

A photograph of a group of Native American children, likely Hopi, wearing traditional red and white feathered headdresses. They are gathered outdoors under a large tree with green leaves. The children are looking in various directions, some towards the camera and others away. The image has a slightly grainy, artistic quality.

INDIAN EDUCATION IN NEW MEXICO, 2025

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EXECUTIVE BRIEF

This study indicates that best practices in Indian education entail providing a culturally responsive education for Native students. Culturally responsive education requires systemic reform and transformation in educational ideologies. Such a task is not easily accomplished in a rigid public school structure that is bound by state and federal laws.

The drive for high-stakes school accountability creates obstacles in implementing the NM Indian Education Act (IEA) and even violates its tenets for placing Native students' home cultures, experiences, and knowledge within the public education system. This conflict foregrounds the importance of developing formal agreements between tribal communities and public schools to ensure that accountability includes Indigenous knowledge, and culturally responsive curriculum, and pedagogy.

Thus, there may be some confusion of what it means to be a culturally responsive educator—does it mean teaching culture or does it mean understanding, respecting, and drawing on the backgrounds and lived experiences of students and their communities? The NM IEA may need to include its own definition to be clear about its intentions.

The issue at hand is enabling schools, communities, and students the ability to define and create culturally responsive schools. The study is revealing that cultural responsiveness is more than being sensitive and aware of a students' cultural background. It is also recognizing how cultures are contextually based, and it necessitates educators become culturally competent in order to meaningfully and appropriately incorporate students' cultural and linguistic backgrounds into their teaching.

The task for many schools is instilling the belief in culturally responsive schooling as a more effective educational approach than cultural assimilation strategies. While laws like the No Child Left Behind (NCLB) may not facilitate such change toward culturally responsive education, likewise, laws such as the NM IEA cannot completely facilitate and enforce schools to become culturally responsive. A belief in cultural responsiveness must be facilitated from within the local context, especially through community engagement.

The importance of understanding the factors and conditions associated with educational achievement among Native American students is imperative. According to population estimates, by 2025 it is projected that 84,710 American Indians will be 18 years & younger. For 2025, it is projected that the share of the 0-18 age group among AIAN's will be 30.2%. This is a decline of 9.5 percent from year 2000. It is unclear if this is the beginning of a downward trend in the participation of American Indian students in the public school system. What is evident is that this enrollment decline cannot be attributed to a decline in births.

American Indian students and schools where American Indian students predominate have had the lowest proportion at or above proficiency. The expectation that all schools and, by implication, all subgroups "must" reach 100% proficiency by SY 2013-2014 foretells definite failure among American Indian students and schools where American Indian students predominate. It is imperative that educators, administrators, researchers, policy makers, and other stakeholders develop a good understanding of the conditions and factors under which American Indian children could succeed.

This study sheds some insight into where cultural responsiveness exists, how it has been fostered, how it is practiced, and how to inform those schools who aspire to become more culturally responsive for the benefit of their students and the tribal communities.

POLICY FINDINGS

BEST PRACTICES

Schools that foster the **Educated Native Person** are those that,

- ◇ strengthen cultural identity by promoting and supporting strong Native American values, traditions, culture, and language at the local level;
- ◇ have native American adults from local communities who serve as role models and mentors to students;
- ◇ provide a foundation for life-long learning;
- ◇ create bridges to successful postsecondary opportunities by using college bridge programs and conducting summer visits on college and tribal community college campuses; and
- ◇ work with the tribal government to connect careers with community development.

Schools that succeed in **Language** are those who,

- ◇ promote and maintain an overall school climate that values and respects Native language and culture;
- ◇ review and renew commitments to Native American language and cultural programs at the district and the tribal community levels;
- ◇ develop local tribal protocols for tribal language instruction by specifying goals and a MOA review process;
- ◇ support or provide an uninterrupted language curriculum, K-12, for all Native students;
- ◇ determine clear goals and basic standards for the hiring of certified and accredited language instructors; and
- ◇ develop MOAs for Native languages such as Cherokee, Comanche, and Lakota that are now widely represented in New Mexico.

Schools that successfully advance **Curriculum** are those that,

- ◇ make curriculum relevant to Native students' lives, in multiple ways, by incorporating experiential learning techniques that bring meaning to local places, events and situations;
- ◇ integrate Native history, science and philosophy in all courses, for the benefit of all students;
- ◇ use information technologies, such as the internet, to direct self-learning and self-awareness;
- ◇ integrate textbooks and resources written by Native Americans that are more contemporary and provide for in-depth, critical reading and exchanges among students; and
- ◇ diversify learning activities in the arts, sports, and technical vocations.

Schools where **Pedagogy** succeeds are those where,

- ◇ teachers use different teaching methods and strategies that encourage innovation and hands-on problem solving rather than memorization;
- ◇ students gain self-esteem and motivation by providing a classroom environment that is equally shared by a teacher and the students;
- ◇ community members and leaders are regularly invited to share their knowledge and motivate students to excel;
- ◇ the classroom entails multiple learning activities in every content area as based on team building, group work, and class and/or public presentations; and
- ◇ the Native content, perspectives, and experiences are presented in positive ways to emphasize their contributions to the world.

Schools where **Accountability** becomes a positive factor are those that,

- ◇ develop teacher/staff action teams to deal with students that exhibit chronic absenteeism, fail coursework, exhibit alcohol and/or drug abuse and are from home environments that are unhealthy, i.e. domestic violence;
- ◇ offer professional development opportunities to improve knowledge and appreciation of the local community's historical, cultural, and social context;
- ◇ provide opportunities for teachers and school related staff members and students to share best-practice examples;
- ◇ continually assess that the district's mission and actual school practice are meeting the standards of the NM Indian Education Act;
- ◇ create incentives among good teachers;
- ◇ develop recruitment and support incentives for Native teachers by offering scholarships and participating in loan-forgiveness programs;
- ◇ address administrative staff turnover rates by developing active and supportive school boards and parent committees; and
- ◇ augment NCLB and state testing by providing a variety of multiple alternative assessments (ie., portfolio, performance, presentations, exhibits, observations, student self-assessments...) that track the same students across grade levels.

The **School Climate** is best served when the schools,

- ◇ create an inviting and welcoming environment for Native students and their families;
- ◇ actively mediate race relations among diverse groups and populations;
- ◇ coordinate on and off-campus activities with Native parents and the larger tribal community;
- ◇ develop clear and concise protocols and expectations for student participation in tribal activities and events;
- ◇ provide for the support of student participation in extra-curricular events that occur before and after school;
- ◇ develop strategies and fund parent workshops for involvement in their children's education; and
- ◇ involve the tribal community to participate and be proactive in the long-range design and development of facilities to serve their students and the community.

Successful Relationships by schools are achieved when,

- ◇ opportunities for interactions between students, teachers, staff, and the tribal community are provided that develop healthy, professional, and caring relationships;
- ◇ classroom learning is built on the values on mutual respect and reciprocity; and
- ◇ teachers make an effort to learn about the community and the social conditions that affect their student's lives.

Vision can extend far beyond a school's immediate agenda. It entails,

- ◇ promoting and nurturing a students' demonstration of their knowledge, ultimately towards their future as a gainful professional;
- ◇ inspiring a student's intrinsic motivation to learn in a manner that values individual intellect as well as maintaining their cultural identity;
- ◇ anticipating and incorporating the newest technologies;
- ◇ continuing to build and maintain quality learning physical environments for active learning and engagement; and
- ◇ developing proactive and reciprocal relationships between administrators and tribal leadership in a manner that advances the future goals and needs of the community.

INTRODUCTION

The purpose of this study is to investigate and determine a long-range plan for Indigenous education in New Mexico and among its tribal communities. The proposal uses an interdisciplinary approach involving scholars and practitioners (many of whom are native to tribal communities in the state), all of whom are accomplished in the field of Indian education. Because of the exploratory nature of the project, the Indigenous Education Study Group (IESG) of researchers has opted to base this study using an accepted Indigenous pedagogy. Its analysis on policies and accomplishments are formulated on a process that entails examining the past and the present, and using this information to inform policies that are developed into the future.

In 2007, the *New Mexico Indian Education Study, 2025*, embarked on a statewide research project to gather the educational perspectives of Native students, parents, community members, and teachers. We have learned from these stakeholders in Indian education how they have identified and defined authentic curricular practices and how they interpret high stakes education for their communities and schools. In this respect, we are bringing together the collective visions, beliefs, and efforts of the constituents of New Mexican Native schools.¹ Essentially, their perspectives inform us on what it means to create culturally responsive education. Culturally responsive education is more than simply incorporating language and cultural knowledge and perspective into course curriculum, but it also implicates pedagogy, values, vision, teacher preparation, school climate, and assessment.

The purpose of the *New Mexico Indian Education Study, 2025* is to investigate and determine a long-range plan for Indigenous education in New Mexico and among its tribal communities. As an Indigenous Education Study Group (IESG) of scholars and practitioners, most of whom are Native to New Mexico tribal communities, and all of whom are accomplished educators and scholars in the field of Indian education, we asked “What should Indigenous education look like in the year 2025? We sought to identify and study best educational practices for Indian children attending various schools; engage and interact with diverse groups of school and community members about their perspectives regarding “Indian education”; learn about their perceptions of “Indian education” with particular focus on the challenges and successes of Native based curricula and instruction; examine the impact of the New Mexico Indian Education Act (NM IEA) and the basic measures of achievement associated with No Child Left Behind (NCLB) mandates; and identify how “Indian education” can be improved in order to build a dynamic vision of Indian education for the future.

The *New Mexico Indian Education Act* (NM IEA) was passed in 2003 in an effort to ensure equitable and culturally relevant learning environments for Native students in public schools. The act sought to develop and implement positive educational systems; enhance the educational opportunities for students and aid in the development of culturally relevant materials for use in New Mexico schools; develop strategies for ensuring the maintenance of Native languages; increase tribal involvement and control; create formal government to government relationships between the tribes and state; and increase parental involvement in schools. The act also created an advisory council to oversee the Indian Education Act. The New Mexico Public Education Department, Indian Education Division contracted with the IESG to examine how well the schools were doing with regard to implementing the act.

¹ The phrase *Native schools* denotes schools with a large or majority population of Native students in the school, whether the school is reservation based or not.

QUANTITATIVE FINDINGS

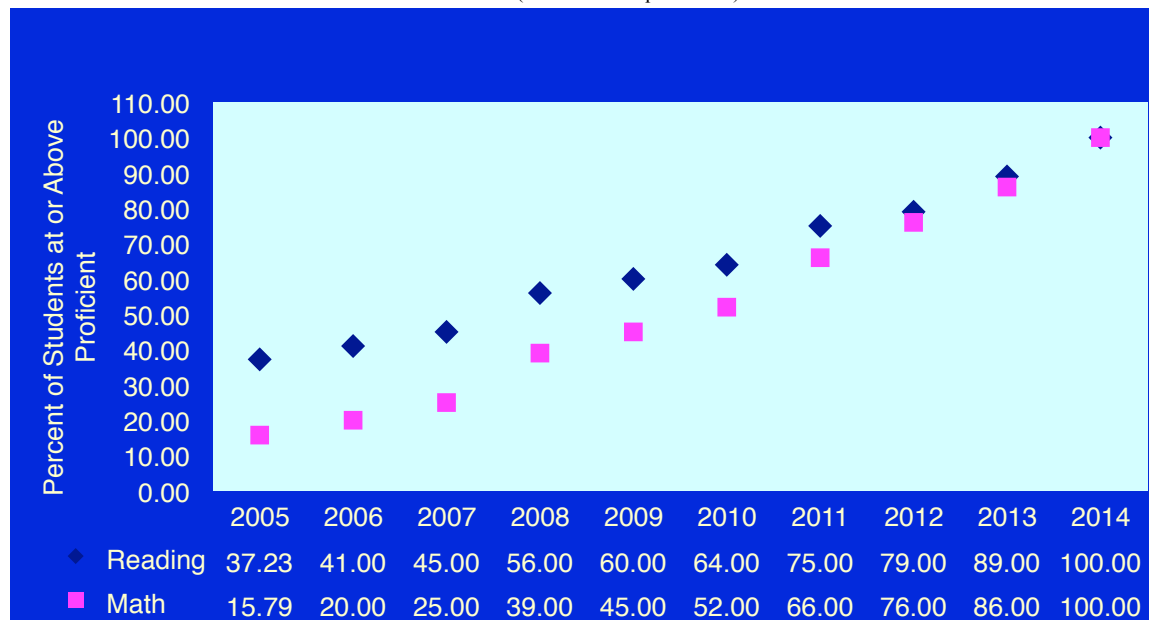
NCLB Act (Public Law 107-110)

The importance of understanding the factors and conditions associated with educational achievement among Native American students is imperative in light of the fact that according to population estimates, by 2025 it is projected that 84,710 American Indians will be 18 years & younger, Table 5.

The No Child Left Behind Act (NCLB) which was passed in 2001 is the latest of a number of federal laws implementing education reform. The best known predecessor of NCLB was Goals 2000 which prompted states to adopt standards based assessments in reading, mathematics, and science. Most of the strategies incorporated in NCLB were based on President Bush's education reform during his tenure as governor of Texas. Despite serious criticisms levied against NCLB, this Act is here to stay for sometime. Thus, a serious look at how NCLB has impacted Native American students is important.

NCLB requires states to create an accountability system of assessments, graduation, rates, and other indicators. Schools have to make adequate yearly progress (AYP) by raising achievement levels of all students. All students must reach 100% proficiency by SY 2013-2014. In New Mexico, the proficiency baseline was set using the New Mexico Standards Based Assessment (NMSBA) data from the first test administration.² From this baseline, yearly goals or Annual Measurable Objectives (AMO) were set to move the public schools towards the 100% proficiency goal by 2013-2014 school year. These AMOs for each grade levels for reading and math are also posted in www.ped.nm.us. For example, the AMO to make AYP for Grades 9-12 from SY 2005 to SY 2014 is reproduced Figure 1 below. The expectation is that all students will make AYP according to these predetermined AMO.

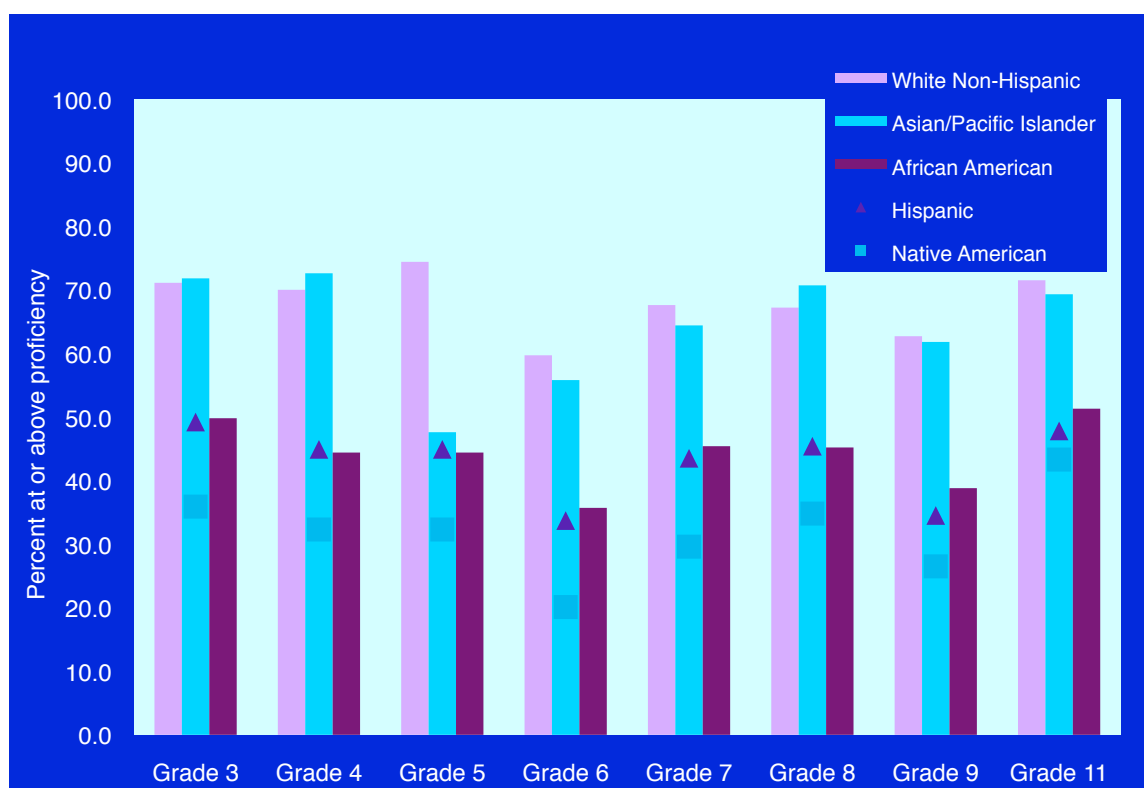
Figure 1:
Annual Measurable Objectives to Make AYP, Grades K - 12
(Source: www.ped.nm.us)



² Veronica Garcia, et al., August 2006 power point presentation at www.ped.nm.us

As demonstrated in Figures 2 and 3, the SY 2004-2005 AYPs for each subgroup, and for that matter for each grade level, are markedly unequal. Using a 100 meter dash race analogy, the starting line is at AYP 50.33 in Mathematics and 53.34 in Reading. Given their AYP ratings in SY 2004-2005, Native Americans have an overall handicap of approximately 15 meters in Math and 17 meters in Reading. To get to the 100 meter finish line, Native American students must sprint at an extremely fast speed to finish at the same time as their cohorts who are starting with a huge lead.

Figure 2:
Percentage of Students At or Above Proficiency Reading: 2004-2005 School Year
(Source: NMPED Indian Education Status Report, 2004-2005 School Year)



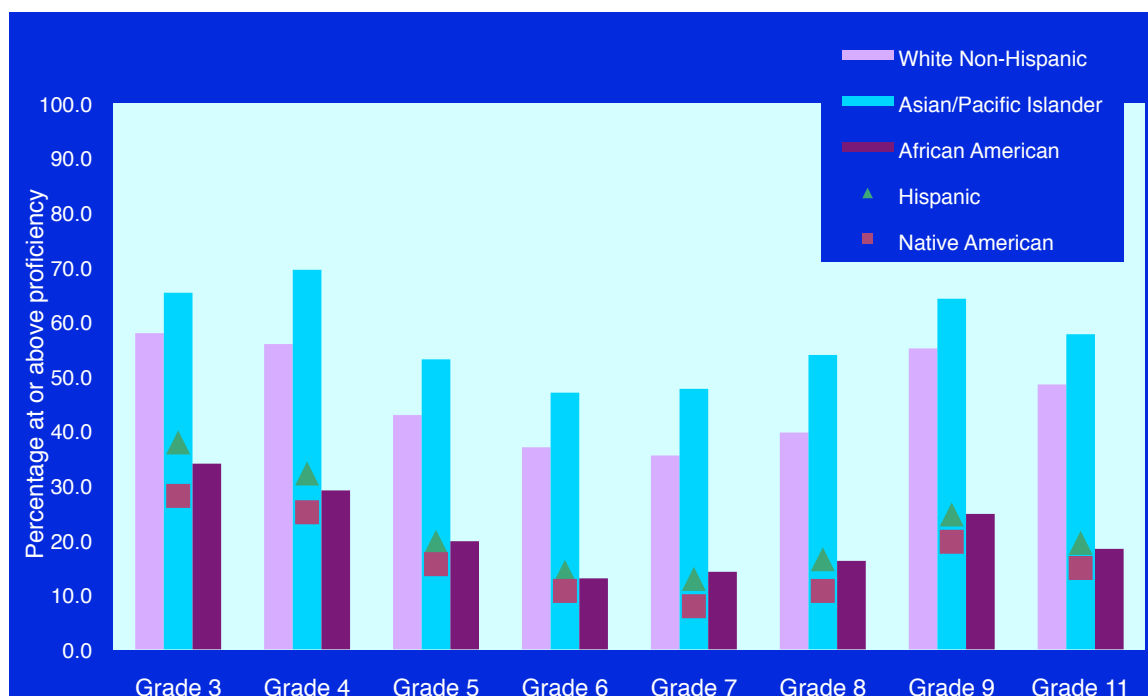
In 2004-2005 school year, Figures 2 and 3 show the actual AYP for all public schools in New Mexico.³ Both graphs indicate that at all grade levels, Native American⁴ students had the lowest proportion at or above proficiency. It is also quite notable that regardless of race, the proportions at or above proficiency are lowest among middle school students. Nevertheless, the expectation that all schools and, by implication, all subgroups “must” reach 100% proficiency by SY 2013-2014 foretells definite failure among American Indian students and schools where American Indian students predominate.

³ NMPED-IED Indian Education Status Report 2004 – 2005 School Year, pp. 9-10, April 26, 2006

⁴ The state uses “Native American,” and the US Census uses “American Indian” as categorical designations. For purposes of this discussion, they are interchangeable.

Figure 3:
Percentage of Students At or Above Proficiency Math: 2004-2005 School Year

(Source: NMPED Indian Education Status Report, 2004-2005 School Year)



The intent of NCLB is to “ensure the highest quality of education” for American Indian children and as Sen. Nighthorse Campbell stated at the June 16, 2004 Committee Hearing on NCLB, “reaffirms the trust responsibility of the United States to educate Indian children,” then it is imperative that educators, administrators, researchers, policy makers, and other stakeholders develop a good understanding of the conditions and factors under which American Indian children could succeed.⁵

While standardized achievement measures are excellent tools for getting a quick and broad view of where students and schools are, it is a double-edged sword. Testimonies given by a variety of prominent stakeholders to the Committee on Indian Affairs Oversight Hearing on NCLB, have repeatedly testified that this “one-size fits all” approach denies the “unique educational and culturally related academic needs of Indian children.”⁶ Roger Bourdeaux, superintendent of Tiospa Zina Tribal School, in his testimony was skeptical that “100 percent of the kids will be proficient or advanced regardless of whose criteria it is going to be.”

The National Indian Education Association Preliminary Report indicated that some stakeholders considered NCLB punitive and damaging to the students as the onus of the success or failure of the schools, in particular, and the educational system, in general, has been transferred to the individual student. This NIEA reported a tribal leader testimony that “identified a specific incident of how an individual student was caused to believe that he was the reason why the school had failed to Annual Yearly Progress

⁵ Hearing Before The Committee On Indian Affairs, US Senate, 108th Congress, 2nd Session, On Oversight Hearing On Implementation In Native American Communities Of The NCLB Act, June 16, 2004, Washington, DC

⁶ Ibid., Lillian Sparks, Director of National Indian Education Association

(AYP).” Moreover, “some considered that even if achievement results were improved for a school that the effect was to increase the drop out rate of students.”⁷

Leland Leonard, director of the Navajo Nation Division of Diné Education Committee testified that NCLB is disruptive to the “Navajo Nation’s self-determined progress in better educating its children and better training its educators.” He also criticized the limited scope of testing in NCLB. He said, “While these subjects [Reading, Math, and Science] are important, the No Child Left Behind Act excludes tests given to students who may be excelling in other areas such as music, art, or Navajo language.” He pled for schools that have large Native American populations to have “flexibility and opportunity to develop and implement culturally based curricula” and that “Testing should be used to identify a student’s aptitude and provide guidance for the future direction of his or her education. Additionally, Leonard also urged for “specific research funded to evaluate its [NCLB] effectiveness.”

Table 1
School Districts With Highest Concentration of AI Students
By Percent of All Students in Title 1 & Title IV

School District	American Indian Students*		Percent of Students in...**		Met AYP in *	
	Number	% of Total Enrollment	Title I	Title VII	Math	Reading
Zuni	1,682	99.1	98.6	94.8	No	No
Dulce	607	91.4	33.7	86.3	No	No
Central Consolidated	6,233	89.0	99.9	59.2	Yes	Yes
Gallup	10,691	81.0	58.8	75.4	No	No
Cuba	472	63.7	100.0	60.9	Yes	No
Jemez Valley	295	61.6	18.0	42.4	Yes	No
Magdalena	202	44.1	100.0	22.3	Yes	No
Bernalillo	1,413	41.7	50.5	39.0	Yes	No
Grants	1,383	37.7	100.0	2.0	No	Yes
Bloomfield	1,129	34.7	53.5	32.4	Yes	No
Farmington	3,000	29.6	26.9	0.0	Yes	Yes
Jemez Mountain	86	22.2	97.4	19.9	No data	No data
Tularosa	204	19.5	34.9	0.0	Yes	Yes
Pojoaque	351	18.2	31.9	15.5	Yes	Yes
Ruidoso	390	16.4	50.9	16.4	Yes	Yes
Aztec	411	12.9	0.0	0.6	Yes	Yes
Taos	249	7.8	29.3	7.2	No	Yes
Los Lunas	656	7.6	54.1	5.9	Yes	Yes
Espanola	303	6.4	67.3	5.5	No	Yes
Penasco	30	4.9	68.0	4.8	No data	No data
Albuquerque	4,518	4.8	38.2	5.2	Yes	Yes
Rio Rancho	529	4.2	7.3	0.0	Yes	Yes
Santa Fe	411	3.0	55.8	3.0	Yes	Yes
TOTAL	35,245	18.5				

Sources: * NMPED-ED 2004-2005 Indian Education Status Report, New Mexico Public Education Department.
 ** Dr. Mary Belgarde, Research and Evaluation to Assess Program Effectiveness of Ongoing Services Provided Through Indian Education Act, UNM College of Education NMRSC, June 2005.

⁷ Ibid., pg. 6.

Nevertheless, regardless of the apparent weakness of standardized tests, they are here to stay. They can serve as great initial or preliminary guidelines in determining areas where improvements can be made and help point to further inquiries into what works and what does not. The exclusive use of standardized tests and AYP as benchmark for student achievement and school performance may not be terribly useful as an educational reform tool.

Currently, AYP is used as a scale to compare student subgroups and schools to one another and to evaluate their distance to the predetermined state AMO. Schools receiving Title I funds that fail to meet AYP requirements for two consecutive years will be required to offer parents the option of sending their children to another public school within the district. If the school fails to meet targets the next year, the school will be subjected to corrective action such as “removing relevant staff, implementing new curriculum, decreasing management authority, appointing outside experts to advise the school, extending the length of the school day or year or restructuring the school’s internal organization.” As indicated in Table 1, except for Aztec, the rest of the school districts with sizeable Native American student population will be subjected to these sanctions.

The overall AYP in Math and Reading as shown in Figures 2 and 3 mask the differences among the school districts. Table 1 indicates that the 23 school districts that had the highest concentration of Native American students had mixed outcomes. In seven school districts Native American students made AYP in all three areas, Math, Reading, and Participation Rate. These schools are Albuquerque, Aztec, Central Consolidated, Farmington, Los Lunas, Ruidoso, and Tularosa. In 14 school districts Native American students did not make AYP in at least one area. In Dulce Native American students failed to make AYP in all areas. In six school districts Native American students did not make AYP in 2 areas. In Bernalillo and Jemez Valley they did not make AYP in Reading and Participation Rate. In Zuni and Gallup they failed to make AYP in both Math and Reading. In Espanola and Taos Native American students did not make AYP in Math and Participation Rate. In seven other school districts they did not make AYP in one area. In Pojoaque, Rio Rancho, and Santa Fe Native American students did not make AYP in Participation; in Grants they did not make AYP in Math; Bloomfield, Cuba, and Magdalena they failed to make AYP in Reading.

Table 1 shows that the three school districts where Native American students fell short in making AYP in Math and Reading are also the top four with the highest proportion of Native American students (Zuni, 99.1%; Dulce, 91.4%; Gallup, 81.0%). These school districts also have the highest proportion of students who are enrolled in Title VII (Zuni, 94.8%; Dulce, 86.3%; Gallup, 75.4%). The proportion of students in Title I was very high in Zuni (98.6%), low in Dulce (33.7%) and moderate in Gallup (58.9%).

Student Enrollment Trends

The number of American Indian students enrolled in public schools throughout New Mexico hovered between 35,000 to over 36,000. The peak year appears to be the SY 2005-2006, when the reported number reached 36,420 students. The SY 2009-2010 registered the lowest number of American students at 34,925. Table 2 shows a saw-tooth pattern of American Indian student enrollment throughout the 12 years for which data were available. Based on this historical trend, it is likely that future American Indian student enrollment in the public schools will rise again. The same up and down pattern is also noted in the study area, wherein approximately 9,200 American Indian students were in attendance in SY2009-2010. In the study area as well as statewide, Table 2 points to a decline in American Indian enrollment. It is unclear if this is the beginning of a downward trend in the participation of American Indian students in the public school system or if it is just a continuation of the see-saw pattern indicated in the last 12 school years. This enrollment decline cannot be attributed to a decline in births.

Table 2
Number of American Indian Students Enrolled in Public Schools
by School District in the Study Area:
School Year 1998 to 2010

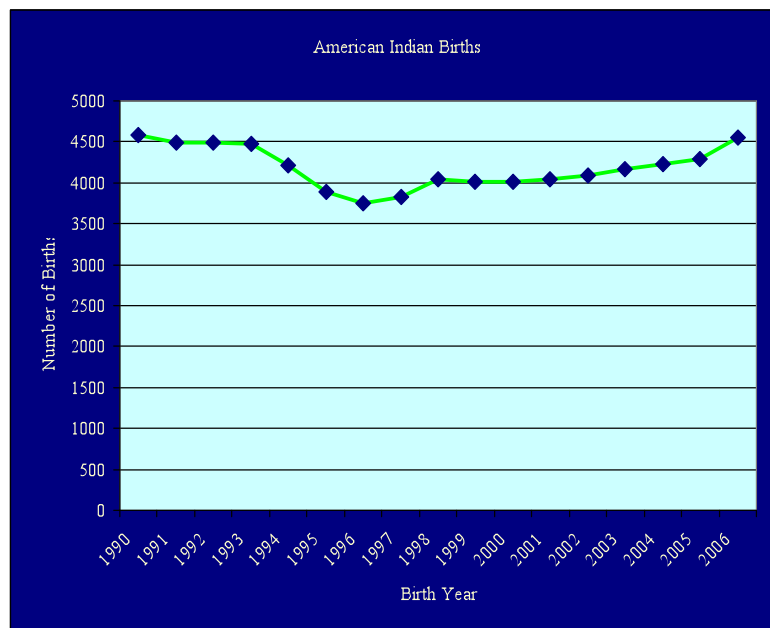
(*source: Extracted from the NM Public Education Department website: <http://sde.state.nm.us/IT/schoolFactSheets.html>)

School Year	Number of American Indian Students Enrolled in School District *						Total In New Mexico*
	Bernalillo	Central Consolidated	Dulce	Grants	Pojoaque	Total in Study Area	
1998-1999	1,524	6,545	673	1,251	328	10,321	35,505
1999-2000	1,479	6,540	676	1,281	345	10,321	35,697
2000-2001	1,492	6,468	619	1,261	350	10,190	35,230
2001-2002	1,453	6,481	656	1,331	362	10,283	36,189
2002-2003	1,474	6,304	597	1,338	353	10,066	35,853
2003-2004	1,435	6,156	608	1,365	369	9,933	35,830
2004-2005	1,413	6,233	607	1,383	351	9,987	36,326
2005-2006	1,393	6,199	633	1,398	382	10,006	36,420
2006-2007	1,365	6,011	605	1,487	381	9,849	35,716
2007-2008	1,393	6,148	640	1,585	385	10,151	36,120
2008-2009	1,367	6,017	638	1,482	377	9,881	36,401
2009 - 2010	1,268	5,528	633	1,461	347	9,237	34,925

Figure 4 shows that the number of American Indian births has steadily increased since 1996. In spite of this, there is an incipient decline in the number of American Indian students in the public schools. It is likely that the rise in the number of alternative schools in the state may be a contributing factor as well as the high drop out rates. In the 2007-2008 NM Student Dropout Report, the dropout rate for AIs was 6.6%, twice the rate for the general population (3.6%).

Figure 4
American Indian Births from 1990 to 2006

(Source: Extracted from data provided by the NM Department of Health Vital Records and Statistics Division)



American Indian Population Trends

Historically, the American Indian and Alaska Native (AIAN) population has increased at a much faster rate than the state of New Mexico as a whole. Depending on which racial category is used, the AIAN is at minimum 173,483 or as high as 191,475 people in 2000. The former number counts those that identified themselves as single race, AIAN. The latter number counts those that identified as more than one race or AIAN plus at least one other race. Table 3 shows that during the 1990 Decade, AIAN alone or in combination with any race grew at 3.54% annually, almost twice the rate of the state population, 1.83%, as a whole. If the AIAN alone population in 2000 is used to calculate the growth rate, the annual rate is one percentage point lower at 2.56% annually. At any rate, the AIAN population grew much faster than New Mexico as a whole.

