.4</td>
<td>19.3</td>
<td>44.8</td>
<td>24.8</td>
<td>25.7</td>
<td>5.3</td>
<td>79</td>
</tr>
</tbody>
</table>

Table 4.2 Mean scores for Science GPA, SAT (Science, Reading, Lang. Math), Incident Reports, and Attendance (%).

The science GPA for all grades is more or less the same, with the average around 2.4. The seventh grade boys had higher scores on SAT science, reading, language, and math. The eighth grade boys had lower scores than sixth grade boys and seventh grade boys in all SAT scores—science, reading, language, and math, this confirms the findings of Bryde (1969), who showed in his study of Oglala Sioux students, that the students performed satisfactorily until the sixth grade, after the sixth grade there was a decline in student performance. Havighurst (1981) in his study of Native American children found that they were well prepared for school during the elementary years, but thereafter they showed a steady decline in grades four to six. The eighth grade boys had the highest average of Incident reports (disciplinary action) a mean of 5.3. Surprisingly, the sixth grade boys had a high mean value of 4.5 for Incident reports.
The seventh grade boys and girls had the same mean value of 2.9 for Incident reports. The Attendance (%) was about the same for all grades, with the eighth grade boys having the lowest number of days in school (79%).

**Instruments and Reliability**

The Resiliency questionnaire was administered to 78 junior high students. The scores obtained from the resiliency measure were analyzed using SPSS to ascertain the significance of the resiliency factors in predicting academic achievement. Correlations, Pearson product moment r, multiple regression, ANOVA, and t tests were used. Achievement is defined here as the Scholastic Aptitude Test (SAT) science score for the 2001-2002 school year. Jew (1991) developed and validated the Resiliency questionnaire. The Resiliency instrument consisted of 65 items, grouped into four subscales. Jew (1991) labeled the subscales as: 1) Optimistic Orientation, 2) Independence, 3) Future Orientation, and 4) Other Person Awareness. For the purpose of this study only 60 questions were selected that seemed relevant to the population. The items were grouped into four categories (subscales) according to the relevancy of the item to the category. The four subscales were labeled as: 1) Positive attitude, 2) Independence, 3) Goal, and 4) Empathy. The items matching these subscales were scattered throughout the questionnaire.

The reliability of the subscales was tested by generating the Cronbach’s alpha coefficients. The higher the alpha coefficient the more the items are correlated with one another. Cronbach’s alpha reliability coefficients are presented in Table 4.3
The alpha for the Positive Attitude subscale with 17 items was .80; the item coefficients for this subscale ranged from .77 to .80. The alpha for Independence subscale with 16 items was .74; the item coefficients for this subscale ranged from .71 to .74. The alpha for Goal subscale was .76; the item coefficients for this subscale ranged from .73 to .76. The alpha for subscale Empathy was .75; the item coefficients for this subscale ranged from .71 to .75. Based on these results it was decided to use the subscales in the analysis of this study. The item means and standard deviations for the four subscales are given in Table 4.4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attitude</td>
<td>61.5</td>
<td>9.88</td>
</tr>
<tr>
<td>Independence</td>
<td>57.4</td>
<td>8.48</td>
</tr>
<tr>
<td>Goal</td>
<td>45.3</td>
<td>7.14</td>
</tr>
<tr>
<td>Empathy</td>
<td>53.1</td>
<td>8.38</td>
</tr>
</tbody>
</table>

Table 4.4 Mean and SD for Items on Resiliency Subscales
The subscale Positive Attitude has seventeen items, the item with the largest mean (4.17) was “I know God loves me.” and the item with the lowest mean (3.10) was “If something bad happened, I would talk to my friends about it.” The subscale Independence has sixteen items, the item with the largest mean (4.14) was “If one of my parents developed a serious illness, I would try to learn as much as possible because knowing a lot would help me deal with things better.” and the item with the lowest mean (2.64) was “I make a lot of decisions for my family.” The subscale Goal has twelve items, the item with the largest mean (4.18) was “Someday I will be able to use what I have learned in my life to help others.” and the item with the lowest mean (3.42) was “Good decisions often involve some risk of bad things happening.” The subscale Empathy has fifteen items, the item with the largest mean (4.26) was “Protecting younger brothers and sisters is one of the best things in the world.” And the item with the lowest mean (2.96) was “Being an adult is much better than being a child.”

**Definition of Variables**

The independent variables used in the study are Attendance (%), number of Incident reports as a measure of disciplinary action (IR), subscale Positive Attitude, subscale Independence, subscale goal, and subscale Empathy. The dependent variable is Achievement (SAT science score). Frequency distributions for these variables were obtained using SPSS, and presented in Table 4.1, and 4.2.
Attendance (%) refers to the number of days a child is in school. It is given as a percent. Incident Reports are a measure of disciplinary action (IR), the school record of disciplinary actions against the student for violating school rules, such as: class disruption; disrespectful to staff and students, destruction of school property etc.

Resiliency subscales are the breakdown of the items on the questionnaire (60) into four distinct groups. These groups are:

- **Positive attitude:** This group has seventeen items which reflect the meaning of hope and positive outlook, it has items like: “Life is good;” “I feel there is hope for the future;” “It is helpful to people to forget the bad things in life and focus on the good.”

- **Independence:** Items here indicate the type of person who likes to be in control, take charge and be independent. Items that reflect this are “If I can I will read all about things so that I am prepared for anything;” “I may not be able to control all the things that happen to me in my life but I control how they will affect me;” “No matter what happens in my life I know I’ll make it.”

- **Goal:** This subscale identifies the planners. They have dreams and they work to accomplish their dreams. It has items like: “If I do not know something I ask because having a lot of information helps me deal with life better;” “Sometimes one need to take risks to make things better;” “In ten years things will be much better for me.”
Empathy: This identified the caring person, who is concerned about others. “Some people cannot make it because of their childhood;” “One of the most important things in life is giving to others;” “My younger brothers and sisters depend on me a lot.”

Analysis of Questions of the Investigation

The questions raised in the study will be answered here. The following questions will be addressed:

1. What are the challenges facing the school system?

2. Is there a relationship between Resiliency subscales and Achievement, Attendance, and Incident reports?

3. Can success be attributed to observable classroom behavior such as class Attendance and number of Incident reports?

4. Are there significant gender differences between Achievement scores, Attendance, and Incident reports.

5. Do Resiliency Subscale Scores vary in relation to Grade (class rank)?

Results

Question 1. What are the challenges facing the school system?

The school faces numerous problems in meeting the school’s mission of providing a quality education and success for all its students. Some, such as school failures and dropouts are common to various degrees in schools elsewhere.
Many other problems are unique to the reservation because of its historical background, geographical isolation, insufficient educational preparation in the elementary and secondary levels, and lack of funds.