Table 3
Historical population Levels and Average Annual Growth Rate:
1990 to 2005

Year	Population		Average Annual Growth Rate (%)	
	New Mexico	American Indians	New Mexico	American Indians
1990	1,515,069	134,355		
2000	1,819,046	191,475*	1.83	3.54**
2005	1,969,291	211,315*	1.51	1.88
Note: * AIAN alone or in combination with any other race. AIAN alone was about 173,483 people. ** Growth rate is higher than expected because race classification changed in the Census 2000. Annual average growth rate based on AIAN alone is about 2.55%, less than one percentage points.				

The disparity in the population growth between the AIAN population and the state continues during the first half of the 2000 Decade although there is evidence that the gap is narrowing. Between 2000 and 2005, the state grew at an annual rate of 1.51% compared to 1.88% for the AIAN population. The decline in the overall growth rate for the state is due to declining fertility and a smaller number of migrants to the state. By contrast, the slower growth of the AIAN population is primarily due to declining fertility. In 1990, the estimated average number of children or Total Fertility Rate (TFR) per AIAN women aged 15 to 44 was approximately 3.71. By 2000, the estimated AIAN average fertility rate was approximately 2.65 per woman, a decrease of slightly over 30%. This decline in fertility was large due to a reduction in the teen fertility rate and in the fertility rate of AIAN women aged 25 to 29 years old. Teen fertility decreased by about 25% and the fertility of those between the ages of 25 to 29 decreased by about 20%. Note, however, that while the fertility rate is declining, the absolute number of births has been increasing.

Migration as a component of AIAN population growth has no significant impact thus far because, on balance, the number of AIAN leaving is compensated by those moving into the state. However, as the level of education increases, there is an increased probability of the highly educated population to seek employment outside of New Mexico.

Table 4
New Mexico State and American Indian Population, by Age: Census 2000

(Http://factfinder.census.gov)

Age Group	New Mexico	American Indians Alone or in combination
POPULATION COUNT		
18 yrs & younger	537,086	75,962
19 - 24	149,064	18,542
25 - 34	234,091	26,841
35 - 44	282,009	27,817
45 - 54	245,819	19,492
55 - 64	158,752	11,522
65 - 74	117,745	6,709
75 - 84	71,174	3,310
85 & older	23,306	1,280
Total	1,819,046	191,475
PERCENTAGE DISTRIBUTION		
18 yrs & younger	29.5	39.7
19 - 24	8.2	9.7
25 - 34	12.9	14.0
35 - 44	15.5	14.5
45 - 54	13.5	10.2
55 - 64	8.7	6.0
65 - 74	6.5	3.5
75 - 84	3.9	1.7
85 & older	1.3	0.7
Total	100.0	100.0

The AIAN future population will continue to expand at a faster rate than the state as a whole. In general, life expectancy for all New Mexicans will increase from an average of 78.39 years in 2000 to 83.63 years in 2025. This improvement in mortality will result in a greater number of people surviving to adulthood and into past retirement age. With the assumption that migration does not change significantly from the patterns noted in the last two decades, the AIAN population will grow to approximately 280,000 people by 2025. This is an increase of about 45%, or about 89 thousand people, in 25 years. By comparison, New Mexico will grow by about 38% (689 thousand people) for the same time period.

Despite improvements in life expectancy, the somewhat rapid decline in the fertility of AIAN women has tempered the growth of the population in the youngest age groups (0-18 years old). For 2025, it is projected that the share of the 0-18 age group among AIAN's will be 30.2%. This is a decline of 9.5 percent from year 2000. Based on the projected population as shown in Table 5, these age groups will in-

crease their overall share in the state by only two-tenths of a percent. Nevertheless, this does not minimize their impact on the school age population. In 2025, it is projected that about 85 thousand AIAN children, an increase of about 9,000, that will be in the school system in one way or another.

Table 5
Projected State and American Indian Population:
July 1, 2025

Age Group	New Mexico	American Indians Alone or in combination
18 yrs & younger	591,552	84,710
19 - 24	184,617	25,362
25 - 34	307,245	34,001
35 - 44	333,922	41,189
45 - 54	282,069	29,753
55 - 64	294,799	26,173
65 - 74	272,775	22,810
75 - 84	162,206	12,149
85 & older	78,364	3,976
Total	<i>2,507,548</i>	<i>280,123</i>
PERCENTAGE DISTRIBUTION		
18 yrs & younger	23.6	30.2
19 - 24	7.4	9.1
25 - 34	12.3	12.1
35 - 44	13.3	14.7
45 - 54	11.2	10.6
55 - 64	11.8	9.3
65 - 74	10.9	8.1
75 - 84	6.5	4.3
85 & older	3.1	1.4
Total	<i>100.0</i>	<i>100.0</i>

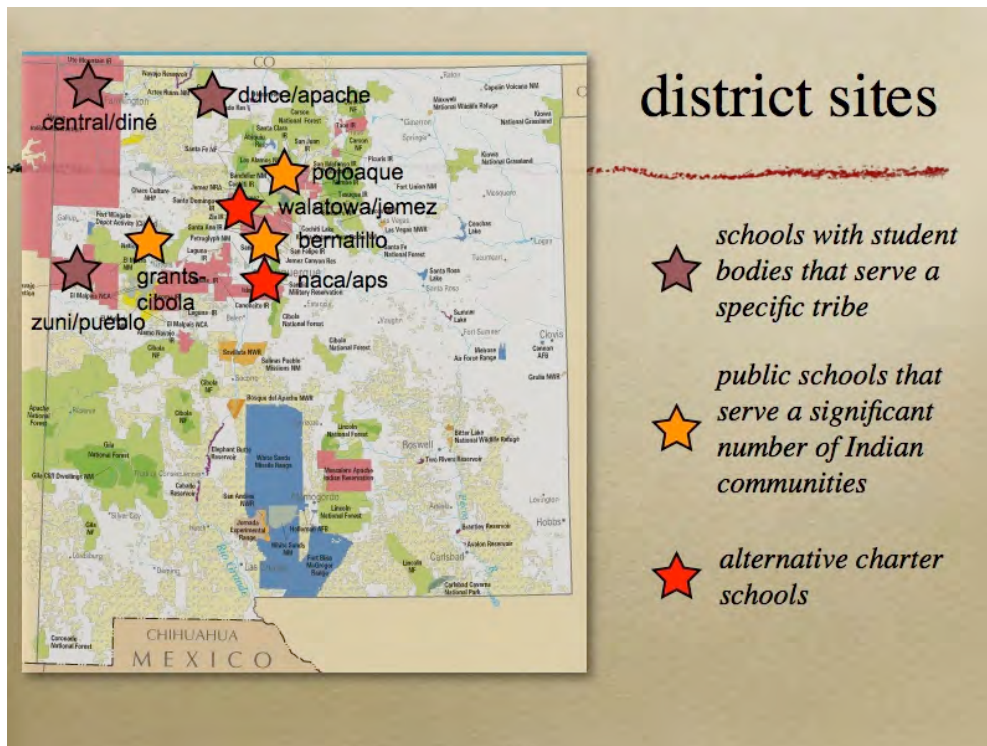
At the state level, these youngest age groups will also lose ground to the older age groups although at a much slower rate. Tables 4 and 5 show that the share of the 0 to 18 year olds in the total state population will be reduced by about 6 percentage points, from 29.5% in 2000 to 23.6% in 2025. The higher fertility of the immigrant population contributes to the higher than expected growth in these youngest age groups. Table 5 also indicates that the AIAN population like other race groups, will be aging. The first wave of the baby boom generation has turned 65 this year. The next 20 years will witness the swelling of the ranks of the elderly as this generation ages.

QUALITATIVE FINDINGS

Methodology

The study used an interdisciplinary and Indigenous approach in methodology and analysis, and it involved scholars and practitioners, who represented disciplinary perspectives in Education, Sociology, Planning, Economics, Anthropology, and Native American Studies. These perspectives enhanced the research process to create a comprehensive, multi-disciplinary research approach rooted in Indigenous methodologies, beliefs, and practices. On average, the interdisciplinary group has met an average of once every two weeks for two-and-a-half years, even during the Summer periods (a more detailed explanation of the Indigenous Research Approach is to be found in the Appendix).

The Indigenous research approach entailed adhering to tribal community protocols with regard to research in their community. It also entailed an understanding of the community's history and nature of interaction at a personal level, school level, and community level. In essence, it emphasized Indigenous ways of knowing and interacting.



Schools were chosen in accordance to the following criteria:

Schools With Student Bodies That Come From Specific Tribes

- ◆ • Central (Navajo)
- ◆ • Dulce (Apache)
- ◆ • Zuni (Pueblo)

Alternative Charter Schools

- ◆ • Walatowa High Charter School (Jemez)
- ◆ • Native American Community Academy (APS)

Public Schools That Serve Significant Numbers Of Indian Communities

- ◇ • Bernalillo
- ◇ • Grants-Cibola
- ◇ • Pojoaque

Focus groups were conducted in 5 school districts and 2 charter schools. Only the Zuni School Board declined to participate in the study.

At least 3 separate groups of students, teachers, and community members were conducted at each site (see table below for the number of pages in the transcriptions of those focus groups).

Focus Group Information at a Glance

Location	Teachers	Students	Community
Bernalillo Public School District			
High School	53	33	54
Middle School	45	16	
Santo Domingo Middle School	32	14	
Cochiti Middle School	38		
Central Consolidated			
Kirtland Central High School	9	16	
Newcomb High School	12	6	
Shiprock High School	22	5	
Dulce			
High School	60	19	8
Grants/Cibola			
District Office			18
Group A	18		
Group B	58		
Group C	22		
Grants High School		23	
Laguna/Acoma High School		41	
Mesa View Elementary			
Group A	6		
Group B	19		
NACA			
	29	26	25
Pojoaque			
	20	61	55
Walatowa			
	34	20	
Totals	477 pages	280 pages	160 pages

There are a total of 917 single-spaced pages that were transcribed from audio tapes taken during the focus groups. 477 pages of transcripts are teacher focus groups, 280 pages are from students, and 160 from community focus groups.

Participants volunteered to take part at the request of the IESG, a school or community liaison, or the principal of each school. The methods for soliciting participants varied in each community according to the appropriate protocol of the school or community. Most participants were randomly selected among willing participants. As seen by the totals, the most challenging aspect of the focus groupings was getting community members to participate.

The data according was coded using qualitative software (Atlas TI) in order to triangulate to topic areas as identified by patterns that emerged within the critical areas. Each principal investigator (PI) assigned to a particular community was the first coder of the data, followed by a research assistant or another PI who participated in the focus group or interview session. A third reviewer (another PI) compared the first level of coding to the transcripts to determine their levels of agreement or disagreement. This served as a reliability check on the first two coders. For those codes where there was disagreement, the IESG group discussed the code, associated quotations, and context of the quote until the group arrived at a consensus on how to code the data.

The PIs along with Student Project Assistants have coded quotations from the transcripts according to the seven critical areas (called “super codes”) and attached a descriptor or memo to the super code to narrow down and specify the content and meaning of the quotation. As the analysis proceeds, new super codes where the data was expressing sentiments or ideas different from the original seven areas (such as *Relationships* and *Attitudes and Beliefs*) have been added.

QUESTIONS

A research literature review was conducted on each area by first identifying any related research in New Mexico, then identifying related research in the southwest, followed by identifying related research across Indigenous communities in the United States and world-wide. It was important to understand what we know in New Mexico first because the study is intended to benefit New Mexican Native communities. We also included significant research we determined to be important to our understandings in these areas regardless of its location or Native population of study.

The IESG identified seven critical areas of inquiry to examine. Their definitions are as follows:

- ◆ **Educated Native American Person / Successful Student describes the manner in which an individual from a tribal community places a value on education.** Success goes beyond educational attainment and GPA. It includes a person’s ability to make long-term commitments to learning as well as completing their responsibility to family and community. Education is a life-long pursuit and is invested in both academic knowledge and their roles in the betterment of the professional and tribal community where they live.
- ◆ **Language is defined as the first and second language that is learned by the students and their families.** Native language is defined as the oral and written language spoken by Native communities. Most Pueblos in New Mexico speak five major languages (Tiwa, Tewa, Towa, Keresan, and Zuni) and different dialects of these major languages exist among the nineteen Pueblos. The two Apache tribes (Jicarilla and Mescalero) and the Navajo tribe speak different dialects of an oral and written Athabascan language. As indicated by the New Mexico Indian Education Act (2004), schools must consult with the tribes to determine who is responsible for certifying and eligible to teach their respective Native languages as well as who is eligible to learn the languages of their communities. In many urbanized communities, however, schools may also be inclusive of Native languages that may not be Native to New Mexican state boundaries (such as Cherokee, Comanche and Lakota).
- ◆ **Curriculum is the set of courses and their content offered in a school.** A set of courses includes the teaching of core courses and may include health, physical development, music, art, foreign languages as approved by state standards. School curricula may include on-line courses, leadership activities, hands-on activities, peer-to-peer group activities, travel experiences, and

other out-of-school activities, as well as other approved curricula that address the mission and goals of the school. Curriculum content includes local and state approved sets of textbooks; written and oral-based materials; and resources to accomplish the academic curriculum of the school.

- ◇ **Pedagogy is the way, methods, and/or strategies in which teachers teach.** They include the processes, skills, and talents that teachers use for instruction. Classroom strategies may include seating arrangements, teacher lectures, seminars, visual demonstrations, silent reading, worksheet completions, hands-on learning, cooperative-learning, peer-to-peer mentoring, individual teacher/student assistance, and question and answer sessions as examples. Some pedagogical practices include holistic practices (mind, body, spirit of the community) that address student interests such as motivation, first and second language abilities, and physical, psychological, & emotional challenges. Multi-sensory learning includes the needs of students as visual, listening, oral, and kinesthetic learners; as well as striving to address multiple intelligences such as artistic and emotional.
- ◇ **Accountability is defined by most educators as the qualitative and quantitative measures in which student's personal needs and academic performances are assessed and determined.** Qualitative assessments may include written narratives, artistic and/or oral presentations, photographic exhibits, hands-on demonstrations, observations, and portfolios, as examples. Quantitative measures may include anything that may be assessed and determined through numerical, mathematical, and/or statistical rankings or summaries. Most norm-referenced tests used today (as required by the No Child Left Behind laws and its amendments) compare different cohorts of students (comparing last year's 3rd grade with this year's third grade students) and does not measure individual student's growth over-time. Both qualitative and quantitative measures may also include other social factors, such as attendance, homework completion, student behavior, organizational participation, and student self-assessments.
- ◇ **School Climate/Environment/Place is the qualitative assessment of the overall social and physical environment that a school creates for its teachers, students, parents, and community members.** Students attending public schools are emotionally affected by the ways in which an institution makes them feel respected and welcomed. Interaction and behavior in the classrooms, libraries, hallways, open lunch areas, and throughout the school affects student, parent and community participation. Sports and extra-curricular activities often builds allegiance to a school. Public schools require that visitations by parents (family members) and volunteers follow formal rules for reasons of school liability and public safety. The school climate often sets the tone of engagement for parents and community members.
- ◇ **Relationships (new area) are the formal and informal ways in which human bonds are created and sustained among peers and between youth and adults.** Student/teacher relationships are anchored formally by ethical codes of conduct. Among native communities, social mechanisms such as age, gender, traditional obligations, and clanship affect human relationships. These are grounded in mutual respect and reciprocity.
- ◇ **Vision is defined as the ultimate desires by students, teachers, and communities for school leadership and school change to occur as suggested in the Indian Self-Determination Act (1975).** As suggested in the title of the study, "Indian Education in New Mexico, 2025," students, teachers, and community members were asked what and how they would like to see happen in their schools in the year 2025.

Central to this study is an approach to broaden the time horizon beyond the past and the present, and begin to strategically formulate what vision the future holds for Indian education in the state of New Mexico. In this respect, the study attempted to identify collectively shared ideas and plans of action. "Collective-think" in this respect takes on new meaning by formulating a vision of Indian education in New Mexico grounded in the perspectives of Native students, Native community members, and teachers.

The 7 areas of inquiry that were detailed for each of the focus groups and the questions that were used in the focus group discussions were:

AREAS OF INQUIRY

1. Educated NA Person	*Teacher: What are the attributes of an educated Native person? *Student: Do you know an example of an educated Native person? How do you see yourself as becoming an educated Native person? *Community: same as teacher question
2. Language	*Teacher: What role does Native language play in the education of Native students? How can schools provide support for Native youth learning their tribal languages? What should be the techniques or strategies for teaching Native languages by 2025? *Student: What has been your experiences with learning your Native language? What could the school do to help you learn your language? *Community: What role does your Native language play in the future of your community? (please define your community). Does it play a role in belonging to your community? How or why not? • Possible interview question: What are important ways young people can learn their Native language today?
3. Curriculum	*Teacher: Describe how Native experiences, history, or perspectives are incorporated in the curriculum? *Student: What is the school teaching you about Native people, history, and culture? • a. What do you think the school should be teaching you? or • b. what are the sources of the information? *Community: What are some ways teachers and schools can include Native experience, history, or perspectives?
4. Pedagogy	*Teacher: How would you describe some of your most effective and engaging teaching practices for Native students? *Student: Can you describe some learning activities or events you have done in or out of class that you felt were most interesting? *Community: What are meaningful ways teachers and schools can include community people in teaching activities with the school?
5. Accountability	*Teacher: What works best for you in showing your Native students' academic progress? What do you see as the root causes (or basis or origins) of educational disparities experienced by Native students? *Student: How do you show your teachers what you have learned? (What has your teacher asked you to do to show what you have learned?- still working on probes for this 2nd part of the question) *Community: In what ways can teachers and schools best demonstrate how well they have taught your children?
6. School Climate/ Environment/ Place	*Teacher: How do you describe your school as a place for the community? Describe the school climate for native students? How welcome are parents and the community to use its resources? Can you give some examples? *Student: How do you describe your school as a place for your community? Describe the school climate for native students? How welcome are parents and the community to use its resources? Can you give some examples? *Community: How do you describe your school as a place for your community? Describe the school climate for native students? How welcome are your students, parents and the community to use its resources? Can you give some examples?
7. Vision	*Teacher: What would you envision to be the ideal classroom and school for Native students in the year 2025? *Student: same as teacher question. *Community: same as teacher question.

It is important to note that while much of the understanding derived from the findings is based directly on the transcript and the context of the situation, it is also derived from the lived experience and knowledge of the Indigenous researchers. As stated earlier, many of the PIs come from the communities of study or have had significant experiences in the communities outside of the professional realm. This study stands apart from many others in this respect because the analysis is enhanced by the researchers' own perspectives.

DISTRICT FINDINGS

BEST PRACTICES

The following tables summarize some of the overall findings as they relate to the NM Indian Education Act. As stated, its purpose is to (letters provide the key to the tables):

A	Ensure equitable and culturally relevant learning environments, educational opportunities and culturally relevant instructional materials for American Indian students enrolled in public schools;
B	Ensure maintenance of native languages;
C	Provide for the study, development and implementation of educational systems that positively affect the educational success of American Indian students;
D	Ensure that the department of education partners with tribes to increase tribal involvement and control over schools and the education of students located in tribal communities;
E	Encourage cooperation among the educational leadership of Arizona, Utah, New Mexico and the Navajo Nation to address the unique issues of educating students in Navajo communities that arise due to the location of the Navajo Nation in those states;
F	Provide the means for a formal government-to-government relationship between the state and New Mexico tribes and the development of relationships with the education division of the bureau of Indian affairs and other entities that serve American Indian students;
G	Provide the means for a relationship between the state and urban American Indian community members to participate in initiatives and educational decisions related to American Indian students residing in urban areas;
H	Ensure that parents; tribal departments of education; community-based organizations; the department of education; universities; and tribal, state and local policymakers work together to find ways to improve educational opportunities for American Indian students;
I	Ensure that tribes are notified of all curricula development for their approval and support;
J	Encourage an agreement regarding the alignment of the bureau of Indian affairs and state assessment programs so that comparable information is provided to parents and tribes; and
K	Encourage and foster parental involvement in the education of Indian students.

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
Educated Native Person/Student Success Indicators	Create bridges to successful postsecondary opportunities (e.g., college bridge programs; visits/summer programs on college campuses, etc.)	<i>It's a really great program because they show you steps like how to apply for college, how to write a resume, what things you should be looking forward to, what kind of recommendations you should be getting; basically preparing you for the next step. – Student</i>	C
	Strengthen cultural identity and foundation	<i>I'd like to see very strong Native American men and women who are well educated and can do any kind of job in the mainstream. At the same time, have strong Native American values, traditions, culture, and language because we keep everything in bal-</i>	C

		<i>ance by continuing to practice our ways. – Community Member</i>	
	Connect careers with community development	<i>I wouldn't mind working here. I know it—I probably wouldn't even be the best pay, but I'd still want to come here and support my community here. – Student</i>	D, G, H, K
	Expand opportunities for students to take more responsibility for their own learning and education	<i>If you're leader of a project, you have options to do what you want to do like give a report, build something or make a power point presentation. –Student</i> <i>We talk a lot about how it's important for them to take responsibility for their education because if they're in a class where a teacher fails to meet their expectations, they shouldn't sit there and count ceiling tiles. They should do something about it. – Teacher</i>	A, C

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
Language	Review and renew commitment to Native American language program and identify goals and learning outcomes	<i>I think our language shapes the way we think. I should think they'd all learn their language. – Parent</i>	B, I
	Provide Native language instruction K-12 for all Native students	<i>And what's a sad reality is you have an elementary and middle school of Keres speakers, but then when they leave middle school they have to come to this high school and there's no programs.- Parent</i>	B, I
	Continue to offer and support Native language instruction. Language and culture included in all content areas; and they should be valued and respected in the overall school climate	<i>They have a Navajo class which motivates my son to go to school. I really, really like that Navajo class. I really appreciate that. There's so much strength in that class and that I see in my son. – Parent</i>	B, I
	For Native languages not native to New Mexico but widely represented in New Mexico today (such as Lakota and Comanche), provide eligibility to develop Memoranda of Understanding for Native language teacher certifications between tribes and the state	<i>Well, we have two enrichment courses: Navajo and Lakota. Both are teaching us to take back our culture, which is like really excellent. - Student</i>	B, G, I

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
Curriculum	Make curriculum relevant to students' lives in multiple ways	<i>There's a farming culture, and agriculture culture, and so it's the kind of thing where I try to include as much as they know because I try to build on prior knowledge. - Teacher</i>	A
	Integrate Native content and experiences in all courses, particularly in required coursework (e.g., English, Math, Science, History/Social Studies)	<i>So you have Science and English teachers right now working on integrating, like, over a common theme and then using the community garden, for example, to teach about science, to write about what they're doing and then associate Native storytelling to gar-</i>	A, I

		<i>dens and the significance of food. – Community Member</i> <i>My son was in a project for social studies, he did a family tree. They had to go five generations back. – Parent</i>	
	Update textbooks and resources to more current information, produced and written by Native Americans	<i>Well, if you actually look in the textbook, it's actually about everything in New Mexico and there's just one small section about Indians, about Native Americans. - Student</i>	A, I

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
Pedagogy	Require teachers to use different teaching methods and strategies for more effective learning experiences that encourage innovation with American Indian students	<i>You don't learn much where you copy from the book. We're always sitting down." – Student</i> <i>"The way the teacher did it; it was pretty cool to see it. But to really have to do it. It was more work. Yeah, it was fun - Student</i>	C
	Employ multiple learning activities in every content area to include hands-on activities, group work, and other experiential opportunities	<i>Some teachers are really good at teaching because they explain it step by step, and if you don't get it, they'll keep going over it. One of my US History teachers used to really get in depth and show video clips off the internet and stuff. And, like, he would know from his own experiences because he would travel across the world. He'll get certain movies and get into it. And then, we'll have like, a project on that to learn more about it. And then he would teach the class and then they would ask us questions about it; like what we learned and stuff. - Student</i>	C
	Teach Native American content, perspectives, and experiences in positive ways to emphasize contributions to the world	<i>I tell them to interview their parent, or their grandparent - more than likely their grandparent - about their experiences in the boarding school. What are their stories? - Teacher</i>	A, C
	Revisit discipline policies to minimize the time students are removed from class for minor rule breaking	<i>Right now they're mostly concentrating on school uniforms than on our learning. – Student</i> <i>I sometimes get emails from a teaching saying "How come I didn't suspend this kid? "He should have been suspended. And I tell them, " I could take care of the short problems, suspend them for three days and then he's going to come back with a lot of anger because he's already flunked the class. At first I was one of those teachers who said, "let's get rid of them" and then I started thinking "What are we doing? "Why are we getting rid of all these kids?"- Teacher</i>	C

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
Accountability	Develop teacher/staff action teams to deal with students making no achievement based on absenteeism, failing in classes, home environments that are unhealthy, e.g., domestic violence, alcohol or drug abuse issues, etc.	<i>It's hard to find the answers to those students, but when you know their home situations. I think a lot of my kids come to school with so much baggage that it's hard to get them to concentrate. Because a majority of them are worried about what's going to happen at home; am I going to eat tonight; am I going to have a safe place to sleep? - Teacher</i>	J, K
	Require all teachers, administrators, and other school staff to participate in on-going professional development opportunities to improve their knowledge and appreciation for the local community's historical, cultural, & social context	<i>I think my strongest suggestion is to work with the Chapters - to expose the white teachers that are out here on the reservation to a language class and a history class.- Teacher</i>	K
	Require teachers, staff members and students to share best practices information in education	<i>My colleague and I, we do not get the time to sit down and coordinate our teaching materials. - Teacher</i>	C
	Continually assess the alignment between the school district's mission and the actual practices at the school and classroom level by utilizing the NM Indian Education Act	<i>I mean there's so many programs that we have here. But [even though] I feel like we're helping them to make progress, but for whose sake? Is it for the student's sake? Is it for the school's sake? Is it for the District so that we can look pretty in numbers—so that we're not one of those numbers saying that we have a high drop-out, low graduation rate, you know?! - Teacher</i>	D, F, G, J
	Create incentives to retain and reward good teachers	<i>I think one of the main strengths is that [the school] has highly trained professionals, that's key. They hire people that are passionate. It's a calling more than a job. - Community Member</i>	D, H
	Develop working relationship between tribes, communities and schools to share responsibility for educating the children.	<i>The teachers, they are community members and role models in the community so that helps. And like when they see each other somewhere else they greet each other the way that they have been taught - Parent</i> <i>Grades and performance are affected by attendance - Teacher</i> <i>It's about the teachers. They don't understand certain things; why you need to go to the village; why you do this. I do religious things on the side, and they tell us that I need a permission slip from the Navajo Nation - Student</i>	B, D, E, F, G, H, I, K
	Proactive recruitment and support for Native teachers through scholarships and loan forgiveness programs	<i>Maybe we just need someone who is Native American and who has gone through college and know the curriculum and can factor in what they know and what we're supposed to be learning from both sides. - Student</i>	D, E, H

	Address the teacher and administrative staff turnover rates by developing effective measures, such as mentoring, additional resources, cooperative teaching, etc.	<i>There are just some very dynamic teachers, and sometimes there are young teachers, but they will tend to lose that enthusiasm. So it's really trying to continue to motivate teachers to want to become better. – Teacher</i>	C
	Utilize multiple alternative assessments (e.g., portfolio, performance, presentations, exhibits, observations, student self-assessments) that follow the same student across time to assess academic progress and competence (currently NMSBA/ NCLB reports and compares different groups of students); include qualitative data (e.g., interviews, participant observations, etc.) as a part of school assessment	<i>Sometimes that's all some teachers do; just to pass the AYP. They're not doing anything else but preparing [for the test]. Us too, making sure students make AYP. No time for hands on science or social studies. It has to be reading. We have a two hour block in the morning for reading. - Teacher</i>	D, J
	Provide paid weekly staff time for special education teachers and inclusion teachers to coordinate accommodations for special education students	<i>I was in IEP last year for a kid, 16-year-old, 3rd grade reading level, 3rd grade writing skills, failing all coursework. I sat in the IEP and asked, "What are the accommodations and modifications for this child?" "Don't you have books on tape? Don't you have the software for your microphone so he can speak into it and it writes for him?" Oh, we don't have the money for that. It was just tutoring. They didn't have anything else. – Community Member</i>	C
	Provide on-going training to all school staff, teachers, administrators and school security on IEP law and implementation (e.g., ipods, books on tape, laptops, video, other technologies, etc.)	<i>Because there's not that kind of a shared information much less to their personal to understand what ADHD is and the law that goes along with it. So, my son is walking across campus with his iPod in his ear and a teacher pulls him over and says, "Well, you know the policy, give me your iPod. - Community Member</i>	C, H

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
School Climate/ Environment/ Place	Create an inviting and welcoming environment for Native students and their families (e.g., coordinate activities with Native American community leaders)	<i>What's good about his school is they, you can go to the school, as parents we can go to the school anytime and they... it's always real inviting. – Parent</i> <i>'Cause isn't that why they're here? To make sure the students are safe.- Student</i> <i>No blank walls. - Student</i>	K
	Develop strategies and fund parent workshops for involvement in children's education (K-12)	<i>I think the State should come up with funds for parents. Maybe that's how we can get the parents to come to our school and form a parent organization, where we can have a parent room. - Parent</i>	D, H, K
	School administrations are proactive in the acceptance of American Indian cultures as a contribution to the educational environment and work with	<i>The Indian Education Program at the high school is an important place where students feel comfortable about their Native American identity.– Community Member</i>	D, F, G, H,

	local tribal education leaders and parents	<i>Whenever Mr. Great was teaching he invited people [from the community]. - Student</i> <i>The Navajo tribe has an agency that we could report any Navajo child with attendance issues and that was taken care of. – Teacher</i>	K
	Upgrade school buildings and facilities	<i>“Last week we had a gas leak and had to go home.”- Student</i>	C

Area of Inquiry	Policy Recommendation	Representative quotes	NMIEA Purpose
Vision	Create occasions for students to demonstrate and present their knowledge, skills, and learning	<i>If we're learning about Americans we should [also] be, like, allowed to do an activity in our own [cultural] way—like sing a native song, bead or make jewelry, make pottery, baskets. - Student</i>	C
	Inspire students' intrinsic motivation to learn, such as by incorporating technology enhanced learning, active learning, and out of school experiences	<i>I'm a big fan of the autonomous learner model where students can kind of embark on their own because then you develop the intrinsic motivation. So I'd like to see a four year package where a student develops his or her own curriculum, puts together his or her own material, sets their own objectives, etc., and just does it on their own. I think that's very possible. - Teacher</i>	C
	Develop proactive reciprocal relationships between tribal leadership and administrators to advocate for students and families	<i>We need to change that relationship between the school and the chapters. Why don't we take our problems - the gang problem - to the chapter?</i> <i>Maybe they can meet us half-way and try to solve that, instead of trying to, you know, fiddle with it within the school only. – Teacher</i>	D, F, G, H, K

Among participants from the youth, teachers and community, there were commonalities among the districts as well. The following sections highlight the various perspectives.

Youth

Students many times expressed their desire to be challenged, to engage in experientially based education, to be treated with respect, and to have some decision-making authority in their schools. Students knew when they were receiving “good teaching” and could describe what was working in their classrooms; what we would call best practices. Others felt their education was inadequate, replete with worksheets and textbook assignments where they worked in isolation. When we asked one group of students how their teachers may have included Native life experiences, language, or cultural knowledge in their courses, one student said,

Well we don't really do much here at this high school. We don't go on field trips or... so it's kind of hard to answer something like that. I mean half of the stuff that I do here in school I don't really enjoy.

Her statement was indicative of other students who desire more hands-on learning from teachers who care about them and who understand their daily lives. Some examples students described where they felt engaged and respected were:

- ◇ when the teachers created hands-on, experiential learning opportunities, such as taking students to a nearby river to test water quality,
- ◇ when they worked in groups or on group projects,
- ◇ when the teacher attended community functions like the local fair where the teacher was in the minority,
- ◇ when teachers recognized their clan-based relationships with the students, and
- ◇ when teachers related material to their community and its relevancy to the larger world.

One student expressed this last example well in terms of how school can limit students' potential and should be connected to larger community and world issues. He said,

It's like a different world for me here. It's like school world. It's like your mind's more covered, concealed at school. You're worried about letters and alphabets. But when you're out there, you're worrying about the whole thing. Not only from A to F, your alphabet, but you're looking for A to Z out there.

Teachers

Our teacher participants shared mixed perspectives about the inclusion and value of Native languages and cultural knowledge and experiences, and in effect, becoming a culturally responsive educator. At one end, several teachers remarked on the importance of getting to know their students, of connecting home life and cultural identity to learning in their classrooms, and to connecting Native community values (such as respect and contribution to community) to school-based values. If they engaged in these teaching strategies, they learned how to make those connections on their own based on individual experiences with their students. Little to no professional development was offered to help teachers become culturally responsive and inclusive.

If there was support, it was organized by fellow teachers. One Native teacher described her attempt to educate the non-Native teachers at the school about the community by creating a cultural immersion experience. She led a group of teachers on hiking trips in the community surrounding the school (her home community) and taught them about significant historical and contemporary sites. She created this event in order to broaden the cultural knowledge and competence of teachers in her community. When describing the need for teachers to learn about the home and community life of their students, she said she made that commitment when learning about the dominant society, so she argued that teachers should make that commitment to learn the Native history and life ways of the community. She said,

I think for the longest time, I've lived in the western white world. That's what these teachers need to do. They need to take classes in [Native] history, language, and culture. A lot of these teachers come in from [omitted] in the morning and then are out the door after school. Only a handful of teachers put in the extra effort. You can't get to these kids in that method.

She went on to explain that taking this interest in students' communities and backgrounds needs to be initiated by teachers and staff themselves; she cannot force them to become culturally knowledgeable and competent if they are not interested in it.

In speaking to this issue of how to effectively engage Native students, some teachers voiced their view that Native students are like students everywhere and that they desire similar educational experiences, like feeling respected and comfortable in school. One teacher described it this way:

I've taught in all sorts of different schools, every race and you know from poor schools to schools that had plenty of funds and everything else and what it boils down to is kids are basically the same. You know what they need and everything seems to be basically the same. The kids are no different here...they have a lot more problems that they have to deal with but the way you approach them is basically the same for me. I believe in treating the kids with mutual respect and making it a positive learning environment and that's, that's what seems to work. It's no different here than I taught in Florida, I taught in Texas. I've taught in Colorado.

There's no difference across the board between what the kids want. They, they wanna feel comfortable in the place that they're learning and they're more open to learning when it's that way.

Only a few teachers expressed commitment and pedagogical approaches as being important. For example, a teacher expressed the importance of teachers making a commitment to remain in the community and the need for students to understand that the teachers are there to support them. He said,

There are so many people coming and going and the [teacher] turnover rate is high...when the students recognize that you're here, that you're staying here and you're not going anywhere, and then they start to really accept you, you know, even though you are bilagaana [a white person], they've come to accept me as part of their life because I've been here through their whole high school career. Some of these kids that go to school here came from the mid school I worked at so I've known them for like six and seven years. And I've been a part of their life and part of their education...when they've really discovered that hey, this guy's not going anywhere. He's gonna be here for us. So I think that's an important part is not only recruiting good teachers, but putting a plan in place to retain good teachers.

One Native administrator discussed the importance of familial and clan-based relationships as an effective way to connect to her students and their families, earn their respect, and influence her students' attitudes and behavior when praising or disciplining them. When speaking about her relationship with her Native students, she said,

I didn't have to try hard to get their attention, because they already knew that somewhere down the line our grammas and grandpas probably crossed paths. We all shopped certain places. We all were very familiar with foods. So you could joke that. It just became real.... I never tell them that I understand completely where they're coming from, or I can never say that I know what many of their backgrounds are, but for the most part we all have the clans. We all have our origins... I do bring up a lot of, like, "Would you have done this to Grandmother? Would you have said what you said to your grandma?" and many of them will shut up right then. They won't say nothing. They'll actually have a respect at that point. If maybe they've been mouthing off to you and you say that, then they just immediately – they stop.

Some teachers also recognize that to effectively engage their students and become culturally responsive, they must appreciate the Indigenous knowledge systems the students represent. Similarly, they believe that to engage their students requires understanding their backgrounds and using that lived experience as a basis for further learning about the world. One non-Native teacher expressed it like this:

I really think that that law [NCLB] ignores what communities have been doing for so long – sometimes hundreds of years – to promote not just academic learning but a more a holistic education of the individual. And I also see – at my school specifically – it's mostly White teachers and I just think that it would be a really good thing to have the students have more Native teachers that can be an example to them of, you know, what they can do, where they can go...So in terms of promoting and fostering cultural learning, I think the best way that I found to do that is number one, be really humble about the things that I don't know so that they can teach me. And then use that as a jumping off point for exposing them to other cultures and other ideas. Because I do think it's important to start with what you're familiar with and then go somewhere else from that. And so they can learn about the Harlem Renaissance and oppressed people everywhere, be it by race or social economics. And sympathize because they have a starting point within their own experiences.

On the other hand, many teachers were unsure how to incorporate Indigenous knowledge and their Native students' lived experiences into school. For some teachers, they questioned whether Indigenous knowledge is a valid form of knowledge. This attitude was consistent with historically pervasive ideologies of cultural assimilation. Their discomfort also reflected the pressure they feel to focus on state standards for testing purposes, which often do not have a place for Indigenous knowledge despite the NM IEA's purpose to include it in schools. In fact, most were unaware of the New Mexico Indian Education Act. One teacher said,

I think they're aware of it, but because it's not in their face and NCLB and AYP is, it gets the backseat.

Finally, there may be direct opposition to becoming a culturally responsive teacher among educators who maintain stereotypical and racist beliefs about their students. One Native teacher, who was raised in a nearby community, has earned a Ph.D. degree, and is a strong role model for her students, recognized the disrespect of some fellow teachers and expressed how it was often directed at her through stereotypical beliefs imposed on her and her students. She expressed her own dedication to teaching Native students by holding high expectations of her students such as by talking to them about completing college and helping them expand their options for their future. But she confronts stereotypes against Native peoples. She said,

I get really tired of teachers who just tell us, 'Well, they're lazy.' They're not lazy. I came from this. I am not a lazy person...I don't tolerate disrespect – not among my students, and not among my peers. And my kids know that. They know that it's not tolerated, not among yourselves, and not to me, because I don't do that to you. You are here. I'm here to do a job. I will do that job. I will do it well because I do know how to teach.

Community Members

Community members generally expressed the importance of hiring teachers that believe all children can learn and are genuinely interested in teaching Native children.

And to have the kind of teachers who are really interested in our children. It's unfortunate that some of our teachers don't belong in a classroom [Parent 1]. And some we've gotten that are superb, and we lose them, and it's heartbreaking [Parent 2]. Yeah, ones that we lose to another district because they're being challenged by the administration. And so, as a result, they move on [parent 1].

Parents also expressed a desire for true collaboration with school administrators and teachers:

There needs to be that equal partnership that I think, in—I feel with the communities in the school system. There needs to be that shared responsibility

Community members' perspectives were in general agreement about the importance of acknowledging, valuing, and including students' heritage into the curriculum and atmosphere at the school. At the same time, community members wanted their children to be prepared to enter college and with abilities to succeed in the larger dominant society. While some community members may have felt these goals were at odds, most did not and felt if their children learned their Native language, their history, and were challenged with high expectations, they would be grounded in a cultural identity that was reinforced at school. This takes a school and staff that cares about its students. Caring relationships was important for all of our participants, but community members especially want to see their children treated with respect and interest in their personal growth. For example, when asked what kind of teachers she would like to see, one parent said,

I'd say teachers who see my children as human beings not as a paycheck.

Most importantly, community members want their students to be educated to become contributing members of their home communities. Their education should serve the purpose of bringing positive change back to their Native communities and families. One community member stated this eloquently:

The day might come when everything is so contaminated with the air, the water, the land, that they'll come to the Pueblo and tell us, 'You know what? You guys— sorry to tell you this—but your land is condemned and if all 3,000 of you decide to stay here, you're on your own!' And so my question is, 'Where do we all go—a group of 3,000 of us—to go live where we can still live and we know who our neighbor is and we know who lives behind us, in front of us, or in back of us? Where [can] we all live together where we can still speak Tewa, where we can still be uncle and aunt; that we're not living, like, in Albuquerque or in Minneapolis where we don't know who the neighbors are across the street?!' We'll have no idea about language, songs, dances, culture, nothing. It's just erased. I want our children to be totally reaching their potential but also hanging onto who they are because I think that's important; not only for our survival but I think that it's the survival of the whole world. That's just the way I see things—that's what I would like for 2025.

Schools With Student Bodies That Come From Specific Tribes (findings)

CENTRAL CONSOLIDATED SCHOOL DISTRICT

Methodology

This section summarizes findings from the Central Consolidated School District (CCSD). Drs. Mary Jiron Belgarde and Tiffany S. Lee, the Co-Principal investigators (PI's) of Central Consolidated School District. . Student research assistants included Leola Tsinnajinnie and Neomi Gilmore. The research approach entailed adhering to the tribal community protocols, including the Navajo Tribal Institutional Research Board, the Central Consolidated School District School Board, and the Indian Education Committee.

Focus groups and/or interviews were conducted at three high schools (Kirtland Central, Newcomb and Shiprock) with separate groups of students, teachers, and community members. The focus groups and interviews typically lasted from 30 to 60 minutes during January through February, 2009. Participants volunteered to take part at the request of the IESG, a school or community liaison, or the principal of each school. Most participants were randomly selected among willing participants. In all, 8 student focus groups involving 41 students, interviews with 19 teachers, and 1 Community Focus Group involving 10-12 individual's representing various chapter houses were completed.

District Profile

The Central Consolidated School District (CCSD) is New Mexico's 11th largest school district, in terms of area, and covers about 3,000 square miles in the Four Corners Region. It serves 7,000 students in the communities of Kirtland, Ojo Amarillo, Newcomb, Naschitti and Shiprock, New Mexico. Most of the students (6,716 or 89%) in the District are Diné, 9% are Anglo, and 2% are Hispanic.⁸ Twelve of sixteen of the CCSD schools are anchored within the northeastern section of the Navajo Nation.⁹

The New Mexico Public Education Department website reported that of the 507 teachers in the district in 2008-2009, 72.8% have a Bachelor's Degree, 27% have a Master's degree or higher, and .07% of core academic classes are not taught by highly qualified teachers. Of the 60 teachers at Kirtland Central High, 76.7 having a Bachelor's Degree, 23.3 % have a Master's degree or higher; of the 31 teachers at Newcomb High, High, 77.4 having a Bachelor's Degree, 22.6 % have a Master's degree or higher; and of the 53 teachers at Shiprock High, 73.6 have a Bachelor's degree and 24.5 have a master's degree.¹⁰

The school district's motto is,

Weaving Ancient Wisdom and Modern Knowledge.

Their vision statement states,

⁸ <http://www.centralconsolidatedschooldistrict.org>

⁹ <http://www.centralconsolidatedschooldistrict.org>; Special Back To School Guide, August 2008

¹⁰ <http://www.ped.state.nm.us/AssessmentAccountability/AcademicGrowth/districtReportCards/2007-2008/CENTRAL.pdf>

A school district that works with its communities to promote student excellence while honoring local traditions and values.

Their mission statement is,

To offer effective instructional services and programs that makes appropriate use of the area's cultural resources and provide students with global options for the future.

The District Goals for 2008-2009 were to:

Increase the percentage of students scoring proficient in READING grades 3-8 and 11 from 44% to 60% in and by the use of technology; Increase the percentage of students scoring proficient in MATH grades 3-8 and 11 from 30% to 39% in and by the use of technology; Build COLLABORATIVE RELATIONSHIPS between schools and communities as assessed by the Quality of Education Survey; and Develop and implement interventions to improve the HEALTH, SAFETY & WELFARE of CCSD students and staff as indicated by 100% implementation of the District Wellness Policy.¹¹

Community Profile

The three communities included in this study from Central Consolidated School District were Newcomb, Shiprock, and Kirtland. Newcomb and Shiprock are located on the Navajo Nation, and Kirtland borders the Navajo Nation. They are farming and agricultural communities, and each school serves a majority of Navajo students.

The communities differ in a variety of ways. Newcomb community is the smallest of the three communities with about 500 people (www.city-data.com/city/Newcomb-New-Mexico.html). A few smaller Navajo communities that are adjacent to Newcomb are each served by Newcomb High School. Located about sixty miles from Gallup and sixty miles from Farmington, many families commute each day outside of Newcomb for employment. Similarly, much of the school staff commutes into Newcomb during the school day and leaves at the end of the day. Many also live on the school's campus in teacher housing. The school and a few tribal offices and local businesses provide employment. Other community members have subsistence lifestyles with farming and livestock as their source of livelihood.

Shiprock has a population of approximately 8,000.¹² Shiprock is named for a nearby rock formation and is important in Navajo origin stories, particularly with the twin warriors. People in Shiprock work for the locally based tribal government offices, local businesses, or commute about 30 miles to Farmington. It is a key road junction for business and tourist traffic traveling through the four corners area.

Kirtland is the closest of the three schools to Farmington, and being off the reservation, has a significant non-Navajo population (50%). Kirtland was settled by Latter Day Saints in the late 1800s. Several smaller Navajo communities surround Kirtland and are served by the high school in Kirtland. Approximately 6,000 people live in Kirtland, and many have established farms and participate in agricultural industry.¹³

All three communities are surrounded by several coal-fired power plants. These plants provide employment but also affect environmental and air quality for the surrounding communities.

¹¹ <http://www.centralconsolidatedschooldistrict.org>

¹² en.wikipedia.org/wiki/List_of_settlements_in_New_Mexico_by_population

¹³ en.wikipedia.org/wiki/Kirtland,_New_Mexico

BEST PRACTICES

Educated Native American Person

Best practices of “successful students” include making commitments and completing responsibilities to their families and communities. They also demonstrated “survival” knowledge as well as academic knowledge by describing ways they handle challenges in life and with their families. For example, the following student explained how he sacrificed his after-school activities to help his family:

I was joining basketball but my mom, I noticed that my mom was in debt financially so I quit basketball and I got myself a job after school, a janitor. And whatever money I get, I just gave it to her because she needed help. And I got my family out of debt too.

Students and community members expressed that it is important for students to gain cultural knowledge for strengthening their Native identity and self-confidence. Teachers discussed the importance of developing students’ intrinsic motivation and goal orientation. Students also desire longer class periods to allow them time to discuss and ask questions of their teachers in all subject areas. The students demonstrated their ideas of being successful when they could master Navajo language. They also desire careers in computers, art, music, law, and medicine. This student conveyed the encouragement and support she receives from her mother:

My mom's always telling me that I can go to college and everything and I do want to go to college. I want to be a family physician and like I get in trouble a lot if I get a B.

Finally, the teacher cited below commended her students for their abilities to focus and work, but the school schedule was not conducive to learning. She explained the schedule should be modified in order to prepare students for post secondary education (including tribal colleges, community colleges, and universities) and employment opportunities:

All of the kids in my classes, they work, but our classes are only, what, this year, 47 minutes. And they will work. They will get things done, but that's just not enough to be competitive with other schools nationwide.

Language

Learning Native languages was another key area. Students and community members expressed that learning their Native language was very important. Many students said that Navajo language courses are very popular, even though some students may seem apathetic or do not express their value for Navajo language and culture while in school. Despite these complex issues around language and identity for students, they desire to learn and speak Navajo. One student said,

If I could speak Navajo, I'd definitely speak it 24/7!

demonstrating her aspirations for knowing her language.

In terms of how Navajo language is taught, most participants placed more value on oral communication skills. While they felt reading and writing was important, they felt the emphasis should be placed on speaking the language. In envisioning an effective Navajo language course, one teacher said,

If there was a Navajo language class it would be on how to converse, and then going out and doing studies, field studies like that so they could practice, rather than just reading and writing.

This is not to say that reading and writing Navajo is not important nor valued by students. Some students discussed how their teacher effectively combined reading and writing with learning oral skills, and that her methods helped these students to make those important distinctions in Navajo language’s complex verb and phrase systems. Additionally, effective teaching included a supportive environment. Many students were discouraged to learn when they felt scolded or harshly disciplined by their teachers. Their

comments reveal the importance of effective and supportive teaching environments for a difficult language that is closely tied to students' personal identities and self-esteem.

Curriculum

The participants felt the type of curriculum that was most meaningful for Native students included content that related to their lives historically, socially, and culturally. Students in particular desired to have some role in those decisions about the content they learn. They also find it most meaningful if the curriculum they learn allows them to connect it to their lives in reflective and creative ways. Speaking about his interest in drawing creative pictures one male student said,

I like that class because there's no boundaries.

He was referring to a drafting class and its curriculum, which allowed him to apply his creative skills and learn all he can with no limits in expressing his creativity.

Another student expressed the importance of learning about important events related to Navajo people. Her message was that it is important to learn about all of history and to understand how many important events happened simultaneously. She said,

When you study the war, the Civil War, they'll mostly put the main focus on that. However, not very many people know that at the exact same time, during those years, towards the end of the war, was when the long walk was happening on this side and people freak out when they find that out.

Similarly, one teacher felt best practices in curriculum would include Navajo cultural knowledge in different courses. She suggested integrating math, drafting, and Navajo stories about the sky, the stars, and their alignment.

Pedagogy

Another key area discussed by participants was pedagogy, or the way teachers teach. Students were very clear about their beliefs that they enjoy hands-on, activity oriented learning best. Some students talked about enjoying courses that take them out of class like science to do experiments, or that keep them active like physical education or home economics. They also appreciate being challenged and opportunities to voice their opinions and share their experiences. This is also known as experiential learning. One student expressed this well when she said,

Our teacher has this thing called 'Syncretic Seminar.' We sit in a big circle so everybody can see each other and like, I guess, symbolize that we're all equal and we have something to say, and she'll give us a topic and we have to - kinda like this, and we just talk about it and about our opinions and everything.

She appreciates that the teacher provides time for and values students' opinions.

Experiential methods in teaching also means drawing upon the knowledge and experiences that students bring with them to class. One teacher felt it was a best practice to build on students' prior knowledge base. Her students came from a farming community, and she utilized their knowledge of farming to connect to her course material. She said,

...there's a farming culture, and agriculture culture, and so it's the kind of thing where I try to include as much as they know because I try to build on...prior knowledge.

Another teacher used experiential methods by connecting her students to their own family histories. This gave students research and writing skills and allowed them to connect to their community in personal ways. She described it like this,

I tell them to interview their parent, or their grandparent - more than likely their grandparent - about their experiences in the boarding school. What are their stories?

These methods make learning content relevant to students' lives and keep students' interested in the content of the course.

Accountability

Issues in accountability were another key area addressed by participants. We asked participants about how students, teachers, administrators, and the school institution should be best accountable to students' education. The teachers had an important suggestion for improving teaching practices and thus enhancing accountability. They felt professional development in the cultural, historical, and social environment of the communities in which they work was vital for teachers and administrators who were not from the area. Teachers also felt federal policies like No Child Left Behind constrained their creativity, and they desired the inclusion of alternative assessments, such as portfolios of student work and progress. Accountability should allow portfolio and other forms of authentic assessment and encourage teachers to use their own personal and professional expertise. For example, one teacher described how she explained accountability to her students:

So my concept was like a rock band and when you're a 90 percent or above, you're a "rock star." And when you're 0 to 49, you're "with the band." 50 to 59, you're a "garage band." You know, like progressing up and them having stickers where they place it themselves. And just creating a culture of like we're all in this together and everybody has different strengths and weaknesses but we still can improve.

Best practices in accountability that teachers discussed also included making extra time to work with students individually. One teacher said, "I'm giving up my prep hour to pull in students." Another teacher, who is also an administrator, noted that this type of commitment can lead to burn-out because teachers do not have enough support and time. She said another important component to accountability is finding ways to support teachers and to continue to motivate them. She said,

There are just some very dynamic teachers, and sometimes there are young teachers, but they will tend to lose that enthusiasm. So it's really trying to continue to motivate teachers to want to become better.

One way to support teachers is to strengthen the connection to the community, and there should be shared responsibility. The community can be a source of support for the school as suggested by one teacher who said,

We need to change that relationship between the school and the chapters. Why don't we take our problems - the gang problem to the chapter? Maybe they can meet us half-way and try to solve that, instead of trying to, you know, fiddle with it within the school only.

School Climate, Environment and Place

The findings from students, teachers, and community members show some positive "school climate" attributes at CCSD although there is some expressed need for improvement. Many of the students feel comfortable in school with their peers and find that some sports activities help to unify them. Many of the participants desire to have a welcoming, respectful environment for students and their families. They want to receive respect from the teachers and administrators and to have visual representations that reflect their Diné heritage and identity in schools. For example, one student said,

I like the idea of coming into the school and seeing a lot of things that have to do with who I am.

The participants also said that it was important for the students to have caring teachers and role models. Few of the participants indicated that they had some concerns about being disrespected and receiving little recognition of culture, language and family. One teacher said,

I get really tired of teachers who just tell us, "Well, they're lazy." They're not lazy. I came from this. I am not a lazy person... Wait a minute. You just made a generalization, and yes, that is me... I don't tolerate disrespect - not among my students, and not among my peers.

Finally, most participants acknowledge that many parents are working and live geographically far-away from the CCSD schools. However, they would like to see genuine respect for parental involvement in school.

Vision

The participants also mentioned their desires for Navajo history, cultural perspectives, and artistic representations to be included in the schools. Some desire experiential education, such as field trips and application of academic knowledge to real life experiences. They also want more technology integrated into the curriculum. Many students expressed the need for longer class time, such as through a block schedule. They also desire an expanded curriculum with more course choices and flexible schedules like college students. Other ideas for their vision of education included: quality food; ways to empower parents to become actively involved in their education; expanded extracurricular opportunities; teacher action research; and, role modeling by Native teachers and leaders. This teacher acknowledged how locally-based knowledge and the hiring of more Native teachers can contribute toward positive student learning, school-climate, and role modeling:

That (NCLB) law ignores what communities have been doing for so long – sometimes hundreds of years – to promote not just academic learning but a more a holistic education of the individual. And I also see – at my school specifically – it’s mostly White teachers and I just think that it would be a really good thing to have the students have more Native teachers that can be an example to them of, you know, what they can do, where they can go.

Participants desire to bring together all of the elements conveyed in curriculum, teaching (pedagogy), language, culture, accountability, school climate, successful student, and relationship areas. Respect for language and culture as well as their personal and family life appears to be paramount and significant. Students and teachers desire to be respected and productive members of society.

Relationships

One unexpected pattern that the study revealed was that of “Relationships.” For example, students benefit from educators who believe in them and have high expectations of them. They described the importance of relationships with teachers who are committed to their community and who recognize their home culture such as their family situations and clan relationships. This teacher discussed the importance of relating to students

I also think if you want to be successful wherever you are you’ve got to be able to relate to your students. So whether it’s on a reservation or in the inner city, you’ve got to develop an understanding and empathy of where they come from or you’re not going to reach them.

Another teacher revealed his perception of how important it is to convey to students that teachers demonstrate their commitment to remain in the community.

...when the students recognize that you’re here, that you’re staying here and you’re not going anywhere, and then they start to really accept you, you know, even though Bilagáana [Anglos], they’ve come to accept me as part of their life because I’ve been here through their whole high school career.

OPPORTUNITIES FOR IMPROVEMENT

This section will describe some of the concerns our participants raised in each key area.

Educated Native American Person

Student and teacher participants are concerned about students being prepared for the future. They desire to be grounded in positive self-concepts inclusive of their Navajo/Diné culture and knowledgeable about the world outside of the four-corner’s region. Student and teacher participants desire expanded curricula

and in-depth learning opportunities whereby they have time to ask questions and receive meaningful answers during class-time.

Language

Concerns about learning Navajo language were more diverse and broad. Participants shared that it is difficult to learn Navajo if the school climate does not respect or care about Navajo students' heritage. Some students expressed that they are uncomfortable speaking Navajo in school because of a climate of intolerance and for fear of being teased. If the school place expressed more interest in students' Navajo heritage and highlighted Navajo language and culture in school events, celebrations, and overall curriculum, there would be more support and interest among students to learn their language and growth in student confidence and self-esteem.

Curriculum

Students indicated that they did not learn or retain much by working solely on textbook exercises and using worksheets.

Pedagogy

Passive teaching methods that relied heavily on lecturing did not work well. Lecturing to the class was not engaging and only served to isolate students individually within a classroom.

Accountability

Participants felt there was an over-emphasis on testing for defining the school's progress. Because the standards-based tests are high stakes and label a school as making adequately yearly progress or not, there was less value on assessing students through other methods. Instead, high stakes testing encouraged teaching to the test and limits opportunities for experiential learning in socially and culturally relevant ways. Additionally, one teacher stated that the tests are geographically biased, meaning they are developed without consideration of the unique characteristics and experiences of the Central Consolidated School District's communities. The issue was not to omit standards-based testing altogether, but instead, to be inclusive of multiple methods of assessment that have equal weight in classifying a school as making progress or not.

School Climate, Environment and Place

Student and teacher participants indicated that they had some concerns about being disrespected and receiving little recognition of culture, language and family. They would like for the School District to find meaningful ways to include parents and extended family members and to mitigate against (intervene against) any negative stereotypes that exist about the Diné people and the communities where they reside. Students discussed their desire for improving the aesthetic quality of their schools, such as displaying student art in the halls or integrating more plant life throughout the schools. Many teachers commute to and from the schools because they live in larger urban towns. Consequently, teachers have less time to experience the communities of their students.

Vision

The school district motto, vision and mission statements appear to be in concert with the findings gathered from the study participants. The school district motto,

Weaving Ancient Wisdom and Modern Knowledge,

implies that the school district will work with its communities to promote student excellence while honoring local traditions and values. Similarly, the mission statement,

To offer effective instructional services and programs that makes appropriate use of the area's cultural resources and provide students with global options for the future,

was not clearly evident as based on our participants' perspectives, particularly with respect to the intended collaboration with communities and integration of cultural resources and knowledge.

POLICY RECOMMENDATIONS

An observation that was made during the visits to the schools and communities was the high rate of turnover among administrators and teachers. For example, two the principals that we worked with during our initial visits were gone nine months later. Several teachers we intended to follow up with were also gone. The turnover presents another area to investigate for the underlying conditions and possible patterns related to this turnover. A thorough examination for understanding the issues behind turnovers will allow the district to respond and effectively intervene with prevention measures to reduce this rate.

- ◇ Teaching methods in any content area should include hands-on activities, group work, and other experiential opportunities.
- ◇ Teachers, administrators, and other school staff should be offered professional development opportunities to improve their knowledge and appreciation for the local community's historical, cultural, and social context. Offer bi-annual district-wide professional development activities that share knowledge about the Navajo/Diné language, culture, and community.
- ◇ Curriculum should be relevant to students' lives in multiple ways.
- ◇ Native languages should continue to be offered and supported. Language and culture should be included in all content areas; and they should be valued and respected in the overall school climate.
- ◇ Find alternative incentives to retain and reward good teachers.
- ◇ Share best practice information to all teachers and school-related staff members. Allow successful students and teachers to "Tell Their Story" to everyone in the district.
- ◇ Continue to encourage Navajo/Diné participation on the District School Board and the Indian Education Committee.
- ◇ Participate in regional, tribal, and state colleges and universities to recruit and train Navajo/Diné teachers.
- ◇ Examine the teacher and administrative staff turnover rates to determine effective prevention measures.
- ◇ Implement the district vision and mission for collaboration with communities and inclusion of cultural resources and knowledge in transparent and comprehensive ways.

DULCE PUBLIC SCHOOL DISTRICT

Methodology

Dr. Carlotta (Penny) Bird was the primary researcher for this District. She was assisted by Dr. Beverly Singer, with student, Neomi Gilmore. The initial approach to the Dulce Independent School District (DIS) was by a letter sent from the lead investigator, Dr. Ted Jojola, to the district's superintendent explaining the nature and purpose of the study. The letter also requested permission for conducting the study and described the focus groups that would be conducted with students, teachers and parents. Dr. Bird followed up by phone call to the Superintendent. The superintendent presented the study to his administrators and advised them about the benefits of participating as he was in full support of the study. In an initial meeting between Dr. Bird and the DIS administration, she received permission to conduct the study. The superintendent assigned the Dulce High School (DHS) principal to be the district's contact for the study group. She in turn delegated the DHS school counselor as the IESG contact person to coordinate the study with the schools. The counselor worked with Dr. Bird to establish the initial protocol for conducting the study, organizing focus groups, identifying potential participants (students, teachers and community), and obtaining parental permissions for students (parental consent).

Because of the distance and time to travel to Dulce, the intent was to hold all three focus groups on the same day. However, only the student and teacher focus groups were conducted on the same day. These were facilitated by Dr. Bird and Dr. Singer with student assistant Neomi Gilmore at Dulce High School. The student focus group occurred in the morning, as they were to be dismissed at mid-day. The counselor had asked for volunteers so a good mix of eight students was present. Additional students indicated interest in participating but they did not have signed permission from their parents. The teacher focus group was conducted in the afternoon during a regular scheduled in-service day. The community focus group required more coordination so the research team returned almost at a year later on March 11, 2009. Each focus group was 2.0 hours in length. The participants included 8 high school students (6 females, 2 males), 6 teachers (5 female and 1 male), and 6 community members (5 female, 1 male). All the student participants were members of the Jicarilla Apache Nation (Tribe).

Dr. Bird completed the initial coding of the data from the DIS followed by Dr. Singer, and a third reviewer (another PI) compared the first level of coding to the transcripts to determine levels of - congruence.

District Profile

The DISD consists of Dulce Elementary, Dulce Middle and Dulce High schools. The district is located on the Jicarilla Apache Reservation and serves 733 students during the first year of the study. Of these, 675 (92.1%) students were American Indian, most of which were Jicarilla Apache. There were also a few Navajo children who are enrolled in the District through a residency dormitory placement from the Bureau of Indian Education. There are also a few other tribes represented by children of parents who work for the schools, tribe or public health. 99.6% of the students qualified for the free and reduced lunch program and 36% were designated as English Language Learners. The district reported 45.9% of its students as "habitually truant" during the 2007-2008 school year. The attendance rate for the elementary school was 89.6% and 92.6% at the middle school during the same reporting period. All three schools in the district had not made AYP for the 07-08 SY.

The Dulce School Board consists of 5 members; and at the time of the study they were all Native American. In May 2009, another Superintendent replaced the one who was in place at the time of the study. During the year of the study, approximately 70% of the teaching staff was considered Highly Qualified, meaning they had appropriate licensure for the classes they taught. With a total of 49 teachers district wide, 65.3% had Bachelor's degrees, and 34.7% had Masters or higher degrees.

Their vision statement states that,

Dulce graduates will be self-directed, capable, responsible, life-long learners who maintain their cultural identities and creative individualism.

Their mission aligns with the vision and states that

Our school district will educate, nurture, and strengthen our children to be productive, contributing members of society.

Community profile.

Dulce, New Mexico is located on the Jicarilla Apache Reservation in north central New Mexico on the eastern edge of the San Juan Basin. The Colorado state line six miles to the north, and the 879,854-acre reservation ranges from 6,500 to 11,400 feet in elevation in the Rocky Mountain Range. It is the second largest reservation in New Mexico and the 22nd largest Indian reservation in the United States.

People of the Jicarilla Apache Nation speak a Southern Athabaskan language. The meaning of “Jicarilla” is from Mexican Spanish and is interpreted as “little basket.” Historically, their territory spanned across New Mexico, southern Colorado and western Oklahoma. Their ancestral lifestyle was based on hunting a wide variety of game, gathering plants for food and medicine, and to a lesser degree raising corn and other crops. After their traditional homelands were reduced to an Indian reservation, they adapted their lifeways to cattle and sheep ranching, forest and range management, and then to work with the oil and gas industry when these resources were discovered on the reservation. A historic railroad once cut through their territory and afforded them passage into southern Colorado.

The 2000 US Census population for the Jicarilla Apache Nation was 2,627. Its capital is Dulce, where 95 percent of the reservation's population resides. The town of Dulce is located 4 hours from Albuquerque and one hour from Farmington. Most tribal offices are located in Dulce. The tribe owns the Apache Nugget Casino, located on the reservation, north of Cuba, New Mexico and the Best Western Jicarilla Inn and Casino, located in Dulce. In addition to these two casinos, the tribe gains a major part of its economy from oil and gas extraction. The income derived from these two industries contributes to the allotments that are distributed to tribal members throughout the year on a regular schedule.

BEST PRACTICES

Educated Native American Person (Student Success)

The students at DHS expressed their own individualistic endeavors as an important aspect of learning and achieving success in the school system. They attributed much of this to being resourceful and taking initiative for their own learning. They took responsibility for the resulting outcomes of their presence in school and the leadership positions that could be earned, and then making decisions about how best to exhibit their knowledge. The following student comments exemplify the spirit of what was shared.

It's basically the person's own initiative to get their own education, to be involved.

Like if you're leader leaders of [a] project that you are doing, they'll ask you.

They'll give you options and what you wanna' do. Like you can give a report, or you can build something out of it to describe it; you can do a poster or a power point or something like that.

I didn't come to school for like the first month, like 4 months of school and I finally came back in January.

According to respected Jicarilla historian Dr. Veronica Tiller (1992), traditionally, “the Jicarilla shared a common culture, but not an overall formal political organization. The independent and autonomous political units [bands or families] had leaders, influential persons who acquired their positions through skill and wisdom.” It seems the spirit of this kind of independence is being exemplified in the students perceptions.

Teachers cited examples of student's patience, listening skills and creativity. They want the students to think critically about their world.

I could sit in the classroom and talk the whole time and nobody'll say a word if I don't ask. I think a lot of my students have learned a lot of patience. I notice that when we have guest speaker or elders, [they] just [are] used to sitting and listening and not interrupting.

I'm beginning the conversation with some second graders and it ended up being they started really using their imaginations.