The geographical isolation contributes to the problem in the sense that there are no community resources such as libraries, museums, parks, and other learning institutions that could benefit the children. The lack of funds precludes visits to places outside the reservation, as well as sharing of available resources within the reservation. The school building is old and mold infested. It has been declared unsafe by the health department, but there are no plans to demolish it and build a new facility. Absenteeism, transfers between schools, and discipline issues are chronic problems. The school policies on these issues are not enforced consistently, which only escalates the problems. The teachers don’t get complete backing from the administrators on these issues which make it hard on teachers to maintain a learning environment. This situation is further aggravated by students being pulled out of class on a regular basis for extra curricular activities, such as sports, dance and drum group, gifted program, etc. While it is commendable that students are exposed to a rich variety of activities, this is unfortunately at the expense of academic work. Due to lack of funding, these programs are not scheduled after school or on weekends.

There is no bus service on a daily basis for activities, except for rare field trips and basketball competitions. Parents do not have the means to shuttle students around. A Lakota studies program which has the laudable goal of instilling local pride, teaching language and Lakota culture also take time away from academics.
The class size is small, 12-15 or 18 students, when 3-4 students leave for activities, and a couple are absent, the rest of the students want the day off! Well meaning teachers, who strive to help the children, are caught up in this maddening web of lost time and inability to maintain continuity.

The depressed economic situation of the region has a major impact on schooling. The unemployment rate is high. Many families are on welfare. Among junior high students 50-60% of the caregivers are unemployed. The children are exposed to social ills like alcoholism, domestic violence, and just plain frustration. They lack good role models to emulate. The school, despite all the challenges it faces, does a good job of keeping the children in school and providing them a safe, warm, loving environment. The children are happy. Some do very well in academics and sports. The school principal has the philosophy that the school must attend to all students, even the students that are constantly absent or disruptive. The alternative to not being in school is worse – opportunity for petty crimes, substance abuse, trouble with the law and incarceration.

The teacher’s in their responses to the questionnaire requesting their perspective on the challenges facing the school cited absences, transfers, and constant disruption of classes as a reason for poor performance. Next was discipline issue and failure of the administrators to follow through and help the teachers. Lack of parental involvement was of major concern also.

Parents want the children in school and they want them to do well in school, but are unable to help or guide their children. Their own schooling has been limited, and being unemployed prevents them from taking advantage of grants available for adult education classes at the local community college. Transportation is a huge problem, and
if you are unable to maintain a car it is difficult to get to places. Parents are unable to attend parent-teacher meetings. The school tries to motivate them to attend and even offers free dinner, the parent-teacher meetings are held from six to eight in the evening. Only parents who are economically better off and parents that live close to the school attend the meetings regularly. The others show up if they can. However, they definitely come to attend meetings if the child is having academic and discipline problems. They are concerned parents, who are unable to take action. School has to be more diligent in ensuring the child learns the necessary skills to cope with personal problems as well as school issues of meeting grade requirements.

Question 2. Is there a significant relationship between Resiliency subscale scores and Achievement, Attendance (%), and Incident reports?

Correlation coefficients using Pearson product-moment were generated for the variables used. The Correlation Coefficient Matrix is given in Table 4.5
### Table 4.5 Correlations Coefficient Matrix

The Pearson product-moment correlation coefficient was used to determine if a correlation existed between Achievement (SAT science scores) and the Resiliency subscale scores. The values are presented in Table 4.6.

<table>
<thead>
<tr>
<th>Variable</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 SAT Sci.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2 Att. %</td>
<td>.33**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3 Inc.R</td>
<td>.24**</td>
<td>-.17</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4 Pos.Ati.</td>
<td>.24**</td>
<td>.19</td>
<td>-.21</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X5 Indep.</td>
<td>.17</td>
<td>.14</td>
<td>-.18</td>
<td>.77**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X6 Goal</td>
<td>.36**</td>
<td>.11</td>
<td>-.18</td>
<td>.73**</td>
<td>.65**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>X7 Empathy</td>
<td>.12</td>
<td>.02</td>
<td>-.18</td>
<td>.79**</td>
<td>.75**</td>
<td>.55</td>
<td>1</td>
</tr>
</tbody>
</table>

**p <.01; *p <.05

### Table 4.6 Correlation for Achievement (SAT science) and Resiliency Subscale Scores.

The results show that there is a significant correlation between the Resiliency subscale Goal and Achievement (SAT science) (r = .37 at p <.01) Significant correlation.
was also found for Positive Attitude subscale with Achievement (SAT Sci) \( (r = .24 \text{ at } p < .05) \). There was no evident relationship for the Independence and Empathy subscale.

Multiple regression analysis was conducted to determine whether the independent variable (Resiliency subscales) are predictors of the dependent criterion variable Achievement (SAT Sci). These data are reported as Beta weights and multiple regression coefficients. The Multiple R, which is the correlation between the group of independent measures and the dependent variable was, .38. The R squared value reports the amount of variance explained by the group of independent measures, one being a perfect relationship. The R squared value was .14. The coefficients are presented in Table 4.7

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 Pos. Att.</td>
<td>.06</td>
<td>.11</td>
<td>.11</td>
<td>.49</td>
<td>.62</td>
</tr>
<tr>
<td>X2 Indepen.</td>
<td>-.04</td>
<td>.12</td>
<td>-.07</td>
<td>-.36</td>
<td>.72</td>
</tr>
<tr>
<td>X3 Goal</td>
<td>.30</td>
<td>.12</td>
<td>.40</td>
<td>2.46</td>
<td>.02</td>
</tr>
<tr>
<td>X4 Empathy</td>
<td>-.09</td>
<td>.12</td>
<td>-.14</td>
<td>-.73</td>
<td>.47</td>
</tr>
</tbody>
</table>

Table 4.7 Analysis of Coefficient for Resiliency Subscales and Achievement

Of the four resiliency subscales only the goal subscale was significant at p < .05. Empathy and Independence subscales show non-significant relationship with dependent variable Achievement.

The residual plot indicated that the assumption of constant variance of the error term was not violated. The histogram of the residuals and normal probability plot were generated and presented in Figure 4.2 and Figure 4.3. Visual inspection of Figure 4.2 indicated that the error term distribution closely resembled a normal pattern. The normal
probability plot (Figure 4.3) shows that the assumption of normality of the error term distribution was not seriously violated.

Figure 2: Histogram of the Residuals and normal probability plot

Figure 3: Normal Probability Plot
The tolerance index and the Variance Inflection Factor for each predictor variable were generated and examined. It revealed that all four tolerances indices were approaching 1 and all four Variance Inflection Factors (VIF) were well below the criterion value of 10. This implied that multi-collinearity was not present. The results are present in (Table 4.8).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude</td>
<td>.25</td>
<td>4.0</td>
</tr>
<tr>
<td>Independence</td>
<td>.33</td>
<td>3.1</td>
</tr>
<tr>
<td>Goal</td>
<td>.45</td>
<td>2.5</td>
</tr>
<tr>
<td>Empathy</td>
<td>.33</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Table 4.8 Tolerance Indices and Variance Inflection Factor of Predictors

Pearson product-moment correlation was used to determine the relationship between Attendance (%) and the Resiliency subscale scores. These results are presented in Table 4.9. There appears to be no relationships between attendance and each of the four subscales on the Resiliency measure.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pos. Att.</th>
<th>Indep.</th>
<th>Goal</th>
<th>Empathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance (%)</td>
<td>.19</td>
<td>.14</td>
<td>.11</td>
<td>.02</td>
</tr>
</tbody>
</table>

Table 4.9 Correlations for Attendance (%) and Resiliency subscales
Multiple regression analysis of Resiliency subscales on the Attendance (%) also indicated Attendance had no significant effect on the Resiliency subscales. Multiple regression analysis data are presented in Table 4.10

<table>
<thead>
<tr>
<th>Variable</th>
<th>MR</th>
<th>R²</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos Att.</td>
<td>.19</td>
<td>.04</td>
<td>21.75</td>
<td>12.60</td>
<td>.19</td>
<td>1.73</td>
<td>.09</td>
</tr>
<tr>
<td>Indep.</td>
<td>.14</td>
<td>.02</td>
<td>13.37</td>
<td>10.91</td>
<td>.14</td>
<td>1.23</td>
<td>.22</td>
</tr>
<tr>
<td>Goal</td>
<td>.11</td>
<td>.01</td>
<td>8.85</td>
<td>9.22</td>
<td>.11</td>
<td>.96</td>
<td>.34</td>
</tr>
<tr>
<td>Empathy</td>
<td>.02</td>
<td>.00</td>
<td>1.75</td>
<td>10.88</td>
<td>.02</td>
<td>.16</td>
<td>.87</td>
</tr>
</tbody>
</table>

Table 4.10 Analysis of Coefficient for Resiliency Subscales and Attendance (%)

Attendance (%) shows no significant relation to any of the Resiliency subscales. The Beta weight for Positive Attitude is higher than for the other subscales, indicating a tendency for Positive Attitude to be related to Attendance (%).

The tolerance index was 1.000 for all the subscales, and the Variance inflection factor for all subscales was also 1.000, well below the criterion value of 10 indicating multi-collinearity was not present.

Pearson product-moment correlation was used to determine if a correlation existed between the number of Incident reports as a measure of disciplinary action and the Resiliency subscale scores. The r- values are presented in Table 4.11.
Table 4.11 Correlations for Incident Reports and the Resiliency Subscale Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pos. Att</th>
<th>Indep.</th>
<th>Goal</th>
<th>Empathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident R.</td>
<td>-.21</td>
<td>-.18</td>
<td>-.18</td>
<td>-.18</td>
</tr>
</tbody>
</table>

No significant correlation exists between incident reports and the resiliency subscale scores. However, as the number of incident reports increase, the scores on the Resiliency measures tend to decrease.

Multiple regression results for Incident reports as a measure of disciplinary action and the Resiliency measure (subscales) are presented in Table 4.12. The results here duplicate the correlation results. The same trend is present – high incident reports indicates low resiliency measure scores. The Beta value for Positive Attitude indicates a greater influence on the incidence factor. The Tolerance index and Variance Inflection Factor for all the variables is 1.000. This indicates the multi-collinearity is not present.
Question 3. Can success be attributed to observable classroom behavior such as class Attendance and disciplinary action as measured by Incident reports?

Pearson product-moment correlation was used to determine if there was a relationship between attendance (%) and achievement (SAT Science). The attendance (%) correlated positively with Achievement ($r = .33^{**}$ at $p < .01$) This indicated that students who attended classes regularly are likely to have better scores. Regression analysis showed similar positive relationship. As the number of days attended increased the score on Achievement increased. The results are presented in table 4.13

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance%</td>
<td>19.5</td>
<td>6.4</td>
<td>.33</td>
<td>3.0</td>
<td>.01</td>
</tr>
</tbody>
</table>

Table 4.13 Regression Coefficients for Attendance (%) and Resiliency Subscale scores
The Pearson product-moment correlation coefficient was used to determine if a correlation existed between the number of Incident reports as a measure of disciplinary action and Academic achievement. The results indicate that there is a negative correlation with achievement ($r = -.24$ at $p < .01$). Students with more Incident reports scored lower on the SAT Science test than students with fewer or no Incident reports. Regression analysis shows the same negative trend. The significant negative relation indicates that as the number of Incident reports rise, the score on SAT science decreases. Results are presented in Table 4.14

<table>
<thead>
<tr>
<th>Variable</th>
<th>MR</th>
<th>R2</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident Report</td>
<td>.24</td>
<td>.06</td>
<td>-.34</td>
<td>.16</td>
<td>-.24</td>
<td>-.24</td>
<td>.03</td>
</tr>
</tbody>
</table>

Table 4.14 Regression Coefficients for Incident Reports and Resiliency Subscale Scores
Question 4. Are there significant gender differences between Achievement scores, Attendance (%), and Incident reports?

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>2-tail Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT Sci.</td>
<td>M</td>
<td>35</td>
<td>20.54</td>
<td>6.02</td>
<td>1.69</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>18.56</td>
<td>4.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att. Per</td>
<td>M</td>
<td>35</td>
<td>8763</td>
<td>4.26</td>
<td>-1.07</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>8977</td>
<td>3.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inc. Rep.</td>
<td>M</td>
<td>35</td>
<td>4.17</td>
<td>4.26</td>
<td>2.49</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>2.12</td>
<td>3.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot. Res.</td>
<td>M</td>
<td>35</td>
<td>231.20</td>
<td>34.12</td>
<td>.53</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>235.26</td>
<td>33.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pos. Att.</td>
<td>M</td>
<td>35</td>
<td>61.29</td>
<td>11.06</td>
<td>.16</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>61.65</td>
<td>8.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind.</td>
<td>M</td>
<td>35</td>
<td>57.46</td>
<td>8.67</td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>57.37</td>
<td>8.44</td>
<td></td>
<td>.97</td>
</tr>
<tr>
<td>Goal</td>
<td>M</td>
<td>35</td>
<td>44.34</td>
<td>8.33</td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>46.07</td>
<td>6.00</td>
<td>-1.06</td>
<td>.31</td>
</tr>
<tr>
<td>Empathy</td>
<td>M</td>
<td>35</td>
<td>53.00</td>
<td>8.17</td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>43</td>
<td>53.26</td>
<td>8.64</td>
<td>-1.33</td>
<td>.89</td>
</tr>
</tbody>
</table>

Table 4.15 t test values for the Independent variables.

The potential relationships between gender and differences in Achievement (SAT science), Attendance, Incident reports, or Resiliency scores (total and subscale) were determined using the t test. Table 4.15 displays the t test values for the variables.

The total number of students in the survey was 78. There were 43 females and 35 males.

No significant relationships were found except for incident reports. Male students had more incident reports than female students. However, the mean SAT Science score was higher for male students than for female students.
Question 5 Do Resiliency subscale scores vary in relation to Grade (Class rank)?