I teach current events and contemporary issues. I tell them, "You can take notes and you can use those notes on the quiz." Only a couple of kids actually take advantage of that which I think is funny!

How to persevere, how to remain true to themselves in the midst of a crowd, how to know, keep curiosity that they did as children.

Among the parents school programs and supplemental support for their children were important for student success. They spoke about their expectations and the life skills that would be important to their children when they left Dulce for post-secondary education and be grounded in their own identity. They also encouraged their children to persevere, to become leaders by using what they learned to help others and to be adaptable to what the future brings.

They have a GEAR UP program that will follow them if they begin when they were seventh graders—all through high school—and will pay for their four year college if they're willing to take it that far.

You have to have a college education to get a good job.

I'd say adaptability.

Learned to balance both worlds.

Ability to transcend maybe everything that's happened to them up to that point.

Proud of who they've been made to be...no matter what their tribe is. They're able to speak their language and not be scared.

You're willing to learn and use what you learn to teach others. Be a positive leader.

Do the best you can. That's all you can do. Yes, just be who you are.

You just continue on. I won't worry because it'll happen anyway. My kids learn to deal with it and their kids and so forth. They just learn to do it just like we did.

Something new comes up, we just go with it.

Language

Students talked about Apache language classes as part of their vision for the schools.

There's more I think that everybody would like to learn about their history and stuff. First of all our language..."

Teachers described the Jicarilla Apache program at the elementary school.

[At] Elementary there's a pull-out. It's the kids going twice a week. It's taught by three Jicarilla women that live in the community. They're teaching the Jicarilla language and culture. But a lot of times, it seems like with this past year, a lot [of] times they cancel. They can't come in.

Parents and community members also described the elementary Jicarilla language program, thought that more people could understand the language but didn't speak it, and also included it as a part of their vision for the future in their schools.

We just started in the elementary school. They had alternating weeks, two times a week, grades three and up... for 45 minutes a day.

She [child] won't speak it unless she's around her grandma and grandpa. My husband is fluent, and I tell him to teach our kids and he won't do that.

I have two co-workers that always, constantly talk it. I think they're about 45, both of them.

I'd say more people would understand it than let on. That's my assumption.

I wish they would learn their language.

A community member observed that the Jicarilla language teacher ran into "a wall" because they were taking away classroom time so the kids could be taught to the test that they're supposed to be passing. That's why it was so hard for them to get that 45 minutes each day at the elementary.

Curriculum

Students saw the mandated tests as the curriculum and the teachers being limited in teaching to the content of the tests.

They seem to like teaching to a test, 'cause we got a series of tests like every year; like in the beginning, and in the middle and then at the end. So that's how they teach.

Talking about resources such as other topics, textbooks, the students observed that in a New Mexico history class the teacher would incorporate Native American topics. However, they expressed concern with the condition of the textbooks being used.

Maps of where the tribe's land used to be and like documents stating that how the reservations came to be.

They're old [textbooks]. They're ghetto; they're written on; everything you name it.

Like they have pages missing.

Or, like the spines aren't attached to the book themselves.

Or, like the pages are list disordered...

One teacher lamented,

When I first came to Dulce, I sort of had that impression that it might be different than some of the mainstream schools I had seen; [at least] have a different textbook. [I] notic[ed] right away [that they used] the same old social studies textbook [containing] the same old lies and, you know, [the same] kind of generic things going on. Thanksgiving comes about and I thought, „Well, maybe here they'll do a little bit more Indigenous focused education. [Then] I would see down the halls in the elementary—little pilgrims, turkeys...

Parents and community members spoke about the extra resources needed to teach their children.

Since we're so isolated, they're making it possible for the kids to begin taking college courses while still in high school through distance learning.

They had more to say about what they would like to see in the curriculum in their Vision statements.

I think they need to teach the kids the truth, what really happened to the Native American culture instead of what the white non-Native wrote about it; two pages and that's it. [Instead] all they talk about is Custer's Last Stand and how Geronimo got arrested. That covers Native American history!

Pedagogy

High school students indicated they received lectures and worksheets in most of their classes but were challenged and enjoyed hands-on learning environments that required activity based assignments. Experiential hands-on-learning reinforced their confidence and skills.

Cause some of the students I've noticed, they have turned against school 'cause that's all they [the teachers] actually do is just lecture.

Sometimes in my 6th hour, we're building the Globe Theatre, a 10" scale model...It's cool.

We're assigned different positions: cutting, painting, reading the instructions.

[For World History]] I just got done with that project, World War I. Yeah, it's about my grandpa. He lives in Arizona, so I just emailed him and then he gave me a couple of pages and then sent some pictures. So I might like present it to the class, yeah.

And plus I think you learn more, especially if you have a hands-on activity; especially kids over here, 'cause I know they like to use their hands a lot instead of just sit there and listen to lectures all the time.

Teachers in the focus group talked about having open communication and personal connections with the students. They also said that being flexible in the classroom was important as well as knowing the individual strengths of their students. They found that group work benefited the students along with manipulatives.

I found that self-disclosure and being direct with Native students is very effective as a teaching tool. 'I'm open and not a wannabe' is very effective.

What helps is making a personal connection. Everybody made such a big deal when I got here about turnover and that it was important to know the students so they could know you year after year.

You've got to be caring. If you don't enjoy what you do, those kids are not going to want to be there...you learn to be flexible with that.

I'll sit them down and say 'okay you can work individually if you want to or you can work with your partner, two or three.' But giving them very specific guidelines.

...my whole thing is that basically to go in and find the things that work for each individual kid because there's always something.

I think visuals and then manipulatives for us is the key. They need to see it. They need to see how it works, why it works. Just telling them, that's not enough. They need to be shown.

I think giving them room for working together cooperatively or maybe there's a little less high stakes because I know there's a lot of my kids will stick up for each other.

Community perceptions, on the other hand, reminisced about their own hands-on education. Women spoke about how they learned to cook in home economics class and men talked about how they took shop. This prompted one parent to relate a conversation she had with a teacher who told her,

...the shop is not even really shop. It's mostly textbook right now. "Here's what we learn," and he pulls out the books and I said, "Do you teach them other things?" He goes, "Well, every once in awhile I'll take them back and make them cut a piece of wood."

It was also mentioned that they want to get students to begin thinking more critically, implying the test prep focus has limited student's thinking skills.

I think a lot of times they're afraid to think like that because they're so used to thinking there's a right and wrong answer. It's either this or it's that. I want them to argue with me. Question the things that I say.

Accountability

Students felt the impact of constant testing, and how anything else being taught was their responsibility.

The levels testing.

If you don't take notes, then you're out of luck.

They expressed dissatisfaction with the condition of materials that were supposed to assist them

...chapter copies. And then, like, sometimes the printing of it; you can't even understand it, 'cause it's like always so foggy. And then you have to go back and try figuring out what the work is. So it takes us extra time just to do some of our assignments.

For supplemental support an after-school program was mentioned by the students. Unfortunately they indicated that the technology was restricted for their use.

I think high school students mostly depend on after school program, it's called Dreams. There's a certain amount of teachers that stay after school 'til like 5:30 or 6:00 maybe at the max; but we have to get a certain amount of work done. If you missed a credit, you can go to Dreams and earn that credit.

Well right now we're kind of restricted on our research because they've blocked all the computers. We don't have access to anything. You have to have a teacher's computer to actually get access to information.

Teachers were well aware of the need for other ways of assessing student progress but finding what works was a continuing effort, and challenged by the standardized tests.

But having alternative projects like posters or just different types or ways of displaying their knowledge is a good thing. I haven't found a good way of testing yet.

I'm exploring right. But I'll get like a three word sentence. How to pull more out of them. We've been using Ace Rubrics and we've been trying all these writing styles and stuff.

I see their test when they take the NM Competency Test. They will not, and I don't want to stereotype, but generally speaking, they don't want to answer anything that that requires effort. If you want them to fill out all that circle, they'll fill in a circle. When they have to answer a question longhand and write a sentence, they won't do it. Those questions are left blank.

Maybe it's our prejudice, but see, I don't feel like we make even half the progress that I would like to see made. But I don't know how to create, to have that.

Teachers also talked about the effects of high absenteeism on student progress.

What I find is I rely on like if a kid is academically struggling, usually in my classroom and not making progress, a lot of it has to do with attendance. The tribe made it 18; that you had to stay in school until you're 18. So, I had like 17 year olds that hated school but they have to come. Now the state has made that requirement.

Parent and community comments with regard to accountability focused on the high teacher and administrator turnover. They felt that Native culture is not the priority and problems with the school are also due to the lack of parent involvement. They expressed their concerns about the drop out rate and they articulated their desire to have the school expand its curriculum in a manner that is positive, forward thinking, and advanced.

They just have one music teacher here. She's been kind of different places over the years in Dulce schools.

We don't have home ec[onomics] class anymore.

That's another thing that he told me they did away with because of the school, the way the state changed things. The Child Left Behind thing did away with shop and all that.

School Climate, Environment and Place

Students talked about the rare occasion, such as the beginning of school when tribal members would address them in the schools, and about the times the tribe's attempts to assist the students were not fully coordinated to benefit the students.

...a bunch of students will get together in the gym down here, and then they'll like talk about our backgrounds and stuff; but then that's like a the beginning of the year, and they never really show up again 'til Gojiya, which is in September."

Teachers expressed their concerns about being left to their own devices as it pertained to their classroom and their contact with parents.

It wasn't like you walked in the door and you had any kind of curriculum that was available to you. It was like you had to figure out how to make it connect to the Native American because it was—well, I walked in with no textbooks.

I remember being asked about the whole thing of parent involvement...well to me even just the question needs to be reformulated. How do we create relationships between community and school? You know it has to be a two-way street to me.

Teachers also spoke about the differing goals of the schools and the community, and how miscommunication led to conflicts.

I don't think they, like the community—at least the parents I've been meeting with, have the same goals for their kids the school has for their kids. Like, I have a lot of parents their goal is to get a diploma. It's not to learn the information. It's to get the diploma.

So there was a lot of very imposed things which I think a lot of the school would have seen [as] great. 'Could you give us a couple of weeks notice? Give us a week notice. You guys [the tribe] knew it was happening two weeks ago because you got the speakers and everybody. How did we not know?' So, it's like these two opposing forces that are pretending they're trying to get together.

Another teacher indicated that the experience of Native Americans with boarding schools and past history gives them power and the right to question the State and ask the State to respect what they believe their children's education should be.

A couple of parents expressed that there were strong relations with schools through the sports and athletic programs of the schools, and others saw a lack of partnerships between the schools and parents.

I think one of the strong points of the school is the athletic program.

From the small child to the elders, they are doing a lot of good stuff.

I've seen some grandparents change their whole schedule for all their grandkids' sports activities. But yeah, when it comes to parent-teacher, or whatever, they're just not there.

Yeah it's a problem. It's real hard to get into the school system. Yeah, you try to—they want their own resource.

It's hard for them to think outside of the box, how to get there.

Vision

Students had visions of a school that incorporated local knowledge and history so they could learn more about their community and tribe.

More background... How it started [Gojiya].

...or certain holidays we have; that would be really cool to learn about like what to respect, what not to respect.

I'd rather be out hunting and cutting wood, running and doing outdoor stuff.

Teachers shared their vision for students, parents, classes, schools and themselves.

You want everybody to succeed. You want your kids to be happy.

The ultimate goal is for a kid to, the students to be able to know how to think for themselves.

So, I think somehow you've got to get the community and the parents more concerned and more involved with their kids education...I would love to see more than 15% at parent-teacher conference.

I really would love to see smaller classes.

Non-compulsory education on the high school level directed by the community as far as the curriculum goes... People come to school because they want to come to school.

Cut out the meetings that we have to go to as teachers and let us teach and stop testing.

I could spend three weeks on this project because I don't have the time or constraints. I don't have to worry. We get more out of it.

There could be more experiential learning. I think one of the biggest problems is that kids start to see school is "school" and everything else is "life."

Community members drew upon visions that were focused on change and adaptability in a manner that retained their Native identity at one's center.

More native teachers to work with the kids.

Learning about your own culture is not extracurricular.

Their vision for the curricula in the schools was for a more enriching array of content and experiences.

...teach them that type of—even just to basically balance your checking account.

What about teaching some technical stuff? Like how to be a plumber and electrician.

Art!

Even agriculture stuff, how to plant stuff.

Ecology.

What about taking care of animals?

What about cooking?

Even performing arts. I see a lot of kids here that are very talented.

Make a center so they can learn how to do sculpture and whatever.

A curriculum that's up to par with the rest of the world.

I'd like to see Jicarilla culture being a required class here in this school.

Why don't they have AP classes, advanced prep classes?

They also envisioned schools with teachers who could commit to their students and community, and with more parents in the schools.

I'd say teachers who see my children as human beings not as a paycheck.

...decolonized teachers.

There's too many tests. Seems like these kids are constantly testing every month it seems like.

I'd like to see a lot more people volunteer their time and work with the kids.

I'd like to see students with active involved parents.

Relationships

Some students experienced limited interaction with teachers and saw their requests for assistance as being an intrusion upon the teachers.

You can ask teachers, but it kinda' takes them a while to get the research you need.

Teachers found that it takes time for the students to begin to trust them.

What helps is personal connection. Everybody made such a big deal when I got here about turnover and that it was important to know the students...I didn't understand that at all. Now, I do because it takes about a year for a high school student to start to begin to accept and trust you.

Parents and community wanted the teachers to “stay awhile.” They spoke of teachers in the past who came and made Dulce their home and became part of the community.

Keep the teachers, present people, instead of always getting new teachers. Can they stay and go on with our kids?

OPPORTUNITIES FOR IMPROVEMENT

From the preceding comments it is possible to identify some key issues that the district, community and state education agency could begin to address in a systematic, coordinated and collegial manner. The Dulce Independent School District has a remarkable and unique student body, the majority of whom are from local families with ancestral Apache cultural roots that go back centuries. Their community history speaks to the resiliency, adaptability and flexibility in surviving the challenges and opportunities that they have encountered. They still remain a people who speak their own language and practice a culture of their own.

The findings suggest the following educational approach. Native students learn best when they are challenged and provided the freedom to employ different learning styles, especially hands-on and experiential learning methods. While a few teachers spoke about the different approaches they use to include experiential learning, others could benefit from additional professional development that is offered by the district and jointly sponsored with the tribe.

Students want their culture to be valued and desire to know more about themselves as Jicarilla Apache peoples. Attendance to this task could be an invitation to engage local community historians, skilled crafts people, environmentalists and health professionals in a meaningful effort to include Apache studies in the curriculum. This effort could result in the district providing quality textbooks and the development of supplemental materials.

Teachers in the Dulce schools do their best when they are teaching and providing a learning content that integrates student interests and diverse experiences drawn from the community. This enhances life-long learning skills and achieves far more than simply passing the state/federal mandated tests.

There is a need to increase community representation in the schools. There was no mention of an Indian Education committee and the Parent Advisory Committees during the focus groups. There were some references to the Jicarilla Apache Department of Education (JADE). In this context, JADE was characterized as “attempting” to support the education of their students.

It is not clear to what extent the Tribal leadership supports its students or how they represent the voice of the community at school-wide activities. Coordination between the School Board, Tribal leadership and the district was not apparent.

Last but not least, parent involvement is vital to student success. The responsibility for developing and maintaining stronger parent involvement is a critical issue at Dulce. It directly impacts all aspects of Curriculum, Pedagogy, School Climate, Language, Successful Student, Vision and Relationships as indicated in the findings.

POLICY RECOMMENDATIONS

- ◆ Develop strategies and fund parent workshops for involvement in children’s education (K-12).
- ◆ Encourage school administrators to be proactive in the districts acceptance of Jicarilla Apache cultures, language and knowledge as a contribution to the educational environment.
- ◆ School board and administrators work with the tribe and local tribal education leaders and parents to reintroduce culture, knowledge and history into the curriculum.
- ◆ Develop teacher/staff/parent action teams to assist students that are failing because of absenteeism, low grades, domestic violence, alcohol or substance abuse.
- ◆ Give teachers opportunities to learn, encourage innovation and use different methods of teaching over a variety of subjects.
- ◆ Review and renew the district’s commitment to a Jicarilla Apache language program by developing goals, learning outcomes, and exhibiting student progress at the community level.
- ◆ Address high turnover among teachers and administrators through professional development and mentorship as well as by offering community orientations that welcome new staff.
- ◆ Review district and state hiring policies so as to recruit and retain qualified AI teachers and administrators.

ALTERNATIVE CHARTER SCHOOLS

NATIVE AMERICAN COMMUNITY ACADEMY

Methodology

Dr. Tiffany Lee is the principal PI responsible for conducting the research at the Native American Community Academy. Dr. Nancy Lopez assisted and conducted one of the focus groups. Student assistants included Leola Tsinnajinie, Carolene Whitman, and Genny Giaccardo. Preliminary findings of the study were presented by Tiffany Lee, Mary Belgarde, and Nancy Lopez to the teachers, community members and parents in the fall of 2009.

The focus groups were conducted during the Spring in 2008. We conducted focus groups with 7 students, 3 teachers, and 6 community members. The focus groups lasted from 60 minutes to 90 minutes. There were eighty pages of single spaced transcriptions for NACA. Specifically, there were twenty-six pages for the student focus group, twenty-nine pages for the teacher focus group, and twenty-five pages for the community focus group.

School Profile

The Native American Community Academy (NACA) is a charter school that is housed in temporary quarters at the Wilson Middle School, Albuquerque. It opened in 2006 to sixth and seventh graders and has added a new sixth grade class each year since then. It now serves approximately 250 students in grades sixth through tenth and will soon serve students through twelfth grade with a total enrollment reaching approximately 450. NACA has the first collaborative charter with the Albuquerque Public School (APS) District. Through the passage of an APS bond election, NACA has secured funding for a permanent school site. The new facility will open in the Fall of 2011.

NACA serves students in the Albuquerque and Rio Rancho areas, Isleta Pueblo, and Sandia Pueblo. Several students also commute into Albuquerque from Laguna Pueblo, San Felipe Pueblo, and To'hajiilee. In all, NACA has students enrolled from over 35 tribal nations. While the school is open to students of all backgrounds, 95% of student enrollment is Native American.

NACA has created a blended curriculum framework by incorporating

[A]n Integrated Curriculum, Wellness Philosophy, and Culture/Language context together to meet the overarching goal theme of a commitment to community and service.¹⁴

The integrated curriculum includes core content and skills development with a specific college preparatory focus. It also includes student driven course choices and projects. The wellness philosophy focuses on developing students' intellectual, physical, social/emotional wellness and community relationships and connections. The culture and language context refers to the stated value for the students' Native heritage, the inclusion of Native perspectives across content areas, and the engagement of students in community service projects.

The mission of the school is,

To engage students, educators, families, and community in creating a school that will prepare our students to grow from adolescence to adulthood and begin strengthening communities by developing strong leaders who are academically prepared, secure in their identity, and healthy.

Students learn about the curriculum framework and the mission of the school through NACA's stated core values. Those core values are,

Respect, responsibility, community and service, culture, perseverance, and reflection.

¹⁴ www.nacaschool.org/curriculum.html

NACA vocally and visibly shares their expectation for students to demonstrate those values in their everyday actions both within and outside of school.

Community Profile

NACA is located in Albuquerque, the largest city in New Mexico with a population of approximately 600,000 in the city limits, and nearing 860,000 in the metropolitan area. According to 2000 US Census data, the urban population of AIANs (alone and in combination) in Albuquerque is 22,047 (4.9%). Albuquerque is ranked 7th among major cities with urban Indian populations. NACA is located in the SE quadrant of the city, where many households are in the lower socio-economic bracket. The area also has the largest concentration of AIAN households (9%) and is home to the American Indian Urban Center and social service programs like that of First Nations Community Health. Historically, Albuquerque has been the center for major AIAN employers and government offices such as the Bureau of Indian Affairs, Indian Health Service and the Albuquerque Indian School (now defunct).

The SE quadrant has a high crime rate, but it has also benefited from civic efforts to establish it as the “The International District” of Albuquerque. While Albuquerque generally has a large mix of Hispanic and White populations, the SE quadrant has a high concentration of migrant and immigrant populations that are African-American and Asian-American. Albuquerque is bounded by numerous Indian reservations some of which border on its city limits. Within a 50 mile radius, there are nine Indian reservations (Cochiti, Laguna, Isleta, Jemez, Kewa (formerly Santo Domingo), Sandia, San Felipe, Santa Ana and To’hajiilee). Many of them operate casinos.

BEST PRACTICES

Educated Native American Person

NACA’s philosophy reaches beyond mastery of content knowledge and high achievement on standardized tests. NACA is passionate about the students becoming healthy people who are grounded in their identity, who believe in themselves, who are prepared for college, and who work to better their communities.

The students’ sense of academic self-competency and strength in Indigenous identity is evident as NACA implements its holistic and rigorous educational approach. NACA also locates opportunities for students to foster their self-confidence and demonstrate their academic and cultural competencies. For example, the students in the study discussed the opportunities afforded to them to share their work in local and national venues (i.e. Art show in the city, the New Mexico film festival, the National History Day competition).

Self-efficacy and competency is enhanced through the advisory course, which helps to set high expectations for students and for students to become familiar with and confident in their knowledge and perspectives. Students, as in this example, shared their critical thinking and analytical skills when they critiqued a Native author’s position and purpose in writing her book,

Finally she [the advisory teacher] just made us read it because we had a lot of complaints because we had read the autobiographies by the lady who wrote it, and made all of us do that because she was saying stuff like ‘I bring dignity to Natives everywhere’ and stuff like that. Just really kind of like... [Female student]; Like she wrote it above us all [Male student]; Like we need her writing stuff. So we all kind of like, so all of us, we got kind of mad about that because of like why do we need your writing to be dignified [Female student].

The preceding exchange illustrates that these students asserted their strong cultural identities and took offense that an intellectual would speak for them as well as purport to dignify them as Native people.

Teachers at NACA are not trying to romanticize Native people nor create false idyllic visions of Native ways of life. They are most interested in stimulating and nurturing students who believe in themselves, and who are inspired to contribute to their Native communities in positive ways. One teacher stated it in the following manner,

I think one of the things that I want the kids to walk away with is that there's always something bigger than them. It's not always about me, the individual, and it's about their family, it's about their community that they live in, so I think that's how I evaluate some of my students is that just have the mindset that you're always gonna' help people.

The students are responding to this approach. One 8th grade student exemplified this ideal when he said,

I want to go into toxicology and, like, [work] with teens and stuff. And then when I'm through with that, I would like to work on the rez or here in New Mexico; someplace close to home because the highest rate of suicides are teens, especially Native. And I would like to help in that.

These examples are only a few, among many, that articulated how NACA is influencing youth toward a commitment to their communities and planting seeds for transformation.

Language

Native language skills are viewed at NACA as important for the overall wellness of Native students and communities. NACA offers classes in Diné, Lakota, and Spanish. It is planning to offer other courses in Pueblo languages such as Tiwa and Keres. It will only proceed, however, after it consults with those language communities.

The importance of native language for the wellness of students was expressed by a community member who said,

We want to really promote the physical, emotional, social and intellectual well being of each child and we believe that Native language would help enhance that part of learning for each child (N3, p1).

Students also recognize the importance of learning their Native language. Several students made comments about cultural identity and the erosion of their languages,

We have our own language classes and I want to continue that 'cause not as many people talk fluently anymore.

It's like adult [only], 'cause only our medicine man and our nanas kind of understand it— or even the elders do—but not as many kids or teens.

There's really a lot of Navajo and, like, Pueblos... and all of them—'cause not to be mean or anything—but there's just lot of Pueblos who don't know their language and it's kind of sad, 'cause some people are starting to lose them; our language groups.

Curriculum

Teachers and community members felt that a challenging curriculum, which incorporates Native perspectives, was most meaningful for students. They emphasize development of critical thinking skills to create a stimulating and intellectually rigorous focus in the various content areas. Native perspectives in the curriculum included integration of issues that affect Indigenous people broadly, but they place a special focus on local and familial experiences to enhance and strengthen students' cultural and youth identity. One student shared a good example of a challenging project that utilizes familial perspectives as a source of instruction,

We're doing Indian Boarding Schools or, basically, Indian schools. The teacher's kind of encouraging us to go, like, interview people from our families; not to just take it from, like, Web places and books and stuff. So I actually got to read my grandma's journal before she passed away.

In this example, the students are learning about the impact of boarding schools from original sources, their own relatives.

Students were also encouraged to utilize the latest computer technologies for school projects in film-making and websites. Many students submitted their final projects to the National History Day competition. Several NACA students won regional awards and the National History Day organizers have attributed it to their use of primary documents and personal resources.

One of the key curriculum components is to find ways to integrate across content areas. Some teachers find ways to work with one another on common thematic projects or units. One community member shared her observations,

I've had the opportunity since I've done other work here with students, and so forth, to see some of how the teachers work in that respect. And there is a definite, not even expectation, but desire to integrate the curriculum. So you have Science and English teachers right now working on integrating... like, over a common theme and then using the community garden, for example, to teach about science, to write about what they're doing and then associate Native storytelling to gardens and the significance of food.

Pedagogy

Teachers and community members not only discussed how to meaningfully engage students in content area learning, but also how to develop students' awareness of their roles and responsibilities to their communities. One teacher stated,

I envision a lot of young people, especially Native young people, really having a voice and really advocating for themselves and for others and really giving back to their community. I think that goes beyond just what we teach in the classroom.

Another teacher described his intention to inspire students to positively transform their communities through their education. He said,

I try to give 'em the solutions or help them develop tools in order to realize the situation and actually give 'em the tools to change their communities—just inspire them to be better than what they see around their communities.

He was referring to some of the social and health problems that are prevalent in the local communities.

Students within the same grade level are assigned to an advisory class. This class is comprised of a cohort group, led by an advisor. They remain together throughout the year and bond as a group. In this class each student learns about college, participates in self-reflection, obtains help on homework, and develops critical thinking skills. In addition, they work on individual demonstration projects, monitor their progress on wellness wheels, and participate in student led conferences. As a reflective piece, the demonstration projects are presented to others at the end of the year. Students present either what they have learned about themselves or on a subject they have mastered.

Another aspect of the student learning experience is the experiential or community-based programs. Students participate in experiential education both within and outside of school. Its intent is to engage students with hands-on, active learning as a way to uncover the importance of place and land among Native peoples. One community member explained it this way,

In order to learn our history, we have to go to the place of history. It's so critical that our children learn the way our ancestors did and that is going to the sites. It's going to the land again... you're learning from the environment, from the land and from, you know, the stories that are connected to it that helped us originate as a people.

Students respond well to experiential education. They are engaged and they are allowed to exercise their creativity. One teacher noted the effectiveness of experiential education and active learning,

One of the things that have worked very, very well with some of the students that don't exactly excel when it comes to book work is getting them outside or even letting them put their hands on what they're working on or what they're learning.

Two students discussed their excitement for learning in science class when their learning involved growing gardens and building pyramids,

The first year in science, we really did study on Native culture and stuff. And even back there, we had built our own, like, gardens [Female student]. And we made, like, these Mayan pyramids [Male student].

Additionally, students talked about projects involving clay-mation, team research projects, “NACA Rocks”—a course on rock and roll history, literature, and performance—and various other art activities, such as pottery making and painting. Some of these activities were offered as separate electives. Most, like the science course, were integrated into everyday classroom learning.

Accountability

Teachers indicated that they have to abide by state testing requirements so as to assess a students' adequate yearly progress. However, they also indicated that they broaden their perspective of assessment to include additional measures. Students are assessed on such factors as the quality of relationships they develop with others. Relationships are important for inspiring a commitment to service and for developing a healthy identity.

Another important set of measures are those that are culturally based. For example, in learning a Native language, students are also evaluated on how they learn to carry themselves with respect as well as how they learn respect for others when using those languages. Evaluation extends beyond academic testing as students are required to apply their language skills outside of class. One Native language teacher discussed it this way,

The first day of Lakota class, I talked about in Lakota society, the way the structure is created is that it's your uncles and your aunties that will discipline you and that will teach you. They will take upon the teaching opportunities to point things out. So I said 'with that—the relationship we're gonna' have in this classroom—I'm gonna' treat you like one of my nieces or nephews. So that doesn't end once we are out of this class!'

The teacher went on to say,

Another way I evaluate if they're receiving some of the things that I'm teaching them is how they treat each other out there when they're not in class. I think our teachers here are very intentional about how they teach the kids and that they should care for each other... We encourage the students to embody some of these virtues that we know and we've grown up with; [especially] when they haven't grown up with them. We can talk about respect all we want and how to live it, but we gotta' give them the opportunity to act on it... I think that's a perfect way to evaluate; to give them experience is to see how they act in the societies, in their communities.

The teacher described the inclusion of Lakota family values and structure to inform his own teaching methods and assessment practices. His pedagogy and assessments draw on Lakota traditional values and knowledge and are culturally responsive. They are related to all students and applied as a life experience.

Similarly, students engaged in self-reflection as part of their learning. They complete a “wellness wheel” diagram prior to each student-led conference. In the wellness wheel, they show and explain how they are growing intellectually, physically, communally, socially, and emotionally. The objective of the task is to process what they have learned and to indicate precisely how they have achieved this in school and among their families. One student explained it like this,

[It's like] a parent-teacher conference, but it's way better 'cause we get to do it our way to where it's not really just with your mom or dad, or your parents. You can have different family members or friends come in.

You talk about your grades. You talk about what you like here at school and what you don't like, and how you can fix it. You have goals of yourself or for yourself, and you talk about how you want to reach it.

Along a similar concept, another teacher discussed how he used writing or “quick writes” to engage students in more self-reflection and discussion. He said,

We have a quick-write every class, 15 minutes, 10, 20 minutes, write 6 to 8 sentences, write a paragraph about the topic of the day. It's anywhere from music to food to respect to how do you hold yourself accountable for your actions or anything. Then students engage in a conversation about their ideas and thoughts.

School Climate, Environment and Place

Community members and students expressed that the small and comfortable school climate made the school feel safe. The positive social and academic environment was cited as one of its best qualities. They recognized the respect for cultural activities within and outside of the school. They described caring relationships between adults and students. The parents felt welcome and were always encouraged to be involved. Participants also discussed school activities. The community feast day and the school powwow helped to unite the students and community. The growing sports program is also unifying and strengthening the NACA community. A community member described a unifying event like this,

They gather students in a circle on Monday mornings, and they begin with the drum. They actually sing together. So that's something that's a part of their ritual for the school. And that's so important to have and so I think that that makes it feel like it's a community and it's unified.

In particular, the principal discussed how the school is a place that should conform to the community, rather than the other way around. In addition to what is taught, students are expected bring and share their own interests, heritage, and knowledge. A community member stated it this way,

What I've noticed of the students here [is] that they're... They seem to enjoy being here and [it] looks like they're having fun and, you know, it seems like they're a lot more outgoing than I think they would be in public school where they're kind of pushed aside and, you know, not have as many friends. But it's really a joy to come here and see the kids looking so happy.

Vision

At the time of the focus groups, NACA was in its third year of operation. The participants envisioned much growth for NACA. Ideas on what they would like to see NACA achieve by the year 2025 included,

- ◆ Continued emphasis on community service (giving back);
- ◆ Integrating course content around issues like political and cultural sovereignty;
- ◆ Fostering students' cultural and youth identity;
- ◆ Establishing full experiential, wellness, and sports programs;
- ◆ Strengthening school capabilities as a resource for community;
- ◆ Implementing rigorous college preparation;
- ◆ Promoting sustainability and traditional knowledge; and
- ◆ Continuing to “drive our own education.

One teacher expressed her vision of NACA as a resource and source of support for students, families, and communities. She said,

Having a strong NACA community! Not only with the students and the teachers, but with the families, their families and whoever else is in their communities. So [it entails] having that strong foundation and actually having a gathering place that we can get together.

Relationships

Participants elaborated on the importance of the relationships between adults and youth for fostering a supportive educational environment. In particular, they discussed the significance of caring relationships. Teachers who care about their students build confidence in their students and set high expectations. The

school environment is also positively affected and students feel comfortable and open to learning. One teacher described this positive quality as,

You have to show them that you care for them, because that changes the whole dynamic. I think that's one thing that I hear a lot of students say at this school is that, 'These teachers are cool! They care about us'.

Another teacher noted that it is important to have patience and to communicate respectfully and without hostility in order to engage students. She said,

You gotta' be very conscious of how you're talking to the students. If you talk to your students with hostility, they're gonna' shoot hostility right back at you. If you're gonna' be angry, if you're gonna' be frustrated, they're gonna' reflect what you're—how you're talking to them. You have to check yourself sometimes because we're all human. We all get frustrated. We all get angry. You have to be very patient.

Teachers discussed the importance of establishing long-term familial relationships with students. They indicated the need to communicate that they are invested in their students' learning beyond the classroom. They stressed the need to create a community within the school; a community where everyone is like family.

OPPORTUNITIES FOR IMPROVEMENT

One comment made by a community member was,

The school can only do so much for its students.