One way ANOVA was used to determine the effect of grade (class rank) on the Resiliency subscale score. The results are presented in Table 4.16

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 6</td>
<td>24</td>
<td>66.6</td>
<td>9.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 7</td>
<td>27</td>
<td>60.7</td>
<td>10.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8</td>
<td>27</td>
<td>58.2</td>
<td>8.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>61.5</td>
<td>9.9</td>
<td>89.5</td>
<td>4.6</td>
<td>.01</td>
</tr>
</tbody>
</table>

Table 4.16 One Way ANOVA of Resiliency Subscale Positive Attitude by Grade

Only Positive Attitude subscale showed significant difference between grades. The other subscales, Independence, Goal and Empathy showed no significant difference by grade (Class rank).

There is a definite shift in Positive Attitude from grade six to grade eight. The sixth grade students had higher mean on the Positive Attitude scale (66.1) compared to the eighth grade mean (58.2), there was no significant difference for the other subscales, nor was there a significant difference for Attendance (%).

The number of Incident reports steadily rose as the students went to higher grades. Sixth grade students had mean of 2.6 Incident reports; Seventh grade had a mean of 2.9 Incident reports; and the Eighth grade had a mean of 3.6 Incident reports.
CHAPTER 5
DISCUSSION AND CONCLUSION

This chapter presents the findings of the study, explores the implications of the findings and draws conclusions based on the findings. The purpose of the study was to determine the challenges facing the school district in fulfilling its mission and goals, and how community values and traditions impact student achievement. The study also investigated how some students are able to focus and achieve in school despite a debilitating environment. The Resiliency measure developed and validated by Jew (1991) was used to study the relation between resiliency scores and student achievement, student’s school attendance, and the number of school disciplinary incidents. The Resiliency measure was on a scale of 1 (strongly disagree) to 5 (strongly agree). A student with a score of greater than the mean was deemed to be resilient. Resiliency is defined as the capacity or outcome of successful adaptation despite challenging circumstances (Masten, Best, and Garmaz, 1991, p. 425). A demographic questionnaire was also administered to obtain background information. To obtain teacher’s perception of the challenges faced by the school, a questionnaire was given to teachers. Seventeen out of thirty six teachers’ responded.
The variables used are Achievement (SAT science score) as the dependent variable, and for the independent variables the number of days in school (Attendance %), the number of disciplinary Incident reports (IR), and the subscales on the Resiliency measure. For this study, 60 items from the original questionnaire by Jew (1991) were used. They were grouped into four subscales according to the appropriateness of the item to the subscale. The four subscales are: Positive attitude (17 items); Independence (16 items); Goal (12); and Empathy (15). The reliability of the subscales was tested by generating the Cronbach’s alpha coefficients. The coefficients for the four subscales are given in table 4.3. The alpha for all subscales was .75 and above. Based on these results the subscales were used in the analysis of this study. The sample for the study was 78 junior high students (grades 6-8). They are all Native American, Lakota, and they all speak English. The researcher worked as a math teacher for grades 7 and 8 during the 2001-2002 school year. The researcher participated in all school related and community activities. The researcher lived on the reservation and associated with local people, made observations, and sought help from the people to obtain information. The towns’ people, the school personnel, and the students were most helpful and generous with they time, and went out of the way to procure the information requested. An attempt will be made to tie in the influence of the students internal and external factors (family, community, school, and student) to academic achievement and the role of schools in providing an environment that fosters resiliency in students. The results of the analysis and discussion of the questions raised in the study are presented below.
Summary and Conclusion

**Research Question One:** What are the challenges facing the school system?

The school faces numerous challenges. Details are presented in chapter four; the highlights are: Deprivation of intellectual stimulation from lack of libraries, museums, recreation centers, parks, and other learning institutions. The geographic isolation precludes access to resources outside the reservation. High unemployment, 60% of the student’s parents are unemployed, and 80% of the student’s parents have not graduated from high school. Absenteeism, transfers between schools, and discipline issues are chronic problems. This is further aggravated by the number of students who are pulled out of class for various activities. When the teachers were asked to comment on what they perceived as the major problems in the school, an overwhelming majority cited absenteeism, the following comments were also made.

- Interruptions affecting academic time; Student transfers, Discipline issues; Lack of materials; Lack of communication and support from administrators; Lack of parental involvement; Alcoholism; Dysfunctional families; Poor parenting skills; Children having babies; Poor role models; Grandparent’s boarding school experience makes them distrust schools; High teacher turnover; Ineffective government programs that cost taxpayers a lot of money and do more damage than good.

Parents desire to have their children educated but are unable to help their children with school work, due to their limited education. Poverty and large families make it difficult to provide a quiet study space for children. All work is completed at school students who do not complete the work fall further and further behind and eventually give up trying.
**Research Question Two:** Is there a relationship between Resiliency subscale scores and Achievement, Attendance, and Incident reports

The Pearson product-moment correlation coefficient was used to determine if a relationship existed between SAT Science scores and the Resiliency subscales. The values are presented in Table 4.6. The results show that there is a significant correlation between the Goal subscale and Achievement ($r = .367$ at $p < .01$). There was also a significant correlation between Positive Attitude subscale and Achievement ($r = .238$ at $p < .01$). There was no evident relationship for the Independence and Empathy subscales.

Jew (1991) found in her analysis of data from 408 male and female students from a metropolitan school district, that “the resiliency measure is somewhat related to grade point averages, language and math scores on the Iowa Test of Basic Skills. Although these relationships were statistically significant, the actual correlations were low (.15 to .30)” (p 81). Collins (1995) administered the Resiliency Belief System (Jew, 1995), to Native American High School students, in the State of Nevada, the subscale categories included: Active Optimism, Passive Optimism, Active Belief in Others and Passive Belief in Others. The questionnaire used is different from the resiliency questionnaire used in the present study, and the subscales are different. Thus, direct comparisons are not appropriate. However, Collins (1995) reported “A small significant relationship was found between GPA and the subset Passive Optimism ($r = .2803$, at $p < .01$). The lack of any other correlation between GPA and the other Resiliency Belief System scores indicated no statistically significant relationships between academic success and resiliency” (p. 87).
Multiple regression analysis was conducted to determine whether the resiliency subscales (Independent Variables) are predictors of the dependent criterion variable Achievement (SAT Science score). The results are presented in Table 4.7. Of the four resiliency subscales only the goal subscale was significant at p <.05. The results indicate that only the goal subscale showed relationship to achievement. This seems to indicate that students who are resilient tend to set goals, plan for the future, and therefore, see the connection to school performance and achievement of their goals. The positive correlation for Positive Attitude and Achievement on the Pearson product-moment correlation suggests that student’s with positive attitudes are more likely to see the benefits in complying with school expectations in order to achieve their goals. Research has shown that resilient individuals have characteristics that help them to overcome the barriers in their environment, set goals, have positive attitudes and relate well to others. (Garmazy, 1985; Werner & Smith, 1982).