This concern indicated that families must also assume the responsibility of building a foundation of learning for their children. The comment conveyed the importance of securing a constructive family home environment, something that may be outside the ability of a school to influence.

Another area of concern that was indicated was how the current momentum at NACA would continue to be maintained. As new school, everyone was excited about its development and its potential for growth. The hope is that this level of enthusiasm and commitment would not wane, especially in light of funding and any possible changes in leadership.

Participants discussed the need to continue strategizing professional development plans to meet the mission and goals of the school. In particular, they expressed the need to continue educating themselves on the diversity of the students' backgrounds in areas like cultural heritage and lifestyles, as well as their familial and social influences.

POLICY RECOMMENDATIONS

- ◇ Teaching methods in any content area should include hands-on activities, group work, and other experiential opportunities
- ◇ Offer teachers, administrators, and other school staff should be offered professional development opportunities to improve their knowledge and appreciation for the local community's historical, cultural, and social context.
- ◇ Make curriculum relevant to students' lives in multiple ways.
- ◇ Native languages to continue to be offered and supported.
- ◇ Language and culture should be included in all content areas
- ◇ Native Languages be valued and respected in the overall school climate.
- ◇ Native languages that are not Native to New Mexico but are widely represented in New Mexico today (such as Lakota and Comanche) be included to be eligible in the Memorandum of Understandings for Native language teacher certifications between tribes and the state
- ◇ Share best practice information to all teachers and school-related staff members.
- ◇ Allow successful students and teachers to share their experiences with everyone in the district.
- ◇ Continue to tangibly implement the school's vision and mission in transparent and comprehensive ways, particularly in ways that address the key areas identified in this report.

WALATOWA HIGH CHARTER SCHOOL

Methodology

Dr. Mary Jiron Belgarde, the Principal investigator (PI) of Walatowa High Charter School. She was assisted by student assistants Leola Tsinnajinnie, Carolene Whitman, and Neomi Gilmore. The research approach entailed adhering to tribal community protocols including the Pueblo of Jemez – Department of Education and the Walatowa High Charter School Board. The initial approach to the Walatowa High Charter School was by letter and phone call follow-up to the Principal, Tony Archuleta. Co PI Dr. Belgarde received permission to conduct the study and was approved by the School Board. School administrator Mr. Tony Archuleta, based at Walatowa High School, was assigned as the IESG contact person to coordinate the study with the schools. Mr. Archuleta worked with Dr. Belgarde to establish the protocol for conducting the study, organizing focus groups, identifying potential participants (students, teachers and community), and obtaining parental permissions for students (parental consent).

Dr. Belgarde, Leola Tsinnajinnie, Carolene Whitman, and Neomi Gilmore conducted focus groups among students and teachers. The Student and Teacher focus groups typically lasted from 40 to 90 minutes. Unfortunately, no mutual time was had to hold a Community focus group. The meetings occurred between March 19, 2009 and April 4, 2009. Participants volunteered to take part at the request of the IESG, the Education Director of the Tribe, and Principal. Most participants were randomly selected among willing participants. In all, one student focus group involving 8 students, and one teacher focus group including 7 high school teachers, the Curriculum Director, and the Principal were completed. Dr. Belgarde completed the initial coding of the data from Walatowa followed by Dr. Lee, and a third reviewer, Dr. Singer, compared the first level of coding to the transcripts to determine their levels of agreement or disagreement. There exist 64 single spaced pages of transcriptions from Walatowa High Charter School.

District Profile

The Walatowa High Charter School (WHCS) is located 50 miles northwest of Albuquerque and was established in 2001. It was authorized as a charter high school in March 2002 through the Jemez Valley School District. After Walatowa High completed its fifth year (2006-2007) of the initial charter, the Jemez Valley Public School District Board approved WHCS for a second charter in February 2007. This became effective for another five years beginning with the school year 2007-2008.

Walatowa Charter is also an “Early College High School” with four academic components: Academic Rigor, Leadership Development, Culture, and Wellness. The “Early College High School” provides students with an opportunity to earn up to two years of college credit while still in high school and is a part of the nationally expanding initiative funded by the Bill & Melinda Gates Foundation, Carnegie Corporation, the Ford Foundation, the W.K. Kellogg Foundation, and the Lumina Foundation. Walatowa High partners with the University of New Mexico’s Native American Studies Department to develop dual enrollment opportunities for Native students.¹⁵

Walatowa High Charter offers a rigorous college and career preparatory curriculum that emphasizes mathematics, science, health and technology. The Leadership Development Program consists of mentorship, internship, and community service. Their goal is to build strong well-educated leaders who will increase community assets, based on their traditional and cultural values. Their leadership program emphasizes respect, self-discipline and responsibility, and high achievement while meeting state standards and benchmarks. Their cultural component is aimed at enriching the experiences of students on a local, national and global level. Students are introduced to native and non-native cultures throughout the world with the intent to expand their horizons, develop cross-cultural relationships and build a heightened

¹⁵ Press Release, Center for Native Education, Antioch University, Seattle, November 5, 2007

awareness of the potential impact of world events and lifestyles locally. Their wellness component promotes appreciation of physical wellness, healthy living and traditional cultural practices. It highlights the importance of living a healthy lifestyle, while also building the “whole” person in body, mind and spirit.¹⁶

In the Jemez Valley School District (2008-2009), there were 115 elementary (31% Native, 39% Hispanic, 30% White), 135 middle (60% Native, 27% Hispanic, 11% White, .07 Black, .07Asian), and 77 non-charter high (56% Native, 33% Hispanic, 10% White, 1% Asian) school students (National Center for Education Statistics).¹⁷ In 2008-2009, the Walatowa High Charter School consisted of 52 (100% Native) students in grades 9-12 and 9.5 (2 full-time and 7.5 part-time) teachers (Archuleta, 2010). Most teachers and administrators are non-Native and some share more than one responsibility (e.g., administrator/teacher).

Their mission is to serve the students of the Jemez Pueblo community and surrounding area by:

- ◇ *providing a rigorous college preparatory curriculum, with an emphasis on math, science, health and technology;*
- ◇ *fostering leadership development;*
- ◇ *preserving language and culture; and*
- ◇ *strengthening physical wellness.*

The school’s philosophy is:

Traditional and cultural values will form the basis upon which is built a solid foundation emphasizing respect, self-discipline and high academic achievement.

The school’s purpose is to:

- ◇ empower students with cultural knowledge and leadership skills through academic and experiential learning to “Think Globally and Create Locally;”
- ◇ claim the right of a sovereign nation to ensure that traditional and cultural values serves as the foundation of a community-integrated curriculum responsive to community needs; and,
- ◇ academically and experientially prepare young adults to be leaders knowledgeable about community needs upon which to build sustainable systems of progress and development.¹⁸

Community Profiles

Walatowa is the traditional Towa name of Jemez Pueblo and means “The Place.” Approximately 2100 of 3788 people live in Jemez a rural farming and agricultural community located 50 miles northwest of Albuquerque (Pueblo of Jemez website). Highway 550 links them to other towns such as Albuquerque, Bernalillo, Rio Rancho, and Santa Fe to the SE and Cuba and Farmington to the NW. The Pueblo of Jemez land encompasses 89,000 acres in north central New Mexico (Pueblo of Jemez website).

The community is vibrant in speaking their Towa language and integrating their cultural traditions with that of modern society. In the population of 5 years of age and older, 91% speak Towa with English as their secondary language and 9% speak English only. 45.3 % of the children, ages 18 and under, live below poverty.

¹⁶ Kevin Shendo PowerPoint Presentation, 2008

¹⁷ http://nces.ed.gov/ccd/schoolsearch/school_list.asp?Search=18DistrictID=3501410

¹⁸ Pueblo of Jemez, Walatowa High Charter School Handout

BEST PRACTICES

Educated Native American Person

Best practices of “successful students” include making commitments and completing responsibilities to their families and communities. They also demonstrated “survival” knowledge as well as academic knowledge by describing ways they handle challenges in life and with their families. Some students said that they see themselves going to and completing college. A few students articulated their desire to become architects, movie makers, and criminologists. One student said,

I like doing a lot of things. And life throws a lot of stuff at you. So you just [deal with] whatever happens, I guess, at the time.

Another responded,

[An educated Indian person is a] native that went to college and didn't drop out, but got his degree and did something with his life. But as we say that—I mean to me—it kind of seems like our parents—some of them only went [on] to [complete] senior [high] and then went to work. When we say that an educated person goes on to college, it kind of seems that it says—like people are saying—that our parents aren't educated. But our parents did they best they could, and they went to the highest level that they could, and then they took their jobs. But things have changed. So the more time progresses, I guess the higher level you can get; some things just didn't work out as according to plan. We can say college is there and know we could get through it. But until we go through it, we don't really know how it is or how rough it is.

As for how students saw themselves contributing to their Indian community, one student indicated,

Sustain culture. At the same time, sustain people.

Language

Speaking their native Towa language is recognized as being very important. The Pueblo, however, has chosen not to have Towa language classes at Walatowa High. Rather, the Pueblo leaders have indicated that the proper setting for learning the language is at the village. There they are taught to speak Towa fluently through interaction with peers, family, and elders in the community. During the sessions, students were observed to communicate with one another in the Towa language. The school supports this by allowing the Towa faculty and staff members to help students clarify concepts using their native language. In addition, students are required to take Spanish as their college preparatory language requirement. This affords an opportunity for students to be tri-lingual. Teachers recognize that many students come from a community where English is not their first language. One teacher said,

In terms of how I teach, [it] depends on the group you know...I saw something in here about issues of language because sometimes we [should] be sensitive. And I think that I don't think that those language issues are related just to Native-Americans. I don't really separate those needs in terms of Native-American, or ethnicity, or race. I think it just has to do with language. If English is your second language, you have certain needs in any classroom.

Curriculum

Walatowa offers a community integrated curriculum. The school defines it as “applying the concepts and knowledge that are taught in the classroom to real life situations out in the field (community). Some examples are: riparian studies, ancestral hikes, geology study, balloon/kite experiments, pottery units, internship program, and any other events where data is collected, gathered, or studied out in the field and information is brought back to the classroom for analysis.” The school literature defined experiential learning as “hands-on learning that takes place both inside and outside of the classroom. Project oriented work that requires hands-on and active participation of students.” Community integrated components is defined as “...the organizing principles of the curriculum that are woven throughout all four years of in-

struction: Culture, language, and curriculum, Leadership Development Program, College and Career Preparation; and Technology.”¹⁹

Students felt the type of curriculum that was most meaningful included content that related to their lives historically, socially, and culturally. Some of the students said:

That was ... very educational, you know, how the Chacos, how they built their kivas. It is all geometric, you know. They're like first people to ever use math in a very high-tech way, and everything, their structure and everything, was all level in one direction, and it all just — it all — everything they did, they did for a reason. That's what I like.

It's teaching us that it's a lot different because we're looking at it from our point of view, you know, not from the textbook's point of view, so it's more — it's more meaningful. It sticks; it's something you can relate to, so.

Like the way they live, what era, time they used to live in, and different things they used to do, people they were involved with.

Students indicated that they are learning through multiple sources, including elders, knowledgeable speakers, films, documentaries, internet, and field trips to museums and ancestral sites. They indicated that they prepared ahead by studying their own ancestral history as well as current issues related to the places they visited. One student said that prior to going to Chaco Canyon,

We researched it, and the teachers told us a little bit about it, the history of where they came from and their trading, how they traded and what caused them to move, ... or relocate.

Similarly, teachers described how they incorporate local cultural knowledge into the curriculum. For example, one of the teachers said,

They learn how the tribe operates, how government affects the tribe, [and] how decisions that are national affects the tribe. They see how everything works and decisions are made. They have to really consider everything, the whole tribe, and how it affects the tribe. They really get to see what the government's doing as far as in their own community and, also, how other tribes interact with each other. So I think just with the internship portion, that encourages [their] involvement in tribal government. But I know, the teachers touch on where they go and why they go to these places.

Pedagogy

Students were very vocal about how they enjoyed hands-on, activity oriented learning. Some students talked about how they enjoy courses like science that take them out of classroom to do experiments. They appreciated being challenged, given the opportunity to voice their opinions and share their experiences. One student said,

The hands-on stuff, some you remember for a long time.

Another student described their trip to Mexico,

Every day different people were filming what we were doing. And we would come back here and whoever filmed that day or that time, they edit it. And then we all put our stuff together and make one whole documentary out of it.

One teacher said:

Ms. _____ and I were doing with the sophomores, [an] interdisciplinary reflection on their trip to Mexico last week. And so I had a big paper folded into six panels. I gave them 30 seconds and I said—and I had four categories: Las Cruces- the border crossing, Chihuahua, the Mennonites, and Tarahumaras, and then two were just open—and I gave them 30 seconds to [reflect], “Okay, what comes to your mind when I say Las Cruces?” And they sketched. And you could elaborate from that, but they had a visual image that they recalled in 30 seconds and drew it out, and then they went to the next one. Some of them were similar, and some were dif-

¹⁹ Walatowa High Charter School Fact Sheet, 2008

ferent. [For] the last two [panels], I said, “Just give [yourself] 30 seconds to [draw] something I didn’t mention; something that stood out in your mind that you recall.” And they all filled them out. On Monday, we’re gonna’ take and derive a finished rhyme from any one of those. But they do, they do—there was not any intimidation or reluctance. They were perfectly fine doing that. So I think that shows something. It is a visual world to them; [an] experiential world.

Teachers also said that they initially had to confront some stereotypes about Native student’s learning styles and adjust their teaching style to address student needs,

I went in thinking, all right, I’m gonna’ group teach and I’m not gonna’ use competition as a tool ‘cause that would be inappropriate. And I was kind of stumbling along, and then I saw our kids play basketball, and I saw what fierce competitors they were. I still don’t see an extraordinary amount of competition with themselves, but I was surprised by the level of competition with the outside.

I was told that Native-Americans were visual learners. So that was a stereotype because later on, I learned that they were more than just visual learners.

I sort of came with the same sort of expectations that they would inform me, and they did pretty much. Now, I do think that they are visual learners. I mean they’re especially gifted in the visual world, and they pick up quickly processes, procedures, and what you do first, what you do next. But they’re not particularly verbal.

So I think they are more visual, and I do think they’re more right brained. I’ve done informal inventories of preference among all of [four] students, and they come out—this school, this year—came out strongly right and middle. We had two students in the whole school that came out strongly left, left dominant. And, of course, it’s not an official, true, verifiable inventory.

You do have to modify your lessons on a daily basis, based on your audience and who’s there. And I think what I learned, as I gained experience as a teacher, is not to be afraid to say, “Hey, this isn’t working. We’re gonna’ stop it. It’s not working. We’re gonna’ do something else.” But it’s hard, and that doesn’t get easy, I don’t think. I think you can teach 50 years and that would still be a challenge.

Teachers indicated that the students avoided taking notes during class, but are good listeners,

There was something that you [another teacher] said about notes or taking things in mentally and visually. But [I found that] there’s an extreme aversion to note taking, except that sometimes they [students] amaze me with recall. I’m teaching in it, and there has not been one pen lifted to taking one note—and there [are] kids that ace it.

Like say, this happened this morning. The freshmen were doing jewelry and I told them... they’re familiar with the terminology. But a student came up, “I need one of those thingies, I need a thingy.” They don’t use the words. They need a blade, but they call it a cutting thingy, or something. It’s not their first way of thinking. They know exactly what to do with it, how to do it. They pick it up very quickly.

Accountability

Participants were queried about how students, teachers, administrators, and the school institution should be best accountable to students’ education. Teachers described their efforts to assess and meet student needs in the following ways,

Based on all my observations, I know my number one criterion in judging students’ academics is effort. It’s trying, ‘cause we got kids at all different levels. You quickly know what levels they’re at. There are some who come in with, really, an aversion to academics. But I’m not sure—I mean I always second-guess myself on grading this way. But I know in my grading it’s like it’s a demonstration of effort. Those are the kids that get A’s in my class.

Even if a student does have some deficits, it’s just finding out what their strengths are. You know, like, if they’re low readers, but maybe their language skills and the thought process are a little bit higher. Try to find out what [their] strength[s] [are] instead of delving at the—or becoming frustrated with the weaknesses; you know, deficits. And I think if you look hard enough you’ll find it. We talked about one student yesterday. We said you know this student has really, really participated, but maybe is not a good writer, not a good reader. So we talked about some ways to have her participate in the critical questions.

My assessment of a student's achievement? When I first came in, I was real project oriented in the end product. I put most of the emphasis on the end product. But I found, without the accountability of steps in between, the end product never was achieved.

School Climate, Environment and Place

The findings from students and teachers show positive “school climate” attributes. Most students enjoy the convenience and comfort of being close to home. They expressed positive feelings toward their teachers.

We can walk to and from school!

Yeah, everyone knows everyone; everyone's related to everyone. So there's no groups hanging around over here, no outsiders; everyone is just cool.

We feel comfortable around our teachers because we get to know that—we get to know them, like, one-on-one; that's how close the students and the teachers are. Like we joke with the teachers, and they joke with us. That's how comfortable we are.

[There are] no anti-Indian sentiments are displayed in the school.

Only a few students expressed concerns regarding communication problems. A couple of students indicated,

They're... They don't inform us as much as they should. Parents do not know what is going on in the school. If there's like a PTO meeting or something simple, if there's a game or something, there's no communication.

No one really knows until afterwards. Then even—inside the school, there's still a lack of communication.

Some teachers talked about challenging the student's comfort zone and parental participation in school. They said,

We've taken them out of Jemez Valley to provide an environment where they can excel. They feel more self-confident. They feel more in their zone there. But it's almost as if—I don't know that we're very selective as to who we bring in. And as a result, we've created a mini Jemez Valley, in and of itself, where again, the kids who are allowed to stay in the back, stay in the back. There's not a feeling of—it's like we've arrived and we don't need to go any further. And as a result, it's complacency. I'm one step above [Jemez] Valley. Therefore, I'm okay now. I'm in my own program. I'm in my own comfort zones, so I'm okay now. Whereas, somehow, we could lift them out of this environment to a higher level. I think you would start to get more response from students as to their education.

I would want to increase the propensity for education on the part of parents. Until we do that, you know, we pay a lot of lip service for parental participation, a lot of lip service. But until we get parents truly understanding the value of their participation—in my experience on the reservations, I still remember those families and those kids whose parents and guardians were really there. [They were] serious about sending the kids to school everyday, on time, were prepared, [and] cooperat[ed] with teachers. Until the mechanism is in place to really do that, I think that is—and I'm talking about Indian education—so, meaningful; parental participation. You know we're semi-selective in who comes to the school. We have to be just as selective of parents as we are with the students. And I would say at the very beginning of the school year, a mandatory workshop.

Vision

Some students desire an expanded curriculum with more course choices and flexible schedules like college students. Students desire bigger, permanent buildings and transportation. They would also like to have an adequate sports complex (i.e., football field and their own gym).

[We need] additional classes, such as music and band, architecture [and] Indian history classes taught by Indian teachers; Native culture in all classes and archeology!

[We need classes] about how we're living now. 'Cause they're always — we're studying about how our parents lived and how our ancestors lived. [O]ur kids—we want them to learn about how we grew up; what environment we were in.

[We need] hands-on/trade classes, such as welding, woodcraft, and other shop classes.

[Let's] start and end later, and to have night school."

[Longer] block classes with some flexibility to go home between classes. Like college does; you can go home for lunch.

Teachers suggested curricular changes and additional resources for the classroom.

I'd like to have a research and writing units for every student in any class. And I would like to be hooked up to a large Internet-connected projector, especially 'cause the kids are visual. And when I'm teaching humanities, I know exactly where to find them a great art illustration to go with the lecture, but I don't yet have the tools. I've got to find the picture. We make an old transparency and drag them out still. But other than that... I really would like to have enough research and writing mock units. I just [hate] trying to break the sophomore class up. [Like] in our last walk; half of you can be writing on the computer and half of you have to be writing by hand. And they get real frustrated with that.

I'd like to see a project-based, centralized school where something's going on. Again, we choose large units, and then we switch into, say, an English-based, math-based, science-based portion within that project. And then, it comes back together and we'd re-disperse. Throughout the day [we could teach] small segments based around the project. But then [we could go] into the [major] core areas touching upon the direct benchmarks and the standards of the State.

Relationships

Students benefit from educators who believe in them and have high expectations of them. They described the importance of relationships with teachers who are committed to their community and who recognize their home culture. Students desire to have Native teachers in the school.

We feel comfortable around our teachers because we get to know that—we get to know them like one-on-one; that's how close the students and the teachers are. Like we joke with the teachers, and they joke with us. That's how comfortable we are.

No anti-Indian sentiments are displayed in the school.

OPPORTUNITIES FOR IMPROVEMENT

Educated Native American Person

Student and teacher participants are concerned about students being prepared for the future. Student and teacher participants desire expanded curricula and in-depth learning opportunities whereby they have time to ask questions and receive meaningful answers during class-time.

Language

Students and teachers would like for Towa speakers to be available in the classroom to aid in the learning process. Ideally, students would like to have Towa-speaking teachers.

Curriculum

Students desired an expanded curriculum, in-depth learning activities, and an open-style curriculum (allowing them to select classes, come and go akin to college classes).

Pedagogy

Teachers desired greater collaboration with colleagues in project-based learning and to focus on the process of learning (reading, writing, creating/working toward end products). Teachers would like additional and advanced technological resources.

Accountability

Teachers would like for students to set their own high standards and to be able to reach these goals. For now, teachers see the standards set by the school and community.

School Climate, Environment and Place

Students and teachers would like to maintain the positive school climate that has been created. Teachers would like meaningful involvement of parents in the school.

Vision

Participants desire to bring together all of the elements conveyed in curriculum, teaching (pedagogy), language, culture, accountability, school climate, successful student, and relationship areas. Respect for language and culture as well as their personal and family life appears to be paramount and significant. Students and teachers desire to be respected and productive members of society. Finally, the school vision and mission statements appear to be in concert with the findings gathered from the study participants.

POLICY RECOMMENDATIONS

- ◇ Teachers, administrators, and other school staff should be offered professional development opportunities to improve their knowledge and appreciation for the local community's historical, cultural, and social context. Offer bi-annual school-wide professional development activities that share knowledge about the Towa language, culture, and community.
- ◇ Curriculum should continue to be relevant to students' lives in multiple ways.
- ◇ Local culture should continue to be included in all content areas; and they should be valued and respected in the overall school climate.
- ◇ Share best practice information to all teachers and school-related staff members. Allow successful students and teachers to "Tell Their Story" to everyone in the school/district.
- ◇ Participate in regional, tribal, and state colleges and universities to recruit and train Walatowa teachers.

PUBLIC SCHOOLS THAT SERVE SIGNIFICANT NUMBERS OF INDIAN COMMUNITIES

BERNALILLO PUBLIC SCHOOL DISTRICT

Methodology

Dr. Nancy Lopez is the principal PI responsible for conducting the research in the Bernalillo Public School District. Dr. Tiffany Lee assisted and conducted two of the focus groups. Student assistant, Neomi Gilmore, conducted another of the focus groups. Other student assistants included Leola Tsinnajinie, Shynoke Ortiz and Carolene Whitman. Preliminary findings of the study were presented by Nancy Lopez and Tiffany Lee to the principals and teachers at the Superintendent's office of the Bernalillo Public School district on Oct. 1, 2009.

The focus groups were conducted during the Spring in 2008. The study complied with the Institutional Review Board procedures established by The University of New Mexico as well as the Bernalillo Public School district. The study obtained informed consent as well as parental consent and student assent for participants under the age of 18. Although we provided snacks (e.g., pizza, soft drinks, etc.), there was no monetary compensation for participants.

Participants were recruited from schools via a general school-wide announcement. A total of 8 focus groups at four schools (Bernalillo High School, Bernalillo Middle School, Santo Domingo Middle School and Cochiti Middle School) were conducted during the Spring of 2008. The focus groups lasted from 30 minutes to 90 minutes and took place at each respective school. A total of 42 people participated in the study.

All focus groups were audio-recorded digitally and transcribed. We had a total of 400 single-spaced pages of transcripts. Because these schools were located in very small communities all co-principal investigators were sensitive to preserving the confidentiality of all participants. To this end we do not disclose any identifying information about the particular school we visited or the specific individuals that participated in the study. Instead quotes are reported in a generic fashion (e.g., a teacher, a student or a community member).

District Profile

The Bernalillo Public School District is located just 25 miles northeast of the Albuquerque metropolitan area. There is only one high school in the district, Bernalillo High School, but there are three middle schools: Bernalillo, Cochiti, and Santo Domingo. The latter two are located on the respective Pueblo Indian reservations. The District also has six elementary schools: Algodones, Placitas, Roosevelt Primary, W.D. Carrol Elementary, Cochiti and Santo Domingo. The latter two are on Pueblo Indian Reservations. Feeder schools that are located in adjacent Indian reservations include Zia Pueblo Elementary School, Santa Ana Pueblo Elementary School, and the Sandia Pueblo Elementary School.

In comparison to the 90,000 students enrolled in the Albuquerque Public School system, Bernalillo enrolls only 3,153 students. During the 2007-2008 academic year, the District reported that its student racial composition was comprised of 42% Native American, 49% Hispanic and 9% Anglo. The Native American teachers and educational assistants are principally found in those schools that are located in Pueblo Indian reservations. The vast majority of Native Americans working outside of the District's Indian reservation schools are employed as educational assistants and Indian Program administrators.

Through the Title VII, Indian Education Formula grant, the district provides a number of programs and support services. Nearly every student in the District receives free and reduced lunch (96%). There

is a significant percentage of students who are English Language Learners (41%, which includes Spanish and Native languages) as well as Special Education (18%). The 2006-07 School Accountability Reports for schools in the Bernalillo School District documents the troubling unequal educational outcomes for Native American students. At the Bernalillo High School and the three aforementioned middle schools (Bernalillo, Santo Domingo and Cochiti) where the focus groups were conducted, proficient scores in math (13%; 17%) and reading (33%; 37%) during the 2007-2008 academic year were quite low. By comparison, Anglo students tested at two to three times higher at every grade level. The one exception was Santo Domingo Middle School, where close to 40% and 54% of Native American students were proficient in math and reading respectively.

Their vision statement states,

Bernalillo Public Schools aspires to serve our diverse student population with a high quality educational program, which exceeds all standard. Bernalillo Public Schools will differentiate the instruction program so that each student succeeds during their educational journey and on to successful future."

Bernalillo Public Schools honors the following principles in all aspects of its educational endeavors:

- ◇ *Rigor – Expectations, challenges and accelerated learning. Ensure that all students are given a challenging curriculum that prepares them for college and work*
- ◇ *Relevance – Relate courses to student's lives and goals. A rich diversity where we value the mix of cultures and languages that comprises the communities that we serve, opportunities and realistic outcomes.*
- ◇ *Relationships – Students come first! We will always place the best interests of students we serve as the fulcrum of all decisions. The school community will motivate and challenge students to achieve.*

Community Profile

The District borders several Pueblo tribes, including: Cochiti, Santo Domingo, San Felipe, Sandia, Zia and Jemez. The community is home to one of the earliest occupations by Spanish Conquistadors (1540) and was founded early in the Spanish reign during the 17th century. As such, it has a rich and vibrant culture comprised primarily of Hispanic and Native American historic settlements.

BEST PRACTICES

Educated Native American Person

Students were very clear about connecting their individual career choices to helping their communities as indicated by the following statements,

I'm going to school because I want to go to architectural school. I want to give back to my community once I get a business.

I wanted to be a nurse or a pharmacist-work with medicine. I want to stay in the community. My grandpa is next to the head chief and I help him. I want to keep my traditional way.

The most promising practices included providing students with windows to their success in the future. A middle school student beamed as she remembered leaving her familiar environment and venturing in to the world of higher education,

They would take us to different colleges in the state. The last one we went to was in Socorro and in Las Cruces. That was cool!

These types of experiences solidified student's visions of graduating from high school, going on to college and returning to their communities to contribute to the well-being of their families and Pueblos. A middle school student, for example, spoke out and said,

[I want to become a] teachers aide—one-on-one teacher—to help with Keres language speakers.

Language

Teachers mentioned that native language classes provided students with an authentic opportunity to hone their homegrown language skills,

They were able to talk in their language. It was the one thing that they were better [at] than the other kids.

An educational assistant in charge of the language program at her school described why she entered the teaching profession,

I just assumed that, [because] I'm Native American, I'm going to be around Native Americans, and my whole goal was coming home. Every summer I teach Keres in my village and that's —that was —those are my kids. I came back to Bernalillo because this is where I came to school and these are the kids from my community.

The language classroom was covered with student work in the Keres language. Students, community members and teachers all recognized the important role Native American languages played in the success of their students as indicated in this statement,

I think that [language is] one of the very important things that we need to see expanding at our school. I'd like to see more hands-on, because in that area the students learn a lot more. Especially now that we are teaching Keres, we can combine classes with what I have just covered.

Curriculum

Teachers talked about the importance of promoting an integrated curriculum that was anchored in meaningful connections to community,

We went to the Pueblos and they were able to share with us all the environmental things that they were doing with improving water and water sources and recycling; reusing. It's very green. It was initially based on science, but the mathematics of it was there, the language component was there. It brought in so much as far as all the different curriculum areas.

Another teacher explained,

When I taught American History, I made that relate to things like treaties and how Native Americans were treated, and how the current reservation system started and to link that to other things.

Students and parents also pointed to the importance of including native experiences in the curriculum.

Pedagogy

Students and teachers alike consistently identified the use of hands-on and project-based work as best for achieving meaningful engagement in learning activities as indicated in the following statements,

Hands-on, I love. I like to work with other people. (Student)

I don't give homework where they could just copy it before they come in. I give a project that involves thinking and processing what we're learning. (Teacher)

A middle school student described a learning activity that helped him learn to love science while having fun,

For our science project today we had to pick a subject that we were doing our poster boards. I thought it was cool. Mine was on radiation and the effects of radiation on the human body.

Another middle school student describes how she learns best,

Like I know that if I'm doing a project—say like on my family tree—I know I like to take construction paper and take different types of things and make a model and explain it. I like to do that.

Teachers described how they utilized storytelling as a way of promoting engaged learning,

Well, the way the [state mandated] lessons are designed, I couldn't connect with the students. I started using this storytelling—very effective. So teaching language arts is much more effective with these students. [By] using storytelling, then they can create a link in order to listen and be interested in what I have to say.

Accountability

Recognizing the limits of using only one measure of student academic progress, (as specified in the New Mexico Standard Based Assessment or NMSBA), teachers spoke about how they employed multiple assessments for evaluating the progress of native students. One teacher explained,

Well, I like them to give oral reports and I like them to give some written responses. [Ofentimes] they like to do true or false or whatever. 'No, no, no,' I said. [Just] do a few of those, but I want to see some written responses. I want to see if they really understand. If they really understand they can formulate some ideas on paper to me. That's what I like to see.

Longitudinal data that tracks the same student across time is also important for assessing student progress. One teacher ponders,

It would be interesting... the 7th graders are being tracked right now—or, no, our 8th graders. They started last year to be tracked, and they're being tracked all the way through high school. It'll be interesting to see that Native American strand pulled out.

School Climate, Environment and Place

Students, community members and teachers recognized the importance of having a Native American liaison to facilitate and coordinate school and community relationships,

It [omitted] really is a community school. Many of the certified and almost all the non-certified staff are members of this community.

Vision

In addition to wanting better facilities, students were unanimous in wanting more courses dealing with Native American studies, films about Native American experiences and learning more from native elders.

They don't teach us enough of our culture.

We haven't really studied the Indian culture really here.

They forget about the Natives. It's like kind of mostly Whites.

Well, my freshman year they didn't really teach us anything about it [Native American History and Culture]. And well, we only got like probably one section of Native American history.

Like in New Mexico History, they just talked about how the Spanish took it over and that's it.

Students also lamented about the loss of art and music classes,

They don't have good music here. They have old instruments. They took away band. They took away art.

Parents envisioned a proactive way of welcoming community members to the schools,

I think the State should come up with funds for parents. Maybe that's how we can get the parents to come to our school and form a parent organization, where we can have a parent room.

Similarly, students pitched their own idea,

My vision is to have more Indian people to come to this school and start a Native American Heritage club.

Community members also envisioned creating pipeline programs that addressed the underrepresentation of local school teachers and administrators,

What I would like to see is more of our students becoming educators, and then eventually become administrators, and then get as far as becoming superintendent, and see what the outcome is. I know we have so many smart students out there that are very much capable of succeeding and becoming superintendent. I would like to see somebody from our community become that.

Relationships

Teachers, students and community members all felt that relationships based on mutual respect and reciprocity were key for creating a successful learning experience for students. One high school teacher explained,

Part of the pedagogy for me is developing a relationship with every student in my class to the point of calling every parent. I am privy to their personal lives and so I am able to teach them better—but it has to be based on trust.

Before a teacher can establish a meaningful learning partnership with a student, she/he has to have had an opportunity to connect with this student in a very personal and reciprocal fashion. As stated by another teacher,

Get to know your students as human beings--that makes all the difference in the world.