Pearson product-moment correlation was used to determine the relationship between Attendance (%) and the Resiliency subscales. These results are presented in Table 4.9. There appears to be no correlation for Attendance (%) and the four subscales on the Resiliency measure. Multiple Regression analysis on the Attendance (%) and the four Resiliency subscales also indicated that Attendance (%) had no significant effect on the Resiliency subscales. The results are presented in Table 4.10. The Attendance (%) shows no significant relation to any of the Resiliency subscales. The Beta weight for Positive Attitude is higher than for the other subscales, indicating a tendency to be related to attendance. Research has shown that resilient individuals tend to like school, not exclusively academics but also sports, dramas, and other activities. Often, they make
school a home away from home (Garmazy, 1983; Werner & Smith, 1992). Jew (1991) in her study on validation of the Resiliency instrument, found that the Resiliency measure did not relate significantly to the number of school absences.

Pearson product-moment correlation was used to determine if a correlation existed between Incident reports and the Resiliency subscales. The values of this are presented in Table 4.11. No significant correlation exists between Incident reports and Resiliency subscales. However, it shows a trend that as the number of Incident reports increase, the scores on the Resiliency measure decrease. Multiple regression analysis for Incident reports and Resiliency subscales are presented in Table 4.12. The results are similar to the correlation results: there is no significant relation. The same trend is reflected: as the incident reports increase the Resiliency subscale scores decrease. Research has shown that the non-resilient (vulnerable) individuals display acting out and other behavioral problems in school. Their self-esteem and self-image has been shown to be lower than that of resilient individuals (Bandura, 1977; Garmazy & Rutter, 1987; Rutter, 1984; Werner, 1989).
Research Question 3: Can success be attributed to observable classroom behavior such as class attendance and disciplinary action as measured by incident reports?

The Pearson product moment correlation coefficient was used to determine if there was a relationship between Attendance (%) and Achievement (SAT Science). The Attendance (%) correlated positively with Achievement ($r = .33$ at $p < .01$).

This would indicate that students who attended school regularly are likely to have better scores on Achievement. With regard to the relationship for Incident Reports and Achievement the results indicate there is a negative correlation ($r = -.24$ at $p < .01$). As the number of Incident Reports (IR) increased, the Achievement score decreased.

Regression analysis for Attendance (%) and Achievement showed a Multiple R value of .33 and an R squared value of .11. The Regression coefficients are presented in Table 4.13. The result shows that the relation between Attendance (%) and Achievement is significant. As the number of days attended increased so did the Achievement scores.

The Regression coefficients for Incident Reports (IR) and Achievement are presented in Table 4.14. The results show a negative relation. As the number of Incident Reports increased the Achievement scores decreased. Research has repeatedly associated lack of Resiliency traits such as social competence, problem solving skills, and a sense of future, low self concept to low achievement in school and dropout phenomenon. (McMillan & Reed, 1993; Werner & Smith, 1982).
**Research Question 4:** Are there significant gender differences between Achievement scores, Attendance, and Incident reports?

The potential relationship between gender and differences in achievement (SAT Science), Attendance, Incident reports, or resiliency subscale scores were determined using the t test. Table 4.15 displays the t test values for the variables. No significant relationships were found except for incident reports. Male students had higher number of incident reports than female students. However, the male students scored a higher mean on the SAT Science than the female students.

Overall the results were as anticipated for most of the questions raised. I expected students who had high scores on the Resiliency measure to have high scores on the Achievement (SAT Science) scores. This was true for students who scored high on the Resiliency subscale “Goal.” One of the characteristics of a resilient individual is “goal setting” and planning. They also have internal locus of control, high achievement motivation. They set goals and seek out ways to achieve them. The results confirm this.

I expected students who had high scores on Independence subscale to also have significant relation to Achievement, but results did not indicate this. All the items on this subscale characterize an individual who likes to take charge and learn all they can so they can handle situations; they feel confident they can make it no matter what. Perhaps, overconfidence and unwillingness to compromise and follow school rules could work against an Independent person.
I expected students who scored high on the Positive Attitude subscale to have significant relation to Achievement. However, Positive Attitude showed only slight relation. Students with Positive Attitude are more willing to comply with school expectations. This is borne out in the study.

I expected high scores on empathy to show low scores on Achievement. All the items on this subscale relate to “caring giving individual” who sacrifice self to care for family. This would impact on goal setting and achieving in academics. The results confirm this, the subscale Empathy showed no relation to Achievement.
Conclusions:

According to Red Horse (1986) Native American education is like a moment held in suspension. Since the passage of the Indian Education Act of 1972, there has been a steady improvement in education and educational opportunities for Native Americans. However, the dropout rates and achievement levels are similar to what was reported in the Kennedy Report (U.S. Senate Committee on labor and public welfare, report No. 90-501, 1969). Dropout rates are still high (50-60%) and the achievement levels for Native Americans are two grades below the National norm. What can be done? A change in perspective perhaps is called for. Resiliency research claims that looking at the strengths in children and providing environments to build on strengths, does far more good than looking for risk factors and trying to solve problems (Garmazy, 1991; Rutter, 1985; and Werner & Smith, 1992). Looking at risk factors and finding solutions has been the trend for over fifty years or more. Perhaps a new outlook is needed. Problem solvers have tried to solve the school related problems, but the failure rate and the dropout rates stay the same or even rise, in spite of millions of dollars spent on education. Clearly a new approach is warranted. Resiliency is a relatively new concept and there is not much research in the area of education to make any pedagogical applications. However, it holds promise.

Resiliency is the ability to thrive in the face of adverse circumstances. In order to survive, the person resorts to his/her inner strength, as well as the factors in the environment. Self concept is an important aspect of resiliency. Resilient individuals have a better self-concept than non-resilient persons (Luther, 1991). Many studies have demonstrated the association between self concept and resiliency. Werner and Smith,
(1982, 1992) did a comparative study on resilient and non-resilient participants in a thirty year longitudinal study on the island of Kauai. Their findings suggest that resilient individuals were those who believed in their ability to control their environment. Rutter (1984) showed in his research that the resilient group perceived to have greater control over their lives. Cowan, Wyman, Work, & Iker (1990) found that stress resistant participants had greater self-esteem and a sense of competence than the stress vulnerable participants.

Success in schools is highly correlated with self-concept and self-identity (Giles, 1985; Hodgekinson, 1990). Hence factors that help build resiliency would have a positive effect on the child’s self-image as well. In schools where there is limited funding, and thus fewer personnel, as well as fewer qualified personnel, the child runs the risk of an early death—from failure to acquire the skills to survive and boost his/her self-esteem and self-concept. This can spiral into a history of school failures leading to perhaps school dropout. Parents send their children to school and expect the teacher to teach. They trust the teacher. When the student fails, they blame the teacher. This leads to distrust of the teacher and dissatisfaction with the school. Students are pulled out of school and enrolled in another school, the pattern is repeated. Unless the child gets help and individual tutoring, it is not possible for the teacher to take the time to help students who missed out in earlier grades. Schools need to ensure that students, especially, in the elementary grades have a solid foundation on the four “Rs” Reading, Writing, Math, and Recreation. Knowledge builds on previous knowledge, if the child does not have the “schema” to build on, learning becomes an uphill battle.
Recreation for the child is as important if not more, than the basics. A child who can relate well to peers and gets along with others is happy and well adjusted, and will channel energy into school work. Parents are unable to help the learning process due to their limited education. Thus, when the child has not mastered the first level and the teacher embarks on the next level, the child is left behind, and as classes proceed he/she is less likely to be persistent in doing the work. They may become withdrawn, or actively disruptive. Both of which are characteristics of “High Risk” youth. Werner & Smith (1982) thinks it is better to say “High Risk Environment.” I agree. It is the environment that has failed to meet the child’s needs. The resiliency concept claims that if we (all the adults that a child comes in contact with—parents, teachers, and community members) are “child centered” and provide an environment that is warm, caring, and accepting of the child, and have clear and consistent boundaries, where the child is encouraged to learn at his/her pace with help and guidance when needed, the chances for success are increased as are the resiliency factors in the child such as: maintaining a positive attitude, taking control of their own lives, be self-directed learners, and problem solvers, and learn skills like cooperation, goal setting, planning, decision making and conflict resolution. These are encouraged by giving responsibilities and opportunities to learn the skills. Resiliency is created by caring individuals in the child’s life. (Henderson & Milstein, 1996; Pines, 1984; Rutter, 1985; Werner & Smith, 1982).

The child is influenced during the formative years by many factors, especially family, teachers and community. Family is the most significant factor in a child’s life that has a life-long impact. Parents and families provide the first protective factors in a child’s environment (Masten, Best, & Garmezy, 1991). Masten (1991) noted that parents
“Nurture motivation and self-esteem as well as physical growth. Parents provide information, learning opportunities, behavioral models, and connection to other resources. When these transactional protection processes are absent or are severely limited for prolonged periods a child maybe significantly handicapped in subsequent adaptation by low self-esteem, inadequate information, or social know how, a disinclination to learn or interact with the world, and distrust of people as resources” (p. 438). Family instability has been shown to have a negative effect on the behavior of the child, and they tend to be more disruptive at school. Research has shown that learning and achievement increases when parents are actively involved with the school and the child’s performance at school. The dropout and delinquency rate decreased, this was true regardless of racial, ethnic or social class membership (Peterson, 1989) A home that is stable, structured and has clear consistent rules that are enforced fairly; where a child receives warmth and care; sends the message to the child that life is secure and dependable. Resiliency is promoted under such conditions and when the family has high expectations it encourages children to do well at school (Werner & Smith, 1992).

Communities are the backbone of people. If a community, is strong so are its people. Resilient communities are characterized by an infra-structure that supports the well being of its members; it is a place where members have a sense of belonging, and have opportunities for leadership and decision making. Resources for meeting the basic needs of housing, employment, health care, and recreation, are provided by the community (Bernard, 1991; Hawkins, Catalano, & Miller, 1992; Werner & Smith, 1992).
Bernard (1991) identified three characteristics of communities that foster resilience: Availability of social organizations that provide resources and services to residents, such as health care, child care services, job training, recreational facilities, religious institutions; Opportunities for children and youth to participate in the community as valued members; and clear expression of norms that constitute desirable behavior. Miller and Ohlin (1985), state that communities that have a well integrated network of social organization have fewer social problems (p. 54).

Students come with their set of characteristics that may aid or impede school performance. Some young children are more intrinsically resilient than others (Werner & Smith, 1992). There are three fundamental resiliency traits that help a child adjust to pressures in the environment. These are: A secure base where the child feels a sense of belonging and security; Good self-esteem and self worth; Sense of self-efficacy, and knowledge of ones strengths and limitations. Social competence has also been shown to be associated with resilience (Luther, 1991). Social competency is the ability to integrate thinking, feeling and behavior to achieve social skills and outcomes that are socially acceptable. Werner & Smith (1982) found certain behavioral characteristics that identified resilient from non-resilient individuals. Resilient individuals had easy temperament that endeared them to care takers and others, average intelligence, a responsible caring attitude, internal locus of control.

Schools are the testing ground for the success or failure of children in adapting to the demands of the society. A caring environment in the school provides a protective shield (Bernard, 1991). Good educational attainment is associated with good outcomes,
and is therefore a protective factor, it is something schools can provide (Rutter, 1987). Students can acquire resilience in educational environments that foster competence in achieving learning success. Effective schools have clearly defined goals, flexibility, a clean attractive place, give opportunity for problem solving, decision making, have high expectations. Children who are labeled and put in special groups experience low expectations and adopt low expectations themselves (Hawkins & Calalano, 1992). To have good self esteem, one must also have feeling of competency. Bandura (1977) refers to this as “self-efficacy”. It is knowledge of ones ability to handle things. Teachers play an important role in reducing stress and enhancing resiliency, by providing positive support. Werner (1982) found in her longitudinal study, the children who were able to beat the odds and succeed, had a favorite teacher who was their role model and confidant. Noddings (1988) has shown that “children work harder and do things for people they love and trust” (p. 32). Schools play a very important role in the child’s life. Good experiences in the school help build positive outlook and also helps mitigate the stress. Some of the qualities of a good school are: effective feedback from the teacher, giving student’s position of trust and responsibility. Teachers being good role models, guiding student’s to be self learners, critical thinkers and problem solvers. (Pines, 1984).

On the reservation, with the depressed economy the families and communities are stressed to the limit in providing for the care of the children. The economy plays a major role in the overall success of the community and hence the school— in terms of opportunities for parents and their children. Lack of resources diminishes job opportunities for families, and also effects the children’s education and their aspirations for a better future. On the reservation, there are many concerned parents, and good
parents. They provide all the support they can for their children, even in single parent homes, there are grandparents and other extended family members who take over the responsibility of caring for the children. When the children’s safety is threatened due to alcoholic parents or domestic violence, children are provided care with other family members, or foster care. The community provides funds for the care of the children. The community is close knit and caring. However, the lack of jobs on the reservation makes it hard for many. The burden of compensating for deficiencies in the community and family fall on the schools, who are themselves strapped with financial woes. However, the school where the researcher worked had implemented many of the elements of resiliency, even though they were unaware of the concept of resiliency as such. The school is motivated by the school mission of providing a quality education to all and by care and concern for the child’s well being. The families also do the best they can under the circumstances— unemployment, substance abuse, large family composition, and poor health. The community is close knit and helps each other. The Tribal Council provides funds for shelter, clothing, and other basic necessities. The most important element of resiliency, “nurturing”, is present in the community, families, and the school. The student (child) has some inherent traits that help their chances of success, such as an outgoing personality, a mild temperament, and above average intelligence. Credit however, must be given to the school for the tremendous effort and care in providing for the needs of the child, not only academic but also emotional, and social needs. The following are some of the ways the school reaches out to build the child’s resilience, self-esteem and self-efficacy.
1. The priority of the school is care of the “child”. All school personnel show respect, care and support.