Teachers also pointed to small classes as spaces that facilitated the development of these relationships. One teacher commented,

Well you know it's 20 or less, and no bigger than that. I think that's the only way you're going to do more one-on-one."

Another teacher explained that small classes facilitated her ability to connect with students,

In a lot of those cases, the only difference between the pre-AP kids—starting fresh, never failed anything, on their way to college, doing just great stuff—and the English Workshop kids is that, somewhere along the line, when those kids were little in kindergarten or first or second grade, somebody grabbed a hold of them and said, 'You're smart, you can do this!' I have been moved to tears in this school when some kid looks at me and says 'Miss, I never got an 'A' before!'

OPPORTUNITIES FOR IMPROVEMENT

Educated Native American Person

Students explained that they longed for more opportunities to visit colleges and connect their classroom learning with their future careers,

There should be like more chances for native people to go to college because most of them drop out in high school.

Another student explained the importance of bringing elders to the school,

They should like bring somebody down from the village like a elderly and tell stories.

Another area for improvement stems from the opportunity to create a cadre of homegrown teachers. Currently there are very few Native American teachers in the Bernalillo District. Educational assistants remarked on their inability, like the regular teaching staff, to be involved in decision-making and setting rules, procedures and policies.

Language

Students frequently commented about language loss. A high school student longed for language courses in her school,

So that everyone can learn their language again 'because they're kind of losing it.

The main opportunity regarding the language class offering was the importance of offering native languages for students across all grade levels. A community member explained,

And what's a sad reality is you have elementary and middle-school of Keres speakers, but then when they leave middle school they have to come to this high school. Every one of the students comes to this high school and there are no [native language] programs.

Curriculum

Among the concerns expressed by teachers was the feeling that a compartmentalized curriculum may impede collaboration. Teachers wanted more opportunities to collaborate on project-based work with teachers from other departments. Community members, teachers and students also recognized the need to include more Native American experiences in curriculum. A high school student explained:

Well, my freshman year they didn't really teach us anything about it [Native American history and culture]. And well, we only go like probably one section of Native American history.

A teacher also echoed the same sentiment:

I can't believe that they don't have it! I just –really it's just incredulous that they don't have a Native American Studies Program right now. They should I think.

Given the rich history of New Mexico and the multiple resources available in the state, there are multiple opportunities to address this concern by making Native experiences the point of entry for the core curriculum classes.

Pedagogy

Students at both the middle schools and high school were unanimous in their critique of worksheets as a learning tool. A high school student explained,

The first semester we had a teacher, she never taught us anything. So we basically missed out on biology. We used to just like sit there and she'll give us pages out of a book. Worksheets and she'll ask us to have them done by the end of the class period. So we try to do them but we really wouldn't understand any of it.

Similarly, a middle school student lamented about the use of worksheets,

They give you a piece of paper and expect you to do it.

Teachers were also concerned about the rigidity of a mandated curriculum that impeded them from collaboration with other teacher on projects that integrated interdisciplinary knowledge and worried that the “canned curriculum” contributed to discipline problems,

Instead of building on what the child brings to the school with his knowledge or her curiosity, we are imposing all this stuff [canned curricula]. If you turned it upside down and said to the kid, “What do you want to do? Let me help you pursue that, then instead of fighting with the kids, we would be channeling their energy in a really productive way.

Accountability

Teachers and parents all talked about the limits of NMSBA for assessing student progress. They also suggested that individual assessment track the same student across time,

It would be interesting...one grade is being tracked right now all the way through high school. It'll be interesting to see that native American strand pulled out.

In regards to on-going professional development the overwhelming majority of teachers were unaware of the NM Indian Education Act. One teacher commented,

Not recently, no, I don't know what has happened. Well, I know that our federal government has responsibilities from old treaties to assure that Native children receive an education comparable to any other student child in America.

School Climate, Environment and Place

Teachers, student and parents agreed that schools need to revisit discipline policies. A high school teacher explained,

I sometimes get emails from a teacher saying 'How come I didn't suspend this kid? He should have been suspended.' And when I tell them I say, 'Well I could take care of the short problems, suspend them for three days and then he's going to come back with a lot of anger because he's already flunked the class.' You know I've been in this for 30 something years and at first I was one of those who said, 'let's get rid of them' and then I started thinking 'What are we doing? Why are we getting rid of all these kids?'

Student and parents also critiqued that the narrow focus on enforcing school rules such as dress code and uniforms, distracted from the task of learning. When asked what changes she would like to see at her school a middle school student commented,

Not concentrating on uniforms. Actually paying attention to the class assignments and stuff...better education.

Parents and students expressed concern that that Native youth were overrepresented in disciplinary situations, especially for minor infractions. They indicated that these disciplinary policies were a detriment to their education particularly for students who may already be struggling in school. This concern was particularly cogent for the parents of special education students. One mother explained,

...because there's not that kind of shared information, much less to their personnel, to understand what ADHD [Attention Deficit Hyperactivity Disorder] is and the law that goes along with it. So, my son is walking across campus with his iPod in his ear [used for psychotherapy] and a teacher pulls him over and says, "Well, you know the policy, give me your iPod."

I was in [the] IEP [Individualized Education Program] last year for a kid; 16-year-old, 3rd grade reading level, 3rd grade writing skills, failing all coursework. I sat in the IEP and asked, "What are the accommodations and modifications for this child? Don't you have books on tape? Don't you have the software for your microphone so he can speak into it and it writes for him?" [They responded,] "Oh, we don't have the money for that." It was just tutoring. They didn't have anything else.

Vision

Students, community members and teachers all articulated the need for better facilities. Indeed during a one rainy afternoon when the student focus group was being conducted, a chunk of wet ceiling collapsed just two feet from the group! A student joked,

[There was another time when] the lights went out and that the school had to be evacuated and students sent home because of a gas leak.

Another pressing need heard among teachers was the low level of technological resources available at their schools. A teacher commented,

I think it's sad. Because when we study about endangered species or threatened species, they should be able to look up on the Internet. I would like them to do projects like that, but I've found it difficult here since I don't have computer access. The day is going to come where every kid gets their laptop when they register. The day is going to come for that.

Teachers also expressed their desire to conduct learning activities outside the four walls of the classroom,

If I could really envision the whole school, I would be teaching my science outdoors as much as possible, or just have it all hands-on. It would really be nice to have a block system.

Another student expressed the same sentiment by saying,

At other schools they usually get us to go outside, but here they just make us eat then they make us go to our classes.

Relationships

Aside of creating smaller classroom sizes, teachers and community members pointed to the importance of having on-going professional development for teachers on Pueblo culture and the surrounding community,

I felt like our district had done a better job in the past of orienting teachers to cultural sensitivity. There are things that you don't do [in Native communities]. But without that training, it's really [a] glaring [mistake]. I think it widens the gap of the school from the community."

POLICY RECOMMENDATIONS

The Bernalillo Public School District has one of the largest percentages of enrolled Native American students in the State and is surrounded by Pueblo Indian reservations. It has a golden opportunity to serve as a model for the inclusion of Native American teachers as well as the representation of Native American experiences and history across the curriculum. Taken as a whole, the student, teacher and community voices point to some policy recommendations:

Educated Native American Person

Create bridges to successful postsecondary opportunities (e.g. college bridge programs; visits/summer programs on college campuses, etc.)

Language

Provide pipeline language instruction K-12 (e.g., few programs available in high school; existing programs are mostly in elementary schools)

Curriculum

Integrate Native experiences in required coursework (e.g., English, Math, History/Social Studies, Art, etc.) by providing on-going professional yearly development for teachers and administrators on how to infuse Native American perspectives in their lessons. Partnerships with all NM teacher licensing programs to ensure that teachers are competent in including Native perspectives in their lessons plans.

Pedagogy

Employ multiple learning activities (e.g., hands-on, project-based learning activities; not just lecture, worksheet learning activities, etc.) as well as provide teachers with opportunities for peer mentoring. Teachers need to be able to visit other classrooms and share and create innovative teaching methods.

Accountability

Portfolio assessments and follow the same student across time to assess academic progress (currently NMSBA/NCLB follows different cohorts of students)

School Climate, Environment and Place

Create an inviting and welcoming environment for Native students and their families (e.g. coordinate activities with Native American community leaders).

Vision

Proactive recruitment and nurturing of native teachers through scholarships and loan forgiveness programs.

Relationships

Small class size creates the opportunity for meaningful and reciprocal relationships between students and teachers, which is conducive to learning. Continued dialogue and partnership with the Pueblos to ensure the appropriate ways for enriching the Native experience in the District.

GRANTS CIBOLA COUNTY SCHOOLS

Methodology

In the Grants Cibola County Schools (GCCS) the study followed the school districts protocol to gain access to students and teachers from the various schools within its boundaries. In this regard, the study followed Indigenous methodology as it pertains to joint coordination and implementation of research as it pertained to developing the process within the district to conduct focus groups among the three groups identified for the study: students, teachers and community members. This process involved the local school board, district administration and tribal leadership served by the schools to be informed of the study, but further to give approval and suggestions to implementing the study. It committed the researchers to a more ethical and meaningful accounting of the findings so that any reports would first be shared with the participants, district and tribes, then to the contractor of the study, and finally to the general population of policy makers and interested readers.

The Superintendent delegated the Indian Education Director (IED) to coordinate with the researchers the dates, times and location of the teacher and community focus groups. For the student focus groups the IED requested the Home School Liaisons at each high school to coordinate the logistics at their individual school sites. These focus groups were conducted between January and April 2008 for about one and a half to two hours. The students especially wanted to continue for more time and suggested longer visits to their schools.

In January of 2008, the community focus group discussion was conducted after an Indian Education Committee parent meeting that was held at Mesa View Elementary School. The IESG was prepared to conduct several focus group discussions that evening but we were competing with a high school basketball game the same night so most of the parents and students left after the IEC meeting to attend the high school for the game. The parents who stayed after the regular meeting participated in two small group discussions of nine parents. Also in January, an opportune time was utilized for conducting the teacher focus group during a districtwide in-service day. The principals of each school were requested by the IED to ask for volunteers for this focus group. All schools in the district had at least one representative, and some had two, in the three teacher focus groups that included seventeen teachers in the focus groups conducted that day. The teacher focus group was conducted at the district administration conference building.

The student focus groups were the last ones in the district to be scheduled as the initial attempt to schedule during a parent-teacher conference day, a day when students are not in school and time is provided for parents and teachers to discuss student progress, resulted in only one student showing up at one school and none at the other. Therefore, the opportunity for conducting the student discussions did not occur until April when the school liaisons arranged with their principals and teachers, to conduct them during the final class period of a regular school day. This also required an extra step for the liaisons, as they also had to assure the students got their permission forms signed by parents to participate in these focus groups. The researchers conducted student focus groups at Grants High School and Laguna-Acoma High School on the same day.

Each focus group was facilitated by one researcher, and two assistants for collecting three forms of documentation: an audio recording, an assistant taking lap top notes, and another recording comments on a flip chart for participants to see as the discussion was conducted. Carlotta (Penny) Bird was the Principal Investigator for the District and she was assisted by Dr. Mary Belgarde, Dr. Tiffany Lee, Dr. Nancy Lopez, and Dr. Beverly Singer. Graduate students who assisted were Neomi Gilmore, Shynoke Ortiz, Vincent Romero and Carolene Whitman.

District Profile

At the time of the study every school in GCCS had Native American (NA) students enrolled. For the 2007-2008 school year, the district reported 41% or 1,516 Native American students from Laguna Pueblo, Acoma Pueblo, Navajo Nation, and other tribes. The highest percentage of NA students attended the schools located on tribal lands, Laguna-Acoma Middle Junior High School (83%) and Laguna-Acoma High School (94%). The smallest percentage (13%) of NA students attended San Rafael Elementary School, which is one of the smaller schools in the district. The table below is from the 2007-2008 School District Report (GCCS, 2008).

SCHOOLS	No. of Students (All)	No. of Anglo	No. of Hispanic	No. of Other Ethnic Groups	No. of Acoma	No. of Laguna	No. of Navajo	No. of Other Tribes	No. of & (%) of Native American Students
Bluewater Elem K-6	66	42	7	1	0	0	16	0	16 (27%)
Cubero Elem K-6	230	2	25	5	97	89	6	6	198 (87%)
Mesa View Elem K-6	397	79	194	11	30	15	65	3	113 (29%)
Milan Elem K-6	483	162	225	6	11	7	69	3	90 (19%)
Mt. Taylor Elem K-6	529	60	244	5	96	16	97	11	220 (42%)
San Rafael Elem K-6	68	6	51	3	1	1	2	4	8 (13%)
Seboyeta Elem K-6	49	0	21	3	2	21	1	1	25 (53%)
Los Alamos Middle School 7-8	473	100	204	12	65	7	67	18	157 (33%)
Laguna-Acoma Jr HS 7-8	81	1	13	1	23	40	1	2	66 (83%)
Laguna-Acoma High School 9-12	343	2	19	1	70	231	9	11	322 (94%)
Grants High School 9-12	936	208	404	22	141	33	111	17	302 (33%)
TOTAL	3,655	662	1407	70	536	460	444	76	1,516 (41 %)

From 40th day count October 16, 2007

In the same report the district documented a 94.68% attendance rate for its schools (NM was 92%) and a 94.54% graduation rate (NM was 90%). 74% of the student population qualified for the free-reduced lunch program. Three schools made Adequate Yearly Progress (AYP) and seven did not make AYP.

District personnel consisted of 300 K-12 certified educators and 270 support staff. Of these, the NA personnel were three NA licensed administrators, 27 classroom teachers, and 37 para-professionals. A five-member school board governed the district; two were Native American from the neighboring tribal reservations.

The District's mission statement is:

Every Student, Every Day, Building a Person for Life.

Community Profile

Grants/Cibola County Schools (GCCS) serves the three major Native American tribes of Acoma Pueblo (4 villages), Laguna Pueblo (six villages) and the Navajo Nation Baca Chapter in addition to the town of Grants and neighboring small rural communities of San Rafael, Milan, Blue Water, San Mateo, Bibo, Cubero, Seboyeta, and several other outlying clusters of homes. While the Ramah Navajo community of Pinehill is also within its school district boundaries, an agreement with the Gallup-McKinley County School district provides public school education for these children.

In 2005, Grants/Cibola County had an estimated population of 29,170 people at mid-census counts (Grants/Cibola County Chamber of Commerce, 2010). The pueblos of Acoma and Laguna have Bureau

of Indian Education schools, Sky City Elementary School and Laguna Elementary and Mid-schools, which provide additional students for the middle and high schools in the district. There are also several non-public schools in the area, St. Joseph Mission School, St. Theresa of Avila, New Sunrise Residential Treatment Center, and Victory Christian Academy (NMPED Directory, 2008). The school district reported 2,107 approximate total bus miles per day with 23.2 unpaved road mileage.

Largely a rural county, the three major employers in the county were Acoma Business Enterprises, Grants/Cibola County Schools, the Pueblo of Laguna and Laguna Industries. Both Acoma and Laguna pueblos operate tribal casinos adjacent to the main highway corridor between Albuquerque and the town of Grants. About 30% of the people worked in education, health and social service industries, followed by those working in arts, entertainment, recreation, accommodation and food services. Area attractions listed include Acoma Pueblo Sky City, Bluewater Lake State Park, San Jose de Laguna Mission, Chaco Canyon National Park, El Morro National Park, El Malpais National Monument, Ice Caves and Bandera Volcano, Mount Taylor and Cibola National Forest.

BEST PRACTICES

Educated Native American Person (Successful Student Indicators)

Students who participated in the discussions identified characteristics that contributed to their, or their peers, success. These included being resourceful, taking responsibility for learning, working with fellow students, talking with friends about positive and negative experiences, facing adversity, having future goals, having adult mentors, being resilient, being responsible for others, having parent's support [or family], being respectful, and having empathy for others. These indicators of success were exemplified in the following statements,

Just learn from each other.

I feel if you're a student and you really want to learn, then you'll learn by yourself, you won't wait...

It's okay 'cause there's other Native Americans that you can talk to about certain things. You can share with one another.

[From] my point of view, I got mad and I told her, 'well we'll prove you wrong!' So this past year they fired her 'cause she threatened one of the boys.

Giving back what we didn't have, to give to our kids.

I want to be a medical doctor and wouldn't mind working in ACL just so.. I'd be near my own people.

I want to be, like, an engineer. Maybe if it was for me and I had time, I'd come and help out with things, like maybe even teach and donate money; or anything that I could help just to get something going.

I want to contribute here, my community, by helping kids get off drugs and get back to what they were taught when they were smaller.

I wouldn't mind working here. I know it—I probably wouldn't even be the best pay, but I'd still want to come here and support my community here.

Teachers saw indicators of success such as: exposure to outside experiences, learning about other students and cultures, creativity, being able to express themselves and their needs, making decisions and choices, being connected to their communities, having a mentor early in their life or profession, being able to monitor their own work, attaining a college or post-secondary training, and accepting responsibilities,

Coming from small communities, I wished the students were exposed to the outside. They need people who are promoters to the outside.

When I look at some of my Native American children, it seems like they may not be paying attention in class but they are.

The stories of who they are and where they come from really come out and their creativity's amazing.

I know that the children I've worked with, if they feel uncomfortable about something in school...they let you know.

The traditions where the kids who live out in [the Pueblo] and who live on the Navajo Nation and who live in Acoma do well.

The first time I became involved with education was as a teacher aide. I had an Indian teacher who convinced me that I should go do that because there was no men in lower grades.

By them sharing, learning, they become closer together and they trust each other to continue learning.

I'd like to see them go to college or some post-secondary education to better themselves.

Actually the kids learn that there is certain responsibilities as you're growing up; you're gonna' have to be doing these things; so don't be always running around... it's hard to be Indian because you have much more to do.

Parent's perspectives on success included: participation in extracurricular activities, learning their language and culture, learning to think, having intellectual knowledge, practicing their native traditions, having self-confidence, setting goals, having family support and being persistent. Several of them mentioned how important it was for students to know who they are as Native Americans.

I think our language shapes the way we think. I should think they'd all learn their language.

...a whole basis of our tradition is the language. And you have to know the language in order to be a part of the tradition.

Language

On the topic of native languages, students expressed the desire that language classes be available for all students. One student stated that

I am [Acoma], but I am not enrolled in the Acoma, so I cannot take the course; and that's what sucks 'cause you have a lot of Acomas that aren't enrolled.

At the time of the study there was not a class for Laguna Pueblo students, and Navajo language was just beginning to be taught at a couple of elementary schools. One Navajo language teacher described her beginning steps in teaching the language.

We don't really do any type of testing or anything 'cause we just basically work with the Navajo language. We translate what we're saying or talking to them in Navajo and translate that into English, so we're doing two different things... Well their home language is right now is English. So we're trying to re-teach them the Navajo language.

Several non-native teachers felt that they needed to focus on languages that would assist the students in college, i.e., Spanish,

You know the Native American students don't think they should learn it. They don't have to, and lately though, they know that they need two years of a foreign language to go to college. The Keres doesn't count for college.

The native language teachers also talked about the best time to develop instructional materials and curriculum since they could not readily buy their resources from educational supply stores or publishing companies,

If you are going to work on the curriculum it takes the Summer—not when you are having class, and when you're teaching. I know that when I develop that curriculum I have to align with the NM standards. So it's really hard to develop something like that.

Parents saw the native language classes as a positive direction taken by the schools.

I have a son that goes to [omitted] Elementary and they have a Navajo class which motivates my son to go to school. I really, really like that Navajo class. I really appreciate that... There's so much strength in that class and that I see in my son."

I think it's good for them to learn it and I'm glad that some of the schools in the district are seeing it as a priority and been able to get it in the schools.

I guess that's like a strength too at [omitted] Elementary, [omitted] Middle, and [omitted] High schools as they have to teach the Keres language there and a lot of the kids there have already started when they were in Head Start. At [omitted] they recognize Acoma as a foreign language; it counts as a credit towards graduation.

I think that [teaching the language] gives a lot more support back to the community.

I wasn't really taught. My son comes home and tells me 'mommy I'm not supposed to do this.' He learned all these taboos from the Navajo class.

I think they teach him a lot there and they learn. Especially like from the men. The men are like the ones who really know more than the women about the tradition and stuff...they've got some male teachers that teach them at the schools. I hate for my son to lose out on that part of it [Keres class].

It makes them proud of themselves, their self-esteem.

Curriculum

Students identified a few courses where Native American content and knowledge were being incorporated into some of the instruction and then courses where it would be possible to include more. Identifying courses like U.S. History, New Mexico History and Native American Literature that they felt could include greater content. One student shared that,

Well, if you actually look in the textbook, it's actually about everything in New Mexico and there's just one small section about Indians, about Native Americans.

...learning from different cultures. It was [a lesson] about African Americans when they first came here and when they were sold and captured. That was really interesting; learning about other places [and how], like, other people have a style [way of life] and how it's still going on. But at the same time, you want to learn more about yourself; like more about Indians."

Students also expressed a need for courses that would include relevant life skills to prepare them for "the next step." One student talked about the benefits of a supplemental program in the following way,

It's a really great program because they show you steps like how to apply for college, how to write a resume, what things you should be looking forward to, what kind of recommendations you should be getting; basically preparing you for the next step.

In the teacher focus groups, a couple of teachers talked about a school wide oral history project that students participated in with the support of parents and community resources that culminated in a community celebration showcasing the student projects. It was seen as a successful and meaningful experience for all who participated.

We get them involved in projects that have to do with language and culture. In history there is a different project each nine weeks. We pick ten students to present their projects in May.

So we take about 40 kids to this conference and they present [their oral history projects] to tribal leaders and their families and the elders. And you know what? It's really pretty cool 'cause they do power points. And they bring the pottery [for show and tell] or a jacket that their grandfather must have been [theirs] in Vietnam."

The parents supported these experiences saying,

My son likes the classes offered, especially music. My son was in a project for social studies, he did a family tree... They had to go five generations back.

The teachers also talked about the new classes added to the school curricula related to reading practice and a test prep that was included in their instructional day that prepared students for the annual round of state mandated tests.

Pedagogy

Students are very aware of the methods and strategies teachers use in the classroom. They experience this on a day-to-day basis so they recognize teaching and lessons that work for them. Students stated,

The way the teacher did it, it was pretty cool to see it. But to really have to do it; it was more work. Yeah, it was fun!

Field experiences and authentic knowledge shared by their teachers made lasting impressions on the students

[The teacher] just mainly tells us about that place. He's really good at it; he makes it interesting. The way he taught, I don't know—everybody just listens to him.

Other students appreciated the teachers who made the effort to ensure that they understood subjects known by educators as ESL scaffolding methods and the use of multiple resources;

Some teachers are really good at teaching because they explain it step by step, and if you don't get it, they'll keep going over it. One of my U.S. History teachers used to really get in depth and show video clips off the internet and stuff. And, like, he would know from his own experiences because he would travel across the world. He'll get certain movies and get into it. And then we'll have, like, a project on that to learn more about it. And then he would teach the class and then they would ask us questions about it; like what we learned and stuff.

Many of the teachers talked animatedly about,

...trying to do things to make things a little more comfortable for their learning, making it fun. You don't want 'em going home at the end of the day frustrated.

Hands on. They love to do things, i.e., in the home-ec course, the foods, the cooking. A lot of my students learn visually. It's hard to explain [and] I have to break it down. Native students have a good understanding if you go through the directions thoroughly. I taught at Mora; learned culture and values and different things. [I] had to change my teaching style because natives learn a great deal by hands on.

Other teachers talked about how to use “teachable moments” and student’s prior knowledge as keys to good instruction,

I think sometimes in class you just need to take a few minutes. If the kids want to talk about something, even if it's not in your lesson plan, just elaborate on it and build it into something that they can do in math or reading or something; but something that interests them rather than so much structure.

Some of the teachers talked about the impact of new policies and interventions from the State on their classroom teaching.

There is a great frenzy in our school, great stress... So we use those best practices that the State says we are supposed to use. We are not allowed to be innovative, especially in the lower grades, K-3. They have to learn [to] use that scripted curriculum and so that is considered best practice.

Accountability

When most people hear the word accountability the immediate connection is to tests and measures of student progress that are quantified. Students see other measures of accountability. Students in this district want teachers and school administrators to have high expectations of them, just as they have high expectations of teachers, support staff and administrators in their schools. They also desire a full curriculum and know that what they receive often falls short of what they had anticipated,

Here, Native Americans are, by certain teachers, being left out. They don't teach the full thing. This school is behind a year in their academics and they're not trying to catch up. Last year we had one teacher that said us

Indians would never amount to anything! And like some teachers, they'll ask you what you want to do when you go to college and when you tell them, they're like 'oh, you can't do that. I don't think you'll be able to do that. You're incapable. You're not smart enough.' I think they need to rewrite their books and actually ask questions about things, and find out the answers. They need to tell the truth.

The students saw others getting opportunities and privileges that translate to them as inequitable treatment. Certain students saw the school's implementation of policies and procedures as more of a communication issue,

If you talk back to the teacher you get ISS [In School Suspension]. Or, it depends on the certain teacher. Some kids are let go and then some aren't. It's like some kids are favored over others. It's even worse when the teacher sees they're copying and not say anything to them.

They don't have enough communication to where they actually bring us [in and say], 'Well, you're failing in this class.' [Instead] we find out through our report cards. It's just like, 'oh, your daughter's doing fine.'

This discussion led to sports, and the perceived special treatment awarded to the "jocks." As an accountability issue by teacher and administrator understandings, it calls up the speculation of inequitable grading practices.

Like in one of our classes, there's like three jocks in there; and the rest of us do our work and turn everything in, and they don't. And they end up with the same grade.

And they get an extension or they can come in after school and redo their test, and we'll get like low grades, and they'll get like 126 with extra credit.

Or, participate in sports. I hate it because they always pick the same people over and over. And if we're like Native, we're supposed to like try out... They don't give them a chance."

For the teachers, accountability was clearly an assessment issue centered on the mandated standardized tests and all the requirements put upon them by their school administrators,

I don't think those teachers make those tests up. Trying so hard to meet those goals. Sometimes that's all some teachers do; just to pass the AYP. They're not doing anything else but preparing [for the test].

Us too, making sure students make AYP. No time for hands on science or social studies. It has to be reading. We have a two hour block in the morning for reading.

When asked about "what works" they talked about alternative assessments and getting to know the students strengths on a daily basis,

I'm a big project queen. We do projects, 'show me this.

I do a lot of journaling and a lotta' writing where there isn't anything to be graded except the process.

I tell them, all of them, not just the Native Americans, upfront; here's your rubric. This is what you're gonna' be responsible for.

It's actual work products. So the child has to be responsible for producing the product.

Keep [a] record of all their class work. It helps me assess. Take it step by step to help them understand. Keep notes and records.

Several teachers brought up their concerns with student attendance as an accountability issue,

Grades and performance are affected by attendance.

Attendance is an issue across the board.

...there are pros and cons. There are some teachers that are you know okay with it [being absent for tribal activities] and there are some that say they have to be here. Because if they're not here, they have to have a letter from the [tribal] Governor to say that they actually participated; even [for] a funeral.

A student had expressed the same concern,

It's about the teachers. They don't understand certain things; why you need to go to the village, why you do this. I do religious things on her side, and they tell us that I need a permission slip from the Navajo Nation.

Parents interests focused on teacher qualifications and school programs that were developed specifically for Native American students. They see themselves as having a role in making sure these programs are appropriately taught and administered,

We have a full time teacher who is not a state certified teacher and she is more on the level of a teaching assistant. We have her full time and last year she did her Navajo [language] classes only with the Navajo kids, which kids liked. And this year is when it got reinterpreted so that those Navajo culture classes—[as] they [are] call[ed]—now have to be taught to everybody. ...The [native language] teachers, they are community members and role models in the community, so that helps. And like when they see each other somewhere else they greet each other the way that they have been taught. When my son joined the Navajo class we filled out a survey form [indicating] whether [it was OK] to accept him to go to that class or not. So it was up to me as parent to let him go”

School Climate, Environment and Place

Students know that classrooms have to be comfortable and inviting for them, their parents and community members. When asked about school climate it was both the physical environment and the atmosphere, or tone, established by staff, teachers and administrators that students referenced. These could be negative or positive depending upon the situation. They appreciated teachers who welcomed community people and who tried to understand the native culture. Students told us,

That is a problem here. I went into English this morning and it was freezing in there. And then it gets all hot.

Teachers, however, responded in a more general manner, reflecting their complacency and acceptance of the routine,

It's an age old story that we've had—the gap we had between the public schools and out[lying] local communities. We all understand that.

And they can do both, they can participate in what they are doing and they can also come to school. But we still do not have that ideal kind of relationship that understands [where they come from].

Teachers also expressed frustration with the heavy emphasis on testing placed upon them by the State and federal policies. However, they also shared promising practices that would bring about positive changes in their schools,

Well we're in the school that has the subgroup that didn't make our scores [AYP]. There's lots of pullouts. Just when you sit down, get ready to do something, there goes half the class this way; and then another group goes this way.

We send a newsletter once a month to keep them up to date to keep contact; and phone calls when needed.

We have a parent advisory council.

We usually hold monthly parent training meetings, where we teach the parents what we teach the kids in our classroom because a lot of our parents are young [Navajo] parents.

Parents had different perspectives about school climate that seemed to vary depending upon the level of involvement that they had with their children's schools. The more involvement the parents had with their children's school, the more positive their opinions were of the school,

I have an 11 year old at Mesa View Elementary and I think one of the strengths there is that the classes are small, so he get a lot of one to one, and he does really well with that.

What's good about his school is they, you can go to the school, as parents we can go to the school anytime and they... it's always real inviting.

I've been able to get into some programs with my kids just because I've been there; get some different opportunities just because I'm there.

The principal is open, and will talk with you.

We had a night Christmas Parade in December and my husband and I, as parents, got involved with setting up the float and decorating. And we placed [won] in the float and that was a good feeling.

The parents also expressed more openness from the District in regards to information about the schools, finances and programs for their children,

Now we have Acoma people on the School Board, now we are part of it. [We] know about the funding [and] they're showing us numbers now. They never shared that with us before.

Vision

The students' vision for the future included some immediate steps that schools could begin and some ideas that schools and districts could utilize for long range plans. Students wished for schools where more Native American knowledge is incorporated into school curricula. They also proposed a curriculum with skills relevant to their current lives and most importantly, they wanted a more respectful place to learn about the world.

If we're learning about Americans we should [also] be, like, allowed to do an activity in our own [cultural] way—like sing a native song, bead or make jewelry, make pottery, baskets.

Have softer chairs, since we sit in them so long. Arrange chairs in a circular setting.

Have class later in the day.

I would like to see the Laguna language [taught].

I would like to see more organization, like within the faculty. There's a lot of communication errors. A lot of teachers don't get along with staff, and staff are the same with faculty or students.

Teachers who are more supportive.

Have different races of teachers not just one. Have different people at school. Have nice people who will not say bad things.

Everyone is treated with respect.

Be able to hang-out with any student and not be put down for acting White—just be yourself!

Have an all Native American school.

Giving back what we didn't have, to give to our kids.

Teachers expressed a vision for more coordination and partnerships with local native communities to address issues such as attendance, curricular enhancement and communication. They also saw a greater emphasis on the use of technology to connect students to the wider world.

The Navajo tribe had an agency that we could report any Navajo child with attendance issues and that was taken care of.

They could invite grandmas in; like, he's doing geometry now. Did you know that grandmas know how to design with geometry?

I'd like to see more Native American teachers, [at least to the point] where they don't have to go to another classroom.

It'd be cool to have telecommunication; classrooms to talk to across the country so the [students] can have pen pals. Team teach with teachers in other states.

Parents had a broader view of what could be had in the future. Among these were their desires to see more students attending college and getting not only a bachelor's degrees, but master's and doctoral degrees. They could see more native teachers in the schools teaching their own history and a broader curriculum. Parents grounded in the here-and-now wanted schools with the latest technology and textbooks.

They wanted school facilities that accommodated modern learning environments and provided for the safety of their children.

See more Natives going into college setting and teaching.

I'm trying to find sources, other ways, how we can get high speed or the wireless, or what we need. It's difficult when you are on the reservation.

We would have our own people teaching history.

Most of the money should go for student supplies and books. Some students don't have books. The teachers make copies of the textbook so that students will have assignments.

No more patch jobs. Fix the roofs so that it will last. Air conditioning, so it is more comfortable for the students.

Native language would be taught at all schools.

Relationships

Students saw their schooling in relation to other students and their home communities, and how they were able to help each other.

It's okay 'cause there's other Native Americans that you can talk to about certain things.

I want to come back to my own community to help.

I wouldn't mind working here. I know it—I probably wouldn't even get the best pay, but I'd still want to come her and support my community here.

You can share with one another.

...spend a day in our shoes, [and see] what we go through everyday; why we do what we do. All of us, we're all in student council, so we're all trying to make a difference in this community.

...like now, if I got more homework we [would] have, like, our parents to talk to and stuff; and to work our way through it.

...like one of our friends. She goes home; she watches her brothers and sisters for like two or three hours, then she goes to work. Some have it hard[er] than others, I guess.

Teachers who expressed a commitment to their profession found it through the relationships they made with students.

You know, when I went into it [teaching] I just wanted to be in the classroom. I didn't think Native vs Hispanic vs Caucasian. It was just the kids. I just wanted to be there with them.

What I liked in the classroom? I would like the challenge, each day, of seeing how kids [were] progressing or working with people. It was just an enjoyment to see all the children.

I wasn't a good student myself ...but at least I graduated! When I started working there, you know; all I wanted to do was to give back to, you know, the community...

Parents appreciated the teachers and staff who were willing to take the time to know and assist their children. Participating in school activities was an important part of their parental support.

My son participates in Native American club at... And that's a motivation for him; in fact the Title VII assistant is the sponsor for that and she is always outgoing and willing to go the extra mile to get the students involved.

He set a goal for himself. And how is the family going to help him with that? And his goal is to get all As by the end of the school term.

We all encourage him. Continue to give [and] to offer support. Because I know that my son understands that he doesn't... We don't expect for him to be perfect. But all we expect is that he try and do his best.

OPPORTUNITIES FOR IMPROVEMENT

Students in both high schools indicated that their textbooks were old. Their schools' technology resources were not always available or reliable. This situation limited their ability to access new information and learn new skills. On one hand, the lack of resources is an accountability issue. Parent groups, schools and the district need to revisit the budget and see how improvements can be had on a regular and timely schedule. On another hand, the heavy emphasis on schools to push for making AYP has certainly diverted resources away from a quality facility.

Moreover, Native students spoke about the inequities they experienced at schools "in town" verses those "outside," on the reservation. This extended beyond comparisons they made about the differences in facilities and services available at each locale. They also saw inequities in grading practices and how extra curricular activities such as athletics were more highly valued than cultural activities. In addition, students had a perception that they were not being taught "the truth" about their native communities' rich history, culture, knowledge and contributions to the larger society.

In and of themselves, all of the above issues are major concerns. In combination, however, it has created a perception that native children are not worthy of quality education.

There is an urgent need for the schools, district administrators, school board members, parents and tribal leadership to develop working relationships to make positive change. There is also an opportunity for schools to meet with the tribes and local businesses to assure more involvement to bring resources to the schools.

POLICY RECOMMENDATIONS

It is clear that the solutions for greater student achievement can be found in the district and communities they serve. There are some issues that will take a larger role of advocating for the greater good of students by all the partners identified in this community of educators. Those coming from the concerns and recommendations made by the students, parents and teachers include the following:

- ◆ Curriculum and instruction be expanded beyond "teaching to the test" to what one parent saw as "students live in two worlds; they must be educated to work and live in their communities." Here one must note that they did not say one community, but many.
- ◆ Native languages must be taught to all students. Whether this includes the non-Indian students has to be discussed with those who have the authority and responsibility for their heritage languages; which presents the district the opportunity to partner with their neighbors on the reservations on a truly meaningful interaction. The legal means for this to occur has already been set in place as law at federal and state levels.
- ◆ More Native Americans in the classroom, counseling staff and in administrative roles was seen to be a positive future vision by students, parents and teachers. Establishing partnerships with higher education institutes, the PED and tribes being served by the schools could assist the district in providing these needed professionals.
- ◆ Qualified staff is more than a degree. Professional development for all school personnel about the Native American communities has to be a regular and on-going component of anyone working in the district. This would minimize misunderstandings and miscommunication that contribute to attitudes and beliefs that are detrimental to student learning and school functions.

POJOAQUE SCHOOL DISTRICT

Methodology

Dr. Beverly Singer was the Principal researcher for this District. She was assisted by Dr. Carlotta Bird and student assistant, Neomi Gilmore. The initial approach to the Pojoaque School District was by letter and phone call follow up to the Superintendent of the District, although the Superintendent resigned the position before the study was concluded, she was in strong support of the District's participation in the IESG study. The Superintendent included the Indian Education Advisory Committee at the first meeting between the IESG and the Pojoaque School District at which time, lead IESG Principal Investigator Dr. Ted Jojola (from Isleta Pueblo) accompanied by Co-PI Dr. Beverly Singer (from Santa Clara Pueblo) sought permission to conduct the study and was approved. The Indian Education Program Secretary based at Pojoaque High School was assigned as the IESG contact person to coordinate the study with the schools. The Indian Education Secretary worked with IESG Co PI Dr. Singer to establish the protocol for conducting the study, helping to set up focus groups, identifying potential participants, and obtaining parental permissions for students (parental consent).

The decision was made by the District to hold Focus groups only at Pojoaque High School, with the possibility of interviewing teachers from the elementary school but was never realized due to scheduling differences. The Focus groups were conducted by IESG Co PIs Dr. Beverly Singer and Dr. Carlotta Bird between May 2008 and February 2009 at Pojoaque High School with teachers, followed by a student focus group with the final community focus group held at the District offices. The Focus groups were each 1.5 hours in length. In all, 25 participants shared their perspectives that included 13 students, 5 teachers, and 7 community members. All the student participants represented one or more of the local Pueblo Indian communities of Pojoaque, Nambe, San Ildefonso, Santa Clara or Tesuque.

Dr. Singer completed the initial coding of the data from Pojoaque followed by Dr. Carlotta Bird, and a third reviewer (another PI) compared the first level of coding to the transcripts to determine their levels of agreement or disagreement. This was to insure reliability on the first two coders. For those codes where there was disagreement, the IESG team discussed the code, associated quotations, and context of the quote until the group arrived at a consensus on how to code the data.

District Profile

The data for this section is taken from Academic year 2005-2006 for the Pojoaque Valley Schools that consists of four schools, Pablo Roybal Elementary, Pojoaque Elementary, Pojoaque Middle and Pojoaque High. Six Tewa speaking pueblos are served by the Pojoaque Valley School District, they include Nambe Pueblo, Ohkay Owingeh, Pojoaque Pueblo, San Ildefonso, Santa Clara Pueblo, and Tesuque Pueblo in addition to Jemez Pueblo, Zia Pueblo, Taos Pueblo and Navajo students. A Native American Parent Committee is appointed by the six main Pueblos and organized by the Indian Education Department based at Pojoaque High School. The District receives federal Impact Aid and has signed Indian Policies and Procedures with each of six main Pueblos. In 2005-2006, the District had 383 American Indian students enrolled (19.20%). Hispanic students led the school enrollment with 1,442 (72.40%) students. The total enrollment for the Pojoaque District was 1,991 students. The District reported having a teaching staff of 133, with the greater number of teachers at the elementary and high school. In 2005-2006, Pojoaque High School reported the graduation rate for American Indians at 85.7% as compared to a State-wide figure of 79.7%. Proficiencies as reported by the Pojoaque District at the high school level for American Indians being 6.3 for Math and 35.4 for Reading.

The school district's motto is,

When visiting another country or person first learn the customs and courtesies expected of you.

The school district's mission is,

The Pojoaque Valley Schools will provide students with the skills and knowledge to enable them to become productive and responsible citizens by exceeding the standards set forth by the New Mexico State Department of Education.

The district's statement on Indian Education is,

It is the intent of the Pojoaque Valley School District that all Native American children of school age have equal access to all programs, services, and activities offered in the school district. A shared responsibility and partnership exists with the pueblos of Pojoaque, Nambe, Tesuque, San Ildefonso, Santa Clara and Ohkay Owingeh to ensure that they actively participate in the development of their childrens' education. Tribal officials and parents have the right to comment on the participation of Native American children on an equal basis in all programs and activities offered by the Pojoaque Valley School District.

Community profile

The name "Pojoaque" was derived by the Spanish who arrived into the valley in the 16th Century who heard *Po'suwae-geh* used by Tewa (Pueblo) speaking peoples referred to as the 'water-drinking' place.²⁰ Pojoaque is located 16 miles north of Santa Fe at the junction of U.S. 285 (the highway to Taos) and New Mexico Route 4 (the highway to Los Alamos), a major crossroad and entrance into Northern New Mexico.

Pojoaque Pueblo has occupied the valley since at least 1150 A.D..²¹ From about 1540 until 1848, the Pojoaque Valley and the six Tewa speaking Pueblos of Pojoaque, Nambe, Ohkay Owingeh, San Ildefonso, Santa Clara and Tesuque was subjected to Spain's Colonial rule and were forced to adopt the Christian religion and serve the Spanish Crown.²² Following Mexico independence from Spain, the Pueblos were governed by Mexico. In the aftermath of the Mexican-American War of 1846-1848, Mexico surrendered the lands that included what later became New Mexico to the United States under the Treaty of Guadalupe Hidalgo. However, the Indigenous Pueblos had received Spanish land grant title to their ancestral lands that "was confirmed by the U.S. Congress in 1858 and patented by the United States on November 1, 1864."²³

By 1913, "due to the encroachment and loss of its irrigable lands, most of the Pueblo of Pojoaque members were leaving the village to live and work in neighboring Pueblos and surrounding communities."²⁴ With its' land base of 11,603 acres, the Pueblo of Pojoaque was federally recognized as an Indian reservation by the United States in 1936.²⁵ Because of Pojoaque's nexus location during the seventeenth- and eighteenth-century, the Pueblo's major population was lost or absorbed by other Pueblos and has higher mixed-ancestry. Those who lived in the Pueblo since the resettlement in the early 1930s are an admixture of Tewa, Tiwa, Hispano, and Euro-American.²⁶

The 1990 Census counted 177 enrolled tribal members; in 2007 there were 373 Pojoaque Pueblo tribal members.²⁷ The Pueblo's population consists of mainly young members: According to the New Mexico Voices for Children-Kids Count Special Report of 2005, the 2000 Census reported that of the 311 Native Americans living on the Pueblo, 123, or 40 percent of the population, were under 18 years old.²⁸

²⁰ Lambert 1979:327-8; Guyette 1996:83

²¹ Pueblo of Pojoaque Governor's Office Testimony 2007:1

²² Jenkins 1972:113

²³ Pueblo of Pojoaque Governor's Office Testimony 2007:1

²⁴ Ibid.

²⁵ Guyette 1996:84

²⁶ Lambert 1979:326

²⁷ Pueblo of Pojoaque Governor's Office Testimony 2007:2

²⁸ Ibid:2-3

The other tribes whose children attend the Pojoaque Valley schools include Tetsugeh, Nambe, San Ildefonso and commuters from Santa Clara and Ohkay Owingeh. The main feeder schools from these communities include, Nambe Pueblo Head Start, Tesuque Pueblo Head Start, Tetsugeh Day School, San Ildefonso Pueblo Head Start, San Ildefonso Day School, Santa Clara Pueblo Head Start, Santa Clara Day School, Ohkay Owingeh Head Start and San Juan Elementary School.

With the expansion of the major highway north from Santa Fe to northern New Mexico the Pojoaque Valley has changed from a largely agrarian environment to one where the largest employer in the area is the Cities of Gold Casino which is owned by the Pueblo of Pojoaque. They also operate the local museum and gallery which serves as a major cultural hub for the area as well as extended educational service provider through its program that brings in artists and cultural resources from the surrounding pueblos to teach their talents and skills. There are several small business enterprises in the area, i.e., gas stations, restaurants, galleries, utilities, health clinics, and flower shops that also contribute to the economic base of this thoroughfare.

Pojoaque Valley schools are within the northern sector of Santa Fe county and in a recent strategic planning document, it states that the area was designated as a Traditional Community. “The original criteria for Traditional Community status has been continued and incorporated into Article XIII of the County Land Development Code. A place that receives a traditional community status must have the following criteria:

- ◇ Continuous settlement since 1925;
- ◇ A historic pattern of diverse and mixed community land uses which carried through to the present;
- ◇ Presence of historic structures;
- ◇ Existence of a village center.

The Pojoaque Valley settlement areas of Nambe, Pojoaque, Jacona, Jaconita, El Rancho and Cuyamungue were designated as Traditional Communities in the 1980 General Plan based on the criteria above.”

BEST PRACTICES

Educated Native American Person

Participants shared the view that a balance is needed between one’s Native identity and the mainstream in order to be successful in contemporary society. One student participant said,

I think it should be a balance between your traditional heritage and what's going on in the world around you now; like [the] modern thing.

Another student voiced it in the following way,

Like, give back to the community—my community; the Pueblos.

Community members were especially adamant about what an educated Native person was,

I'd like to see very strong Native American men, women who are well educated and can do any kind of job in the mainstream, but at the same time have strong Native American values, traditions, culture and language because we keep everything in balance by continuing to practice our ways.

Language

The survival of Indigenous languages are of great concern as speakers of Indigenous languages dropped significantly in the 20th century and although there is renewed effort and attention being made to support Indigenous language learners, some Indigenous languages have already gone silent. The Pojoaque Valley School District offers Tewa language classes, the local language spoken by the local Pueblo peoples. One community participant stated,

I think Native American language is really important for students in order for them to succeed in their traditional lives.

On the other hand, some students were less enthusiastic about learning Tewa. A teacher gave one reason why,

Students get very frustrated and I can see why because they don't understand [what is being said in the language].

Community participant perspectives provided several ideas for visibility of the language study to capture its' value and as an incentive for students to learn Tewa. One community participant called for an end of year program where Tewa speaking students present, stating,

It's very important, but we are not seeing it. The community would like to see something, a public event or a way to integrate [Tewa] language at a District meeting like they do for Spanish bilingual students.

Other statements by community participants indicated that,

...if we could get special guest speakers-to share cultural traditions to have more community-coming into our classrooms [this would support learning].

...our school district does have Tewa, that it is recognized as a heritage language that our students are able to take this, that schools such as UNM will accept it as a credit.

Curriculum

Students perceive what they learn at school needs to be relevant to their lives to help prepare them for life. Students would like more detail and information in their curriculum especially with regard to Native American studies content concerning history and knowledge about all tribes. As one student states,

I expect to learn about the different Native American tribes throughout the U.S.

Students find benefit in a comprehensive overview that includes all tribes and where the whole story is told, as indicated by a student who wants "our side of the story" to be told.

Yeah, there's a little bit. There's like, like in New Mexico history they only have like a little section of Native Americans, that's it and the rest is Hispanics...

Teacher perspectives affirm student statements regarding a curriculum that engages students to relate their culture and community experiences as relevant to the learning process. Teachers indicate having to teach to the State requirements and tests that depend on units or small categories of information. One teacher used the example of World Literature that could be taught from multiple perspectives as means to get students to think about where knowledge begins.

What we have to teach and it's literally aligned from the state level, even the people that we have to study; and I think that to be, to have a more open curriculum model requires kind of step back from that model also.

Everything has been chopped up.

One teacher used the example of World Literature that perhaps could be taught in collaboration with another topic area such as science, and that curriculum has to be meaningful for the student.

World literature we start with that so we'll collaborate. We were talking about the womb and where does thinking begin because when you're developing in your mom and that whole internal world.

That's how when I do fieldtrips, I try to make it to where it relates to them and it's gonna stay with them and maybe history wouldn't be repeated.

I do know a lot of Native American, I guess history; especially up here. I know a lot of plants and stuff like that. I try to engage them in a way that might relate to their culture or what they go back to their Pueblo for.

The community perspective regarding the curriculum was the importance of teaching about Native Americans not as conquered peoples.

I think that would be encouragement to our students, to be able to relate their culture because they do come from a different world where they do have their traditions.

New Mexican history of course, well, whose history are they presenting? And when you look at American history and the books that are use, very rarely is there any justice done to Native Americans. In fact, more often, from what I've seen, the Native Americans are portrayed as subservient and just in awe of and grateful for the conquistadors, where they actually had illustrations in the books.

Pedagogy

Student perspectives are consistent with trends regarding the need for hands on learning environments that require activity-based assignments outside the classroom. Student participants shared ideas for positive learning,

More fun activities.

Music is fun!

It can be arts and crafts.

And do stuff like that people...could teach you but you can learn it at school.

Teach more useful skills.

Teacher perspectives are in agreement with regard to having students apply what they learn based on experiential/ hands on learning believing that it allows for positive reinforcement and confidence building. The most highly sought after classrooms for students were technology-equipped or 'smart classrooms' to prevent boredom from constant lecturing, being stuck at a desk with limited activity that does not give them opportunity to apply their knowledge or feel they learned something. Teachers observed that teaching also involves

...moving beyond a student's ability to memorize but actually comprehend and apply their knowledge.

Relying on their background knowledge and their experiential learning is key to their learning. And when you do a lot of group work and a lot of oral presentations that builds their self esteem and their self confidence to where they can face whatever challenge they have in their other classrooms.

Another effective method outlined by one of the teachers was to provide student opportunities to give oral presentations to build self-esteem and confidence. Teacher participants indicated they use different methodologies because no student learns in the same way. According to one teacher,

I try to do more hands on things. I try to do projects; to allow kids to work in groups although I haven't recently found that to be as effective as I used to. And I've attempted to allow my Native students to try and pick something out from that time period that approaches their history so that they can try and buy into it or find it to be more interesting.

Accountability

There is a degree of frustration among students regarding inaction by the school to their issues. This was evident when students asked,

How are you [researchers] gonna' take what we're saying and change, like, our school?

Students proceeded to elaborate on the reasons for their cynicism. Among those mentioned were:

Parent/teacher conferences have to be scheduled on your own.

Grades get mailed out.

Teachers are slow to change or update grades, doing it last minute and it appears that teachers are lazy, but students too are lazy.

One student related,

When a student gets bad grades and then they start turning in their work... but teachers don't turn in their grades and so the poor grade stays on the student record because they don't update your grades.

Students also indicated that Pueblo leadership should be more responsible by faxing an official letter to the school excusing them for participating in tradition-based ceremonies at their community.

Then you have to go talk to the teacher and tell them why and sometimes they don't understand why you were gone. So it's not excused and yet it is, "Why are you gone?" And then you kinda' like explain in detail to them why.

With regard to student progress and transitions, one teacher stated,

We as teachers need to have time to collaborate or just to sit and have discussions. And I think that's very important when we have kids making that transition from 8th grade to freshman, to high school, 5th grade to 6th grade and 6th grade to 7th; all those transitional grade levels. But there's no communication...

Teacher perspectives on accountability fell into three general categories; time constraints; the need for stronger parental involvement, and concerns that few native students are excelling in anything. One teacher indicated it this way,

You just have to know the student, where they're coming from and their progress. I mean there's so many programs that we have here. But [even though] I feel like we're helping them to make progress, but for who's sake? Is it for the student's sake? Is it for the school's sake? Is it for the District so that we can look pretty in numbers—so that we're not one of those numbers saying that we have a high drop-out, low graduation rate, you know?!

Another teacher thought that working with the tribes would be a way to address student issues.

And this years the first time I've had the opportunity to work with the tribal authorities for some of our students, and they've been hand in hand with us and working together with to keep the student in.

Community perspectives focused on the use of special funds to support Indian education in the District. In particular, they were concerned about the lack of information on how funds were spent and the lack of involvement by the Indian Parent Advisory Committee in the budget process.

Native kids are getting left behind.

There's no one to look after that money.

That's the job of the director, the IEC. I had control of the budget, the committee, with their input and their approval, we all did the budget together. We decided how the money was spent. And now it's gone and I just came in—I was like shocked but I didn't know who to ask, you know, what happened to the Indian Ed. Department?

School Climate, Environment and Place

The importance of environment and place was quite evident among the participants. The historical and cultural aspects of the Pojoaque Valley that are shared among the communities was considered to be an important and vital element of the school climate. As stated by one of the teachers,

I think for me, the main thing about Pojoaque was [is] the sense of community.

A student participant also noted,

It's just the only school close to where we all live. We all live right around here and we come to school here.

The presence of Pueblo students in the classroom offered one of the teachers the opportunity to discuss community relationships,

...speaking up in the classroom discussion; allowing time for just free discussion. Let them have their voice be heard and know how to disagree and agree with each other and listen and build an environment where there is mutual respect.

Another teacher commented,

And, I think, that as long as you respect the students that are in your classroom, that respect will ultimately come back. And with my native kids I don't know if it's just being native and being one of them—[but] that [respect], it's already there and it's already present."

That support was extended beyond the classroom. A community member remarked,

The Indian Education Program at the high school is an important place where students feel comfortable about their Native American identity."

That feeling, however, does not extend to school sports. Students and community members indicated that few of them make the teams because of poor grades. Some of the views expressed were,

It's like a Catch 22 situation. If they don't have the grades, then they don't qualify to be on the team and vice versa.

There's very few of them that are really excelling in anything.

I brought that up here and I just requested that the - that somebody talk to the coaches or the athletic departments to give them some kind of leeway.

The community members also expressed concerns about kids having to make choices between athletics and attending tribal activities.

Your coach is telling you that if you don't come to practice because you have to go to this traditional thing, then don't even bother coming. I don't think that's fair and now that the school has, I think, the excuse—unexcused absences, I don't know, sports and extracurricular activities are different. I don't think they are. I think the students should be given the opportunity, if they have an excuse from practice—because they practice Monday through Saturday.

A comment made by community member suggested a disconnection between intention and true acceptance,

I think that cultural awareness really needs to be brought more into our entire district, and it shocks me, it always does, as I walk through the walls, I don't see anything that reflects the Native American culture.

Another thing that I see that the school has done is that they've asked me to participate in activities to where I feel like my input's not even worth anything. I'm just there as part of - because I'm Native, because I'm a token, and that whatever event that's happening and whatever I say, my input, has nothing to do with what I say so I just wasted my time being there and it's just like frustrating and really it gets me angry because they didn't take my word for what I thought whatever the situation may be.

Vision

Students provided practical ideas with regard to being asked about their vision for the future of education. They referred to things such as having the latest technology and having alternative class times and environments when students are more motivated to learn,

They have to like treat people equally.

Like better computers and like laptops maybe.

They should have school like at 10:00.

Being outside.

Do our work outside.

The visions of teachers were more introspective as indicated in this comment,

We need to discuss these things and to know where everybody stands; which is the teachers. I think that's what this District needs. Because we have so many – well, basically, three cultures here. And yet we're saying we don't understand them.

You're gonna' apply what you learned. You're gonna' write a lot. We're gonna' have discussions. We're gonna' think. We're gonna' exchange. We're gonna' communicate. Out of that you'll apply what you learn with the tool of the word on paper.

An additional area of concern concerned the role of curriculum and selective testing.

I think in order for a lot of our Native American kids to really succeed is that they need to -a lot of educators need to understand that our children all have different learning styles.

One especially poignant insight by a community member on the state of the future was,

The day might come when everything is so contaminated with the air, the water, the land, that they'll come to the Pueblo and tell us, 'You know what? You guys— sorry to tell you this—but your land is condemned and if all 3,000 of you decide to stay here, you're on your own!' And so my question is, 'Where do we all go—a group of 3,000 of us—to go live where we can still live and we know who our neighbor is and we know who lives behind us, in front of us, or in back of us? Where [can] we all live together where we can still speak Tewa, where we can still be uncle and aunt; that we're not living, like, in Albuquerque or in Minneapolis where we don't know who the neighbors are across the street?!' We'll have no idea about language, songs, dances, culture, nothing. It's just erased. I want our children to be totally reaching their potential but also hanging onto who they are because I think that's important; not only for our survival but I think that it's the survival of the whole world. That's just the way I see things—that's what I would like for 2025.

Relationships

Teachers commented that some students are more socially vulnerable and that a school may be the only place where they find shelter from home environments that have been disrupted by domestic violence, alcohol and drug abuse or economic hardships. One teacher provided her experience,

I think a lot of times... It's hard to find the answers to those students, but when you know their home situations—I think a lot of my kids come to school with so much baggage that it's hard to get them to concentrate. Because a majority of them are worried about what's going to happen at home; am I gonna' eat tonight, am I gonna' have a safe place to sleep? You know, there's so much dysfunction out in the world that a lot of times, our kids, this is their refuge. And to them, 'if I can hang with my friends and have a good meal at lunch, that's better than nothing.' I can't move [teach] them anywhere, until I have them safe in here [classroom] and in here [gesturing to her heart].

OPPORTUNITIES FOR IMPROVEMENT

The Pojoaque Valley School District website is a telling example of how good intentions are not always fully realized. Its District homepage gives an index that directs individuals to topics relevant to the school. One topic entitled, Who We Are, takes viewers to a page that posts a color map of the Pojoaque Valley within a five-mile radius of the School District. The map depicts specific communities and makes notations about the Pueblos located within the District. The words, *Rich in History, Vibrant in Culture*, serve as a motto intended to reflect the Pojoaque Valley at-large.

The page has language links done by students. Spanish is listed first under the designation of *Historia Encantada, Vibrante en Cultura* [Enchanted in History, Vibrant in Culture]. The second designation is done in the Tewa language, *Koe-di-Towa gi-muu, Wo-wa-tsi Eway di* [Tewa: A Living Language]. The student Spanish link contains information about the Hispano culture in the area. In contrast, the student Tewa link brings up a blank page that says, *soon to be described*.

Curriculum

Students want to learn with access to modern tools (computers and media) beyond their desk in the classroom;

Teachers need to be provided with modern tools to teach with.

Pedagogy

Students want differing approaches of study;

Teachers need to be given time and opportunity to develop and share their methods in creating or developing course content that integrates student interests and diverse experiences;

Accountability

There is a Native American Parent Advisory Committee appointed by the local Pueblo leaders and (some possibly self-appointed), it is not clear to what extent the Tribal government supports its students or how the voice and interests of the Parent Advisory Committee are received and implemented into wider school activities.

School Climate, Environment and Place

Students want to be accepted as people from Native American communities with tradition bound commitments for participation that adds purpose to their life and does not subtract from their learning.

The district has a remarkable and unique student body at-large, the majority of whom are from local families and communities with ancestral cultural roots that go back centuries. Building upon this heritage and in particular, American Indian representation in the schools, the question of how to have stronger and more direct Community involvement is at an impasse.

Teachers at PVSD do their best when they feel respected by their home institution;

Relationships

The role of the Indian Education Program office at Pojoaque Valley High School was cited as one of the only places where American Indian students find refuge and where they feel total respect as individuals.

Vision

It was noted that there are only a few Native American teachers hired.

POLICY RECOMMENDATIONS

- ◇ Develop strategies and fund parent workshops for involvement in children's education (K-12).
- ◇ School Administrations be proactive in acceptance of American Indian cultures as a contribution to the educational environment and work with local tribal education leaders and parents.
- ◇ Develop teacher/staff action teams to deal with students making no achievement based on absenteeism, failing in classes, home environments that are unhealthy, i.e. domestic violence, alcohol or drug abuse issues.
- ◇ Allow teachers opportunities to use different methods of teaching a variety of subjects as demonstration projects to encourage innovation with American Indian students.
- ◇ Review and renew commitment to Native American language program and identify goals and learning outcomes followed by a public program.

APPENDICES

(Indigenous research approach)

INDIGENOUS EDUCATION STUDY GROUP

The study was conducted under the auspices of the Eight Northern Indian Pueblos Council, Inc. (ENIPC, Inc.), although all the researchers and student research assistants were affiliated with the University of New Mexico. Dr. Theodore (Ted) Jojola (Isleta) was the overall coordinator of the project and Dr. Tiffany Lee (Navajo/Oglala Lakota) assisted as co-coordinator when Dr. Jojola was unavailable. Patricia Reifel (Santa Clara, non-enrolled) served as the project manager and liaison with the ENIPC, Inc.. Team members became employees of the ENIPC, Inc., for the purpose of the study.

An interdisciplinary approach was used to build the team, called the Indigenous Education Study Group (IESG). The researchers represent some of the best regional practitioners and scholars in Indian education. Team members hold faculty positions in Anthropology, Education, Native American Studies, Planning, and Sociology. Interdisciplinary perspectives enhanced the research process by creating a comprehensive and holistic approach rooted in both traditional social science as well as Indigenous methodologies, beliefs, and practices. This composition led to enriched discussions about how the assumptions, methodologies and findings were analyzed and interpreted.

Quantitative Researchers

There was one principal researcher, Dr. Adelamar Alcántara, who conducted various facets of the quantitative aspects of the study. The quantitative study, however, was not fully realized because of the NM Public Education Department's inability to approve and release the data requested for the study, in a timely manner. This resulted in doing basic analysis, at best. The PI did all the work pro-bono.

Qualitative Researchers

There were five researchers (co-principal investigators) and ten undergraduate and graduate student research assistants who participated in the qualitative study. Four of the five researchers are American Indian (AI). They are Dr. Mary Jiron Belgarde (Isleta/Ohkay Owengay), Dr. Carlotta (Penny) Bird (Kewa), Dr. Tiffany Lee (Navajo/Oglala Lakota), and Dr. Beverly Singer (Santa Clara). All of the AI co-principal investigators are enrolled members of their principal tribe. Only Dr. Nancy Lopez (Dominican ancestry) was not AI. The researchers are scholars at various stages of their academic careers. They all collaborated as equally invested co-principal investigators, working together in a team-building fashion, exhibiting little or no power hierarchies in terms of faculty rank and age.

Throughout the entire period of the research, the IESG team met as often as once every two weeks and, at the minimum, once a month. At the beginning, researchers shared information and ideas for developing a research approach, guided both by the literature on research design and their own field experiences from previous research.

The student research assistants were chosen in a manner that provided mentorship and field experience. With the exception of one student, they are all American Indian. They were Carolene Whitman (Navajo); Genevieve Giaccardo (San Felipe); Betty McCorkey (Navajo); Neomi Gilmore (Navajo); Nantahnee Winder (Duckwater Shoshone/Southern Ute/Pyramid Lake Paiute); Shynoke Ortiz (Navajo); Marie-Michele Jasmin-Belisle; Jodi L. Burshia (Laguna/Navajo); Leola R. Tsinnajinnie (Navajo); and

Michael Vincent Romero (Taos). Several of the student researchers spoke Keres and Navajo. A number of the Navajo speakers among the student researchers facilitated the discussion in Navajo.

A key aspect of the research process involved mentoring and training the next generation of Indigenous researchers. As a result of this approach, the IESG team learned that more time and effort has to be put to the “growing” of future researchers who can apply not only academic methods and processes, but tribal knowledge to this body of work. A couple of meetings devoted discussion on how best to assist the research assistants while they were working on the study at the same time encouraging their progress on their own research areas of interest. The length of employment among the student researchers varied by their degree status and academic demands.

Indigenous Research Process

The qualitative research process was anchored in a community-based approach. Because the researchers and student research assistants are largely American Indians (AI) themselves, they are knowledgeable and sensitive to the nature of research in AI communities. It was essential, as such, that the study was conducted in a culturally appropriate and respectful way. The research had to be meaningful for AI communities. It had to be in line with the social and cultural protocols of each community participating in the study. The research was done with input and feedback from the schools and its participants.

Unlike Eurocentric research approaches, there are added cultural protocols needed to conduct an Indigenous based methodology. An Indigenous research process requires knowledge of community ethics, protocols, and nuances for personal communication and contact with participants. The process is also dependent on community engagement in order to define levels of interaction, involvement, and collaboration.

The study had to comply with both the University of New Mexico’s and the Navajo Nation’s IRB approvals. The former was necessary because all of the principal investigators held academic or research positions at UNM. The Navajo Nation IRB process also required university IRB approval. It is a necessary requisite for scholarly publication. Both the PIs and the student research assistants took on-line training and were certified by passing a test. In addition, the UNM IRB certification proved invaluable at each District where administrators did not have research protocols in place. The UNM IRB certification helped allay their concerns about the integrity of the process and the use of the information.

The proposal to conduct research in the Central Consolidated School District (CCSD) was submitted to the Navajo Nation IRB office. This generated a series of responses necessary to clarify the intent of the project. In addition, the Navajo Nation required two formal presentations before their IRB tribal review board process. Approval was granted a full eight months after that of UNM’s. Additional conditions which were addressed included the ownership of the data-sets generated at CCSD, the review and presentation of findings, and approval to share and publish findings from the study.

Aside of institutional protocols, the Indigenous research approach entailed adhering to tribal and school community protocols. This necessitated an understanding of the respective community’s history and determining the nature of interaction at a personal level, school level, and community level. This committed the researchers to a longer term effort wherein findings are first shared among participants, districts and tribes. Upon further refinement, the study was then issued to the contractor of the study and, lastly, to policy makers and the general population of interested readers. In essence, the approach emphasized Indigenous ways of knowing and interacting.

The study was focused on dialoguing with students, parents/community people, and teachers/administrators about the “best practices” for AI education in their respective schools. The research, as such, was conducted with the intent of measuring how well schools fared with respect to meeting the intent of the NM Indian Education Act of 2003. It was not the intent of this study to hone in on the short-

comings or problems associated with Indian education, in general. Particular attention was given to avoid this, especially in light of tendencies among participants to turn the meetings into “gripe sessions.”

In spite of the best efforts of the IESG team, logistics and scheduling often hampered the focus group process. This required the team to be flexible and to adjust their efforts accordingly. The logistics were demanding requiring in some instances overnight, 4 hour one-way commutes (in the case of the Dulce Public School District). All of the visitations were conducted so as to avoid major holidays and feast/cultural days during the regular school year. Weather became a critical factor, even among school sites that were within the vicinity of Albuquerque. Despite their best efforts, researchers usually had to return to the school multiple times in order to complete the assignments.

Participants were solicited at large by a school or community liaison, or the principal of each school. Refreshments were provided as an enticement, although it was determined that the best rates of participation occurred when the sessions were scheduled before or after another general, school-wide event. Conducting interviews with youth under the age of 18 required both parental consent and student assent. Because of this extra requirement, there were times when students forgot to bring their parental consent form on the day of the interview and were therefore unable to participate.

Before each meeting, facilitators explained the purpose of the meeting and collected signed waivers before a session proceeded. Although there was not a precise way to measure the receptivity of the participants, it was noted that students and parents were particularly responsive to having AI researchers and AI student assistants conducting the meetings.

Meeting times varied by the size of the group, usually taking an hour-and-a-half to two hours, on average. The optimal size was five participants. All meetings were held on the school’s premises. Every session was recorded with a digital audio recorder, note taking on a laptop, and on large poster sheets. Facilitators followed a script and timed the interactions in order to cover all the questions.

The audio files were downloaded, organized, and prepared for transcription. This detail took a considerable amount of time per each recording. The findings from the sessions were transcribed using a professional service. It was found that this procedure was more cost-effective than attempting to use students for the transcriptions. At the first level, the typed narratives were coded by the lead researcher. At a second level, a student research assistant or another researcher who also participated in the focus group coded the narrative. A third reviewer then compared the first and second levels of coding to determine agreement or disagreement. When codes were discovered to be in disagreement, the two coders and the third reviewer discussed the code, associated quotations, and context of the quote to arrive at a consensus on how to match the data.

The data analysis and findings were determined using accepted qualitative, statistical techniques. On the other hand, the nuances and cultural context of the findings were informed from the lived experience and knowledge of the Indigenous researchers. Researchers represent these by using first-person quotations as much as possible in the analysis. This permits the reader to draw out a more contextual representation of the issue. This study stands apart from many others in this respect because the analysis is enhanced by the researchers’ own perspectives and experiences.

A final component of the Indigenous research process was the reporting back to communities. After compiling our preliminary analysis in each of the communities, members from the IESG team returned to the respective schools to report their preliminary findings and to get their feedback from their analysis. This aspect of the process is intended to build a partnership with the participants as well as raise their awareness in how their participation contributes to policy change.

In sum, in spite of the numerous research challenges, there have been significant and substantial gains, especially among the research team. Dialogue processes among colleagues have substantially enhanced interdisciplinary research agendas. Through the dynamic reframing of group discussions, new approaches to Indigenous research have been discovered.

The most significant return has been the groundwork accomplished in modeling a reflective, feedback loop process into the design. This entailed creating “goodwill” at the districts, schools and the tribal community. It also entailed working the Indigenous research process into the tribal and state systems especially by modeling research roles with both the student assistants and the larger community. Due to the length of the project, however, turnover among the student assistants was high. In spite of this, students have indicated that this experience has substantially broadened their academic experience. Several students are continuing the same line of inquiry for their degree plans and questions of social and civil rights in Indian education have been posed.

Through this time and investment, the IESG team has been able to successfully build social and intellectual capital. This has required the team to learn about “place” versus the academic abstraction of more traditionally grounded studies.

LESSONS LEARNED

Quantitative Research

The original intent of the quantitative research was to conduct longitudinal analysis on AI student attainment at the respective district school level using the NM Public Education Departments STAR data set. From the start, efforts were frustrated by the amount of time necessitated to draft and complete a signed MOU. The main concern in drafting an agreement was the maintenance of confidentiality at the level of detail required for the data set. This agreement also had to comply with the federal Family Educational Rights and Privacy Act (FERPA). Attorneys from ENIPC, Inc., and the State of NM PED worked on clarifying the language. Due to edited omissions, however, a final MOU was not been signed and approved until one year later, in January 2008.

The second factor was the inordinate lag in providing the data set as requested by the project. The list of variables requested for the data set were submitted to the Secretary of Education in June 2007. No action was taken pending the approval of the MOU which was negotiated January 2008 and finally re-drafted and approved in July, 2009. Once this was received, however, the project received several notifications indicating that the request “is excessively burdensome or broad.” This resulted in a series of 60 day extensions. When the project was notified in October, 2009 that the data set was completed and sent to the NM Indian Education Office, a courier was sent to pick up the CD which contained the requested information. Unfortunately, the NM Indian Education Office was unable to locate the CD or verify that it had received it. The CD was eventually located at the NM Office of State Records in May, 2010.

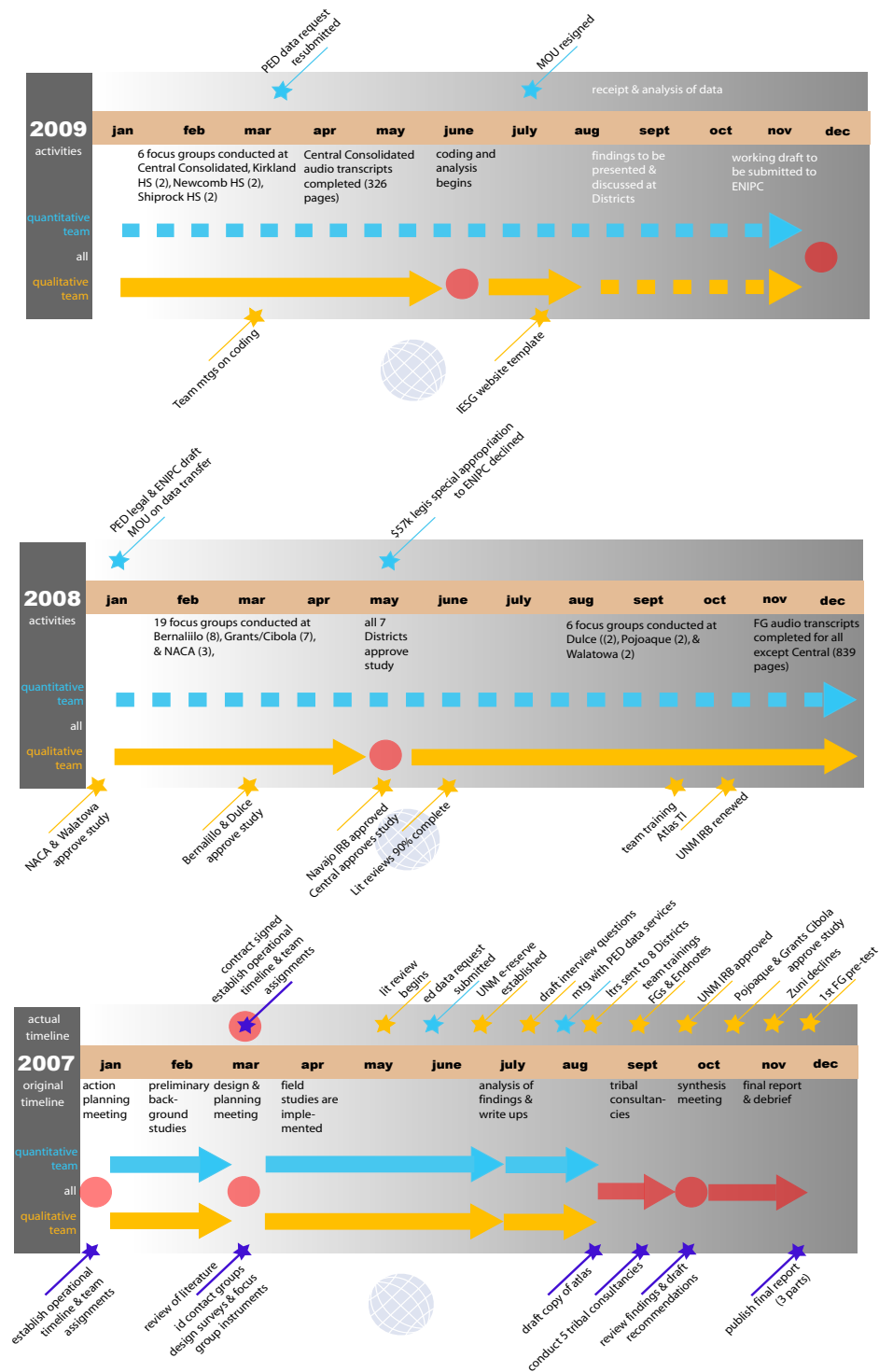
A review of the file has determined that the data set will require extensive re-coding and re-editing in order to prepare it for analysis. It was further determined that the data only went as far back as 2007, providing only 2 years of data. This was not enough of a time series to conduct a longitudinal analysis. Because of tardiness, the inadequacy of the data set and the lack of funds to recode the data, the quantitative analysis cannot be completed as originally intended.

Qualitative Research

Timeframe—The study was originally designed to be completed in one year, Figure 5. Instead, it took two and one-half years to complete. The study award was granted midway through the fiscal year, in January of 2007 to the Eight Northern Indian Pueblo Council, Inc (ENIPC, Inc.). The reasons for the delays were numerous and are detailed in the following discussion. However, it should be emphasized that Indigenous research that involves community engagement requires long-term, sustained time and effort.

Organizational—The ENIPC, Inc., then under the direction of John Gonzales, was best poised to advocate for the study particularly because of its political ties to both the Eight Northern Pueblos and to the All Indian Pueblo Council. Both of these organizations indicated their support of the IESG proposal.

Figure 5
Time Line: 2007–2009



The ENIPC, Inc., was incorporated as a non-profit organization in 1962 and is overseen by the Governors of the member tribes. The organization oversees a broad variety of economic, educational and social-service programs for the member tribes. This study, however, was one of its only ventures to administer and manage a research project of this scale.

This immediately presented a challenge for the researchers, all of whom were put on wage employment rather than fixed research contracts. It is estimated that PI research honorariums have exceeded one-and-a-half the original estimate (\$9,000 per PI). Whereas the salaries were originally budgeted under this arrangement for 9 successive months, the time paid out was twice that period because of unanticipated protocol delays and IRB approvals. It should be noted that after this original expenditure, PIs no longer drew down any compensation except for travel and meeting expenses.

Another unanticipated problem concerned the negotiation of the operational overhead. Whereas the State's procurement system indicated a specified amount that an agency could claim for overhead, it was under the level required by ENIPC, Inc.. Although a mutually agreed upon rate was eventually negotiated, in 2008 a State Legislative Appropriation of \$57,000 that would have supported the quantitative portion of the study was refused by ENIPC, Inc., because of the same problem.

Compliance—The study did not factor in the time necessary for full administrative and community-compliance reviews. Both IRBs (UNM and Navajo Nation) required full review and disclosure of detailed research agendas and procedures. UNM had the additional requirement of on-line training and certification of all researchers. Among school districts and tribal communities, there are no standard procedures for seeking approval. Getting the approval for a District's participation required making formal presentation to the respective Boards and administrators. The main concern of each site was the sign-off and protected disclosure of sensitive information for teachers, students and community members.

Because the beneficiary of the study is the NM Public Education Department, it was assumed that the NM PED's Indian Education Division would take a more direct and proactive role in assisting the IESG team in gaining access and securing permissions to the Districts and schools. This did not occur. Instead, the researchers were surprised to learn that the NM Indian Education Act was largely unknown at the schools and that awareness of the role of the NM Indian Education Division at the local level was in name only.

Logistics—Doing analysis at the District level was compounded by the presence of multiple school sites that varied by geography and school level. Because of the organizational and educational complexity of district-wide systems, it was often indicated that no one school was necessarily representative of the others. This aspect required reconsideration by the IESG team, which was solved only by the inclusion of multiple sites at each District. For Districts like Bernalillo and Grants-Cibola that serve multiple communities at different educational levels, the administration requested that PIs conduct more than 3 focus groups in order to better represent their constituents.

The additional focus groups and distances between school sites, even within some Districts, challenged researchers. Although both PIs and local coordinators did their best to schedule meetings, the unexpected day-to-day events sometimes precluded even the best made plans. Windows of opportunity for conducting focus-group activity during any given week were short. Because all researchers and student assistants had academic responsibilities as well, rescheduling often took weeks if not months.

Although costs were kept down by conducting two to three focus groups on the same day at a single site, the multiple arrangements exceeded the intent of the original research design. These focus group costs and travel budget far exceeded original estimates. One unexpected factor was the increase of the mileage per-diem which, due to the economy, had gone in a span of 9 months from 32¢/mile to 58.5¢/mile.

Budget Shortfalls—Some of the budget shortfall was offset by in-kind services performed by both PIs and student assistants. Carpooling, expense sharing and the use of personal research equipment (eg., lap-

tops) were employed. The PIs, as faculty members, were also able to utilize their faculty office space and utilized other provisions and academic services provided at the University of New Mexico. No one was reimbursed for personal cell phone usage.

At the end of the project, funds were nearly depleted. Due to the length of time required to get permission to access and analyze the data set for the quantitative research, neither funding nor time to conduct the analysis remained to complete the effort.

Although there was approximately \$20 thousand remaining that was earmarked for publication dissemination as well as public and tribal education government-to-government presentations, the funds will likely revert back to the NMPED because of the reluctance by ENIPC, Inc., to extend the project beyond the final ending date (June 31, 2010).

Similarly, in spite of intentions to design and publish a website, this was not accomplished. A sub-contract to begin these services with ANATVCO was negotiated and fees paid in advance, but no services were forthcoming and were never completed. Issues concerning the technology interface, website hosting and proprietary rights to the site frustrated the effort before it was initiated. We will explore the possibility of including our website with the Institute for American Indian Research (IFAIR).

Similarly, a multimedia effort to develop a short video on the history of NM Indian Education was curtailed due to lack of funding. Historical research was done and a working script developed.

Turnover—Student assistant turnover has also added to additional training costs. Due to the length of the project, it was higher than anticipated. As students progress in their academic studies, their availability changed. The original mentorship-model between the PIs and the student assistants was not as easy as had been anticipated. Trained students had to yield to untrained ones, requiring a re-effort and retraining for the PIs. In spite of these setbacks, the gains offset the losses.

Another challenge for the IESG team was the high turnover among staff and administrators at the Districts and schools. Although this varied for each site, in some instances, the IESG team literally had to reintroduce themselves and the project to new school personnel. This introduced dynamics that once more opened up discussion and challenged the relevancy of the project.

LITERATURE REVIEW

(general)

National Studies

The most comprehensive review of Indian Education literature was completed by Brewton Berry in 1968 for the Special Subcommittee on Indian Education for the Committee on Labor and Public Welfare, United States Senate. The U. S. Senate Report also known as the Kennedy Report, was entitled *Indian Education: A National Tragedy, A National Challenge* (1969). Another review, *Education of the American Indians: A Survey of the Literature*, contains 708 items from the early 1900s to the late 1960s, or almost half of the 1,500 books and articles found in professional and popular journals, theses, and dissertations. In 1976, the Battelle Human Affairs Research Center reviewed 790 citations in their report, *Bibliography of American Indian Education Studies*. In addition, Trimble, Goddard, and Dinges (1977) studied 962 research articles for the *Review of the Literature on Educational Needs and Problems of American Indians: 1971-1976*. Professor Grayson Noley supervised graduate students at Arizona State University to compile a list of 2,900 citations since 1969 from the Education Resources Information Clearinghouse (ERIC) database (Deyhle & Swisher, 1997). Deyhle and Swisher (1997) analyzed approximately 400 research articles on American Indian education. Finally, Demmert & Towner (2003) investigated 109 quasi-experimental and experimental studies assessing the effectiveness of culturally-based education on the achievement of Indian students.

Some of the earlier major studies also investigated the structures of educational institutions. The Brookings Institution, led by Lewis B. Meriam, studied federal government boarding schools in the 1920s and in the 1960s, the U. S. Senate, led by Robert Kennedy, studied students in federal and public schools. The Kennedy Report resulted in 4,077 pages in seven volumes of hearings and 450 pages in five volumes of committee prints (U.S. Senate, 1969). Fuchs & Havighurst, researchers from the University of Chicago, also carried out a major study on Indian education about the same time. All of these studies found numerous systemic and uncorrected historical problems within the educational institutions that served Indian children. For example, they found deplorable living conditions in schools, poor health care, poorly trained teachers, poorly written textbooks, unusually high numbers of children placed in special education, mismanagement of funds geared for Indian children, lack of Native teachers and administrators, lack of parent participation and the lack of a curriculum that supported the language and cultural base of the Native communities they served (Meriam, 1928; Fuchs & Havighurst, 1972; U.S. Senate, 1969).

Table 6 highlights findings from 14 major federal studies that have been conducted since the last millennium.²⁹

²⁹ Adapted from Bowman, N. (2005). *A Critical, Cultural, & Contextual Analysis Of NCLB's Impact On Early Childhood & Elementary Students*. Paper presented at the Rural Early Childhood Forum on American Indian and Alaska Native Early Learning, Little Rock, AR.

Table 6
Summary Findings From 14 Major Federal Studies:
1928–2008

Date/Report	Findings	Solutions
1. 1928 Meriam Report	Academic problems, poor health, disciplinary issues, and lack of ability to live honestly, efficiently, and with good moral character, and Indians were receiving poor services from public officials who were to be serving their needs (health and education especially)	More participation in formal European schooling (boarding schools), increasing social and cultural opportunities, improving the family Indian structures, teaching them English, training for proper behavior, and motivate them to be harder workers
2. 1966 Coleman Report	Low test scores as compared to whites, existence of an achievement gap between whites and minorities that grows over time spent in school, low educational levels for family members, high drop out rates, segregation of schools as well as more opportunity for whites vs. non-whites and whites was documented, and lack of racial information for Indian and other minority students	Voluntary transfer plans and redistricting is noted in order to move towards racial balance in schools and diminish overcrowding, new transfer policies to achieve racial balance, summer tutorials by colleges and schools, apprenticeships for racial equity, and new community/school partnerships created
3. 1969 Kennedy Report	High poverty, low self esteem of Indians, low achievement rates, lack of school's understanding of the culture and needs of Indian students, and school failures are blamed on Indians by schools themselves which severely hinders educational improvement, serious lack of social and recreational activities, and boarding schools created deep social and emotional problems leading to Indian alcohol abuse, discipline problems, and drop out rates	Endorsed Indian control over education, creation of a national Indian board of education, infusion of Indian culture into policies and programming, and use of other effective Indian models for positive educational restructuring
4. 1991 Indian Nations At Risk Report	Emphasis on how schools have failed to educate AI/AN students, language and culture is eroding or lost, any Indian self-determination rights have been severely limited by school administration and government	Strategic framework to improve schooling for AI/AN is provided, comprehensive education plans, development of parent based programs infused with culture for early childhood through 12- grade, and creation of community, family, school, and business partnerships to improve education
5. 1992 White House Conference on Indian Education Report	Under funding for BIA and Indian education in general, alcohol and substance abuse issues in schools, impact aid is not being spent correctly by schools for Indian students, educational policies for Indian students are not being followed, Indian input and Tribal government involvement in public schools is low or non-existent, and a fragmented system is noted because public, private, BIA schools, and post-secondary schools never meet	More Indian governance over schools, increase student achievement through literacy, improve dropout rates, create safe and drug free schools, school readiness, parent education, infuse Indian language and culture, provide funding for research studies and clearinghouses, training for non-Native school personnel, and create parent/community/tribal partnerships
6. 2002 National Education Association	Poverty & geographic components are noted as barriers to high levels of educational success, racism, loss of Indian identity, low self esteem, high drop outs, statistically insignificant so exclusion from studies and programming is seen, lowest academic performers in nation, cultural incompatibility with school, low/no teacher expectation for Indian student achievement, high mobility rates, assimilation policy impact, isolation, and an evolving "trust relationship" between tribes and the federal government.	Permanent and separate identity as a fundamental right for Indians so govt policies and programming for Indians must be broad, more shared responsibility by state and local government for Indians, national forums with educational organizations, political advocacy, partnerships with institutions of higher education, infusion of culture and language into PK-16 programming, and education of non-Indian policy makers, administrators, & teachers about Indian people

7. 2003 US Civil Rights Commission Report	Culture and language suppression, discrimination, low educational attainment rates (students or adults), high drop out, poverty, and substance abuse rates, ignored or forgotten by mainstream, inadequate federal funding, poor buildings, loss of Indian identity with loss of culture, a disproportional number of Indian students labeled special education or suspended from school, and isolation leading to low/no educational or economic opportunities	Creation of educational environments and school cultures that value Indian students, more funding and grant opportunities by the federal government for Indian programming, more money and programming to develop Indian teachers and administrators, and strengthen cultural identity by allowing more Indian programming in schools and embedded in the curriculum
8. 2005 National Advisory Council on Indian Education Report	Implementation of Indian culture, language, and traditions in to educational curriculum, collaboration at local, state, and federal level with Tribes, unified message is needed by Indian groups, academic status of AI/AN students is missing (statistically), accountability and outcomes that are scientifically based are missing for Indian programs, policy and program effectiveness is not measured, and funding is too low to support Indian educational needs	More interagency federal work group sessions, develop a national Indian contact list of researchers, advocacy at all national Indian meetings by Indian Advisory council to develop relationships and a unified message, disseminate a unified message to non-Indians, congressional reporting and advocacy, and streamline grant process for new grant ideas and information sharing
9. 2005 Natl Center for Educational Statistics on AI/Alaska Native Early Childhood Longitudinal Studies Report	Per capita Indians have the lowest early childhood developmental, social, and educational rates as compared to majority and minority students, lowest levels of sound and letter recognition and proficiency, high poverty rates, high mobility rates, low parental education rates, high unemployment rates, and low levels of word use and problem solving skills during early childhood	Descriptive statistical report. No recommendations are provided.
10. 2005 109-Congressional Recommendations for Indian Country	Policy implementation issues, lack of culturally based Indian education strategies, no alignment between standardized testing and cultural/educational experiences of Indian children, not enough funding to meet unique Indian requirements so students do well under No Child Left Behind, one size fits all curriculum or programming does not address the cultural and linguistic diversity of American Indian Tribes, lack of proper culturally relevant teaching methods, tests are only given in English, low school attendance, high drop out rates, and high levels of student mobility	Recognize Tribal sovereignty and authority, hold joint congressional hearings for Indian education issues, provide more funding to meet Indian education needs, mandate and authorize funding to study and value the importance of culturally based education, cultural relevancy of programming, and effectiveness of culturally based curricula and requirements, amend the adequate yearly progress (AYP) requirements specifically for Indian communities, and include the use of individual progress reports when evaluating AYP, and all education legislation must include Indian cultural needs, and improve teacher retention and training efforts
11. 2005 National Center for Education Statistics Trends of AI/Alaska Native Education Report	High unemployment rates, low academic achievement rates, behavioral problems in schools, low enrollment at post-secondary institutions, low graduation rates (all levels), high drug use rates, high drop out rates, low voting participation, and very high poverty	Descriptive statistical report. No recommendations are provided.

12. 2005 National Indian Education Association's NCLB Preliminary Report	NCLB doesn't address the needs of Indian students (cultural and linguistic), funding levels are too low to provide educational success, too many negative sanctions with NCLB, no recognition of the educational system failures but blames the Indians and their family, many subject areas are left out of the NCLB programming, federal government is not meeting its trust responsibility, too few of Indian teachers and administrators, high dropout rates, NCLB is punitive and creates a punishing environment, low educational attainment rates, and the need for more research and sharing of information is scarce and not systematic in any way	Interconnection of culture, language, and education, Tribes need to push for more federal responsibility and accountability for trust relationship with Indians, Tribal government involvement and advocacy efforts at local and federal level, increased resource sharing, increased funding for educational research and programming for Indians, inclusion of Indian statistics in mainstream studies, central effort by local, state, and national Indian organizations to share resources, conduct advocacy activities, and create a unified message for improvement, and provide more state and congressional testimony
13. 2007 National Indian Education Study Part I	Average scores for AI/AN students were not significantly different from the scores for Black or Hispanic students but were lower than the scores for White and Asian/Pacific Islander students. Scores for higher-performing AI/AN students—those at the 75th and 90th percentiles—were higher than those of their Black peers. AI/AN fourth-graders attending city schools scored higher than their Black and Hispanic peers, and AI/AN eighth-graders attending rural schools scored lower than their Hispanic peers.	Descriptive statistical report. No recommendations are provided.
14. 2008 National Indian Education Study Part 2	Location—Higher percentages of AI/AN fourth-graders and eighth-graders attended schools in the South Central and Mountain regions. In the Mountain region, higher percentages of AI/AN students attended schools in which at least 25 percent of the students were AI/AN ("high density" schools). Families and Homes—A higher percentage of AI/AN students were eligible for free school lunch compared to their non-AI/AN peers. A lower percentage of AI/AN students than non-AI/AN students had access to a computer in their homes. Language—A higher percentage of AI/AN students in high density schools reported that a language other than English was spoken in their homes all or most of the time. A higher percentage of students in Bureau of Indian Education (BIE) schools than in public schools reported the same. Teachers' Backgrounds—Nearly 80 percent of AI/AN students overall were taught by teachers who identified themselves as White. 40 to 60 percent of BIE schools and 5 to 9 percent in Public Schools were taught by AI/AN teachers. 20 to 29 percent in BIE schools and about 3 percent in public schools were taught by teachers who said they were fluent native language speakers.	Descriptive statistical report. No recommendations are provided.

School Characteristics and Climate—Higher percentages of students in high density schools had administrators who indicated serious problems with student absenteeism, student tardiness, lack of family involvement, and low expectations.

Homes and Communities—Exposure to native language at home most of the time occurred more frequently for students in BIE schools than for students in public schools. A higher percentage of eighth-graders in high density schools said that they participated in AI/AN ceremonies or gatherings several times a year.

Teachers and Schools—Nearly 90 percent of AI/AN students had teachers who provided instruction entirely in English. Students in high density schools had teachers who reported occasional use of AI/AN language in their instruction.

Regional Studies

The earliest study on Indian education was a 1900 dissertation entitled, *Education of the Pueblo Child; A Study of Arrested Development*. Since then a cursory glance at thesis and dissertation databases using *ProQuest* indicates that there have been numerous studies conducted nationwide in the fields of education, psychology, sociology, anthropology, English, American Studies, Native Studies, to name a few. Of the 23 studies identified dealing specifically with tribal communities in New Mexico, eleven were studies conducted among the Pueblos, eight among the Navajo and 4 dealt with urban Indian populations. Just over half of these (12) were by Native American scholars. These studies are specific to tribal communities in New Mexico and have used various field-based methodologies to examine the conditions of learning and behavior among Indigenous populations. It is surprising, as such, to note that the impact of such studies has been limited. There exists no comprehensive discussion of the findings and recommendations from these studies, nor have they been assessed in terms of their relevancy toward the formulation of public policy.

In order to assess the earliest formulation of public policy and Indian Education in the Southwest, it is necessary to look at archival documents. The following review of archival documents concerning American Indians in the Southwest are from three major collections, two are at the University of New Mexico Center for Southwest Research including the Sophie Aberle Papers³⁰ and the Doris Duke Collection. The third archive is at the Indian Pueblo Cultural Center within The Institute for Pueblo Indian Studies. This collection houses the All Indian Pueblo Council meeting notes, policy statements and miscellaneous reports. Two particular themes appear in the documents reviewed, the first is a statement made in 1940 at a meeting of Indian Service Workers organized by U.S. Indian Commissioner John Collier, calling for a “curriculum which affords students of Indian schools experience with every type of learning that they may need for a useful life in their own communities.”³¹ The second thematic view is by All Indian

³⁰ Sophie D. Aberle Papers Dates (Inclusive) 1913-1987. Aberle, Sophie, D. 1899- Abstract: This collection documents the professional and personal interests of Sophie D. Aberle. There is an abundance of research materials pertaining to the Pueblo and Navajo Indians, as well as general Native American issues, including relocation. Records pertaining to Aberle's tenure with the United Pueblos Agency, the Commission on the Rights, Liberties, and Responsibilities of the American Indian, and the National Science Board are included in the collection. Collection Number MSS 509 BC. Size 36 boxes (34.5 cu. ft.) + 6 oversize folders.

³¹ Sophie Aberle. “Indian Service Workers from 44 Jurisdictions Attend Santa Fe Summer School,” United Pueblos Quarterly Bulletin, vol.2 no 1, October 1940, p.7-10

Pueblo Council Chairman, Domingo Montoya in a speech given at AIPC Education Conference 1968 states: “the need and lack of cross cultural orientation of Public School teachers who may have Indian students in their classes. The Indian people, parents and leaders, believe that the present system has not recognized the innovations that will help the Indian child form an image which will be acceptable to him in life.”³²

AIPC Chairman Domingo Montoya illuminates AIPC’s increased concern and active involvement in Pueblo children’s education in the 1960s. Margaret Connell Szasz seminal studies on Indian Education notes the AIPC efforts to organize meetings and workshops about education policies but also their efforts to meet with public school teachers and administrators to advise them on how to deal with special needs faced by Indian students in teaching about Pueblo history and culture.³³

Interviews with former students of the Santa Fe Indian School collected by Sally Hyer, for her dissertation thesis, “Remembering Santa Fe Indian School, 1890-1990” provides personal reflections about being Indian and becoming educated in an institutional setting. Hyer concludes that former SFIS students see themselves as people who overcame adversity by humor, strength, and dignity, that traditional Pueblo values such as sharing, hard work, cooperation, and respect for authority made it possible for them to survive culturally at the school which helped them transform the repressive institution into an expression of Pueblo identity. She suggests many factors influenced this process, among them geographic location, predominantly Pueblo enrollment, and the continuity of Pueblo political leadership, languages, and shared values. Of the many interviews provided, one in particular suggests the significance of maintaining one’s Indian identity: “The attitude our parents gave us at home was, ‘Don’t ever forget your heritage. This is what you are, and you can’t ever change because you are this. But you must learn this other [culture], which is necessary in this life.’ (San Felipe, 1933). When children left home, their relatives blessed them and sent them on their way.”³⁴

The administrative plans to have Indian children educated were historically government-controlled with the intent to change and civilize the Indian. Thus noted in the historical plan for the Santa Fe Indian School as well, according to Hyer, “The uniform plan rejected students’ tribal heritage and their individual identity. After all, adobe pueblos were miserable and unhealthy, opined the superintendent of Indian schools... The school building made an explicit statement about educational values. Its organizing principles were control and isolation. Federal architects and bureaucrats believed that school buildings could shape students’ behavior and reinforce a social hierarchy ranging from absolute authority to utter submission. They grouped students together as an undifferentiated mass in a single building affording total control.”³⁵

An altogether different study that includes Navajo education issues by Howard C. Ellis claims that from his analysis of hundreds of audio taped interviews collected between 1967 and 1972 as part of the American Indian Research Project, also called the Doris Duke Collection at the University of New Mexico Center for Southwest Research, Indian education is the single-most often cited problem by the interviewees.³⁶ The Doris Duke Collection contains some 982 interviews the majority of whom are identified as Navajo or Pueblo. Ellis outlines several themes that figure prominently in the interviews, among these are: boarding school versus the day school, difficulty in learning English, to family involvement in the

³² “Speech by Domingo Montoya, Chairman AIPC, Education Conference, “Hilton Hotel, Albuquerque, NM, January 19 & 20, 1968. Courtesy of the Indian Pueblo Cultural Center (IPCC Box 9).

³³ Margaret Connell Szasz and Carelita Ryan, “American Indian. Education,” in Handbook of North American Indians, vol. 4, History of Indian-White Relations, Smithsonian Institution, 1988, p. 24.

³⁴ Sally Hyer, “Remembering Santa Fe Indian School, 1890-1990,” Dissertation Thesis, University of New Mexico, 1994.

³⁵ S. Hyer, 1994, p. 122-123.

³⁶ Howard C. Ellis, “From the Battle in the Classroom to the Battle for the Classroom,” American Indian Quarterly, Vol. 11, No. 3. (Summer, 1987), p. 255.

educational process.³⁷ Ellis refers to the original 1868 Treaty with the Navajo that promised a classroom and teacher for every thirty students between ages 6 and 16 who 'can be induced or compelled to attend school.' However, in 1953 a thesis on Indian Education by William M. Hensing, completed at the University of New Mexico says neither the government nor the Navajo kept the educational part of the Treaty. The Navajos refused to send their children, while the government would not provide enough schools. According to data used by Hensing, in 1925, 93% of the Pueblos were attending school in contrast to 35% of the Navajos and then dropped to 25% by 1948, with only two hundred Navajo students in high school.³⁸ By 1968, 90% of the Navajo children were in school and some 9,000 were in elementary boarding schools.³⁹

Concern was expressed early on by Pueblo leaders with regard to boarding schools referenced by Sophie Aberle in a short report she wrote in 1940 titled, "The All-Pueblo Council: A Veteran Confederation." She references a resolution by the AIPC in 1930 that in part, read: "The Council earnestly requests the Government to increase without further delay the day schools in the Pueblos... We do not want boarding schools for our younger children. We