2. Harsh discipline of the child (loud voice or criticism) is frowned upon. Teachers are reprimanded if they resort to this method of handling children in class.

3. All children are encouraged to achieve in academics, sports and other activities. This gives the child an opportunity to build confidence and self-esteem. The school and the Tribal Council provide the equipment and outfits for sports, dance etc. for children who cannot afford them but wish to participate. All children are encouraged to participate.

4. All children are helped and encouraged to stay in school, and school policy is not strictly enforced with regards to absences and discipline issues, to give the child time to deal with issues. The school counselor, the principal, parent, and child hold meetings to determine the best way to deal with the student issues and the school expectations. An illustration of a discipline issue that left teachers frustrated and the administration and school board with only one choice “expulsion” was turned around by involving the disruptive students in the decision making. Half a dozen eighth grade students (all boys) decided to test every ones patience, they were disruptive in class, disobeyed rules, and destroyed school property. A meeting was held with each of those eight
students, the parent, the class teacher, the principal and the school board members. A contract was drawn up for expected student “behavior” the student agreed to the written contract. This was reviewed weekly by the principal, teacher, counselor and the student. The condition was that if the student violated his end of the agreement he/she would be expelled. The result was the students settled down, did their assignments. All but one student graduated.

5. Students and teachers have breakfast and lunch together. There is free communication between students and teachers. Some students have cafeteria duty and help the kitchen staff with the clearing of tables and clean up. The students are well behaved in the cafeteria, they are allowed to talk. I have never seen pushing, fighting or put downs. There are occasional fights on the play ground, and the students involved get detention (no free playground time the next day).

6. The student council has elected representatives from each grade. They meet once a month with the principal and guidance counselor to discuss school problems (student complaints or needs), programs for community service, school activities etc.
7. Student support team assists students that may need help. The school nurse is active in ensuring students are healthy, have regular physical and dental checkups, and even provides baths at the school (some children live in areas where water is not readily available), and donated clothing.

8. The children are encouraged to participate in activities (sports, music, dance, drum group, quilting, gifted and talented program, etc.) While the motive is good, it unfortunately takes time away from academic work and is a major source of frustration for teachers. Due to the financial constraints activities cannot take place after school hours, there is no bus service, and parents cannot afford to shuttle the children around. However, it is essential for students to have an opportunity to be involved in fun activities that helps to build their confidence, teaches them to interact with others, and builds their self-esteem. Teachers have to adapt to the situation and plan lessons accordingly.

9. Nurturing caring environment is provided at the school, one of the nicest way of demonstrating this is the assemblies they have to recognize student and staff accomplishments, and the celebration of student and staff birthdays once a month. This is combined with the weekly prayer sessions. Every Monday morning after breakfast, the school begins with a prayer session in the cafeteria (auditorium). The prayers are for the success and care of the children. On Friday special prayers are for well being of children over the weekend.
10. The school provides in-service programs for teachers and support staff, to learn better teaching methods, handling of discipline and class management techniques. All teachers have to take a course in “Indian Studies” and “Indian Culture” to be certified to teach at the school. This is to enable the teachers to understand the needs of students on the reservation.

The school does everything in its power to provide for the academic as well as emotional and social needs of the students. The geographical isolation is a barrier to implementing programs that could benefit the students, such as a tutoring or mentoring program with the universities outside the reservation. It is very difficult for volunteers to commute to the school from neighboring cities.

Implications for Classroom Practice

Adults are the mirrors the child looks into. If we project a positive attitude, and give encouragement, care, and understanding, the child will see self as a worthy person, capable of being loved, and who believes he has strengths he can use. There is a Xhosa people (S. Africa) saying “I am because we are.” If the child’s environment is supportive and caring, (this includes home as well as school), the child will have protective factors that they can draw on when needed. The following are some suggestions for creating an environment that is helpful in fostering resiliency. 1) Have caring, understanding school personnel. 2) Provide help to students without labeling students or grouping them into categories— slow learner; hyper active; special education etc. One of the most important
factors in “resiliency” is self-concept. Research has shown that children with a good healthy self-concept do better in school and life, than one with a poor self-concept. A child cannot develop a good self-concept when he/she is made to feel they have deficiencies. It is better to focus on the child’s strengths so that the child will feel good about himself or herself. 3) Set clear consistent boundaries. Structure is essential. A child needs a safe, secure place that is dependable. 4) Teach life skills through cooperative learning activities that promote decision making, goal setting and getting along with each other. 5) Increase bonding, between student/teacher, between teachers and parents.

Parents and community are important components in the conceptual model. The efforts and cooperation of all is essential. 6) Give positive feedback and praise to the child every day. It doesn’t have to be academic work related. Notice little things they do – like sharing a special toy, or helping peers at work etc. It makes children feel special and wanted. 7) Set high expectations. Children come up to the standards we set. 8) Provide opportunities for meaningful participation. Resiliency is increased when a child has a pleasant hobby or activity to be absorbed in, especially during trying times. 9) No “chalk talk” or textbook “seat work.” Children get bored, and will learn to dislike school. Involve students in planning an activity. 10) Seek corporate partnerships for sponsoring projects and activities for students.
Further Research

1) More empirical data is needed to confirm current findings.

2) Data from many schools on the reservation would help identify the special traits of “achievers.”

3) Data using personality measures will be helpful in associating personality traits to academic success.

4) Ethnographic qualitative research including the community will be useful in determining the factors that affect a child’s performance at school.

5) Developing more specific items on the resiliency measure, that reflect the characteristics of the subscales would eliminate ambiguity.

6) Focusing on the special traits of children who succeed despite the debilitating environment, would help in developing programs to curtail the incidence of vulnerability.
REFERENCES


Special Subcommittee on Indian Education, Senate Committee on Labor and Public Welfare (1969). Indian education: A national tragedy, a national
Challenge. (Senate report 91-501, commonly known as the Kennedy report).


APPENDIX A

PERMISSION TO USE QUESTIONNAIRE
2/3/2003

To Whom It May Concern,

Mrs. Jamu Saiduddin has my permission to use the 1991 Resiliency Questionnaire for her study.

Dr. Cynthia Jew

[Signature]
APPENDIX B

STUDENT CONSENT FORM
Student Consent Form

Title: Factors effecting the academic success of Native American students in Junior High School at Oglala, South Dakota.

Investigators: Name and Phone Numbers
Dr. David L. Haury (Advisor)
Ohio State University (614) 292-6717

Jamu Saiduddin (Researcher)
Ohio State University
(605) 745-5240 SD
(614) 766-8279

I consent to my participation (or my child’s participation) in research being conducted by Dr. Haury and Jamu Saiduddin, from Ohio State University, Columbus, OH 43210. The investigator has explained the purpose of the study, the procedures that will be followed, and the amount of time it will take. My participation (or my child’s participation) is voluntary and I (or my child) may withdraw from the study at any time, and there will be no penalty. I have read the form or I have had it read to me. I sign it freely and voluntarily.

Print the name (Parent or Guardian) __________________________________________

Date and Signature (Parent or Guardian) ______________________________________

Print the name (Student participant) _________________________________________

Date and Signature (Student participant) _____________________________________
APPENDIX C

DEMOGRAPHIC QUESTIONNAIRE
Demographic Questionnaire

Code Number: ______________________________
Name of School: ______________________________
Date: ______________________________
Sex: Male: _______      Female: _______
Date of Birth: ______________________________

Where do you live: (Circle the place)

Oglala    Pine Ridge

Grade Level at School:

6th
7th
8th

Race and Degree of Native American Blood (Check one)

_____ Native American (Full Blood)
_____ Native American (Over ½, but less than full blood)
_____ Native American (Over ¼ but less than half)
_____ Native American (1/4 or less)
_____ White
_____ Other

How many times have been retained?

_____ Never
_____ Once
_____ Twice

How many times have you changed schools?

_____

Language normally spoken at home:

_____ English
_____ Lakota
_____ Other ________________ (Please specify)
What is your father’s occupation (job)? ____________________
What is your mother’s occupation (job)? ____________________
How much schooling did your father have (please circle)
Primary Year 7 Year 8 HS College Don’t know
How much schooling does your mother have? (please circle)
Primary Year 7 Year 8 HS College Don’t know

Who do you live with? (please circle one)
Mother/Father Mother only Father only Relative

How many brother do you have? (please circle one)
0 1 2 3 4 5 6 7 8 9 _____

How many sisters do you have? (please circle one)
0 1 2 3 4 5 6 7 8 9 _____

Are all you siblings in school? ____________________

How many graduated from Junior High School? ____________________

How many graduated from High School? ____________________

How many graduated from College? ____________________

How many of your brothers and sisters are employed? ____________________

What is your career goal (work choice)? ____________________

What do you think of the school you are now attending? ____________________

What do you like about your school? ____________________

What don’t you like about your school? ____________________

Do you like living on the Reservation? ____________________

What do you like about the Reservation? ____________________

Would you like to live in the City? ____________________

How interested are you in school work? ____________________

How important is it to achieve in school? ____________________

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Do you use computers for all subjects at school?  _______________

Does using computers help you learn better?  _______________

Do you like to compete, (do better than others) in school?  _______________
Do you like to compete in sports?  _______________

Do you set goals and try to achieve them?  _______________

Is it important to be accepted by peers (class mates)?  _______________

Are you influenced by peers?  _______________
APPENDIX D

RESILIENCY QUESTIONNAIRE
Resiliency Questionnaire

Code number: ___________________

Read each question carefully and then rate the degree to which you agree or disagree with the statement. Please answer all of the questions.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It’s helpful to people to forget the bad things In life and focus on the good.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Teachers can sometimes be real helpful in getting me through rough times.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If I can, I will read all about things so that I am prepared for anything.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I am a lovable person.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Being an adult is better than being a child.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Parents who do bad things to their children can also do very good things for their children. Protecting younger brothers and sisters is one of the best things in the world.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I try to learn as much about new situations as possible before it happens.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Sometimes one needs to take risks to make things better.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Whenever I am feeling nervous or uptight, I try to concentrate on something else.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
I feel like there is hope for the future.

My younger brothers and sisters depend on me a lot of the time.

If one of my parents developed a serious illness, I would try to learn as much as possible because knowing a lot would help me deal with things better.

Life is good

Good decisions often involve some risk of bad things happening.

People who do one bad thing may do many good things.

When I think of something bad that happened time, it really wasn’t as awful as it seemed at the time.

Sometimes I take risks that I shouldn’t

Parents may be good providers even though they hurt their children.

I try not to concentrate on bad feelings too much.

I get a lot of pleasure out of giving to others.

No matter what happens in my life I know that I will make it.

Someday I will be able to use what I have learned in my life to help others.

I may not be able to control all the things that happened to me in my life, but I control how they will affect me.

Some people cannot make it because of their childhood.

Sometimes it is best to accept bad things because you cannot change them even if you try.

I know God loves me.

In ten years things will be much better for me.

If I do not know something, I ask because having a lot of information helps me deal with life better.
I can usually tell when there is going to be a family fight.  
For the most part my life is o.k.  
I make a lot of decisions for my family.  
Someday I’ll be able to make my dream come true.  
I once knew someone who helped me a lot, but I do not see them anymore.  
If something bad happened, I would talk to my friends about it.  
One of the most important things in life is giving to others.  
I am happy with my life.  
I can control my feelings most of the time.  
I can often do things to prevent a family fight.  
Someday I will have a husband/wife who will love me very much and forever.  
Some children think their parents are mean to them but when they grow up, they realize that their parents have problems too.  
If something bad happened I would talk to my friends about it.  
When I grow up, I’ll be able to do the things I want.  
Most of the risks that I take are worth it.  
I like helping others who cannot help themselves.  
I can stop myself from feeling uptight and out of control.  
Some things that were bad at the time turned out to be good.  
Sometimes it is best to take a risk regardless of the consequences.  
Most of the time I take care of my younger brothers and sisters.  
I respond quickly to dangerous situations.  
I am as loveable as anyone else.  
I have a good attitude about life.  
I can be loved by my teacher, coach, or someone else than my family.
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<td>I look forward to the future.</td>
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<td>My parents depend on me for a lot of things.</td>
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<td>Sometimes good things come out of bad situations.</td>
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<td>I have adult friends whom I can count on most of the time.</td>
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<td>I can usually recognize when a situation might be dangerous.</td>
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<td>If I needed to call someone to talk to, I would call my friend.</td>
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<td>I do not like feeling out of control,</td>
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Teacher Questionnaire

Date: _______________

School _______________________

1. Total number of required school days for 2001-2002: ____________

2. Total number of actual work days ________

3. Total number of students pulled out of class for various activities: ________

4. Do students make up the work missed? ________

5. Does Principal visit classroom for observation? ________

6. Do you have a copy of the school manual? ________

7. What problems exist to keep your school from being effective?
   a. ________________________________________________
   b. _________________________________________________
   c. __________________________________________________
   d. __________________________________________________
   e. __________________________________________________

8. Please provide comments on the plans of your school to be more effective.
   a. __________________________________________________
   b. __________________________________________________
   c. __________________________________________________
Please answer the following questions:

1. What problems do you perceive effecting the education on the Reservation?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What is your perception of the student’s level of interest in academics?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. What is your perception of the parents level of interest in their child’s progress?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. What recommendations would you make for training teachers to work on the Reservation schools?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. Does the school place a strong emphasis on technology?

________________________________________________________________________

6. Do students have computers in your classroom?

________________________________________________________________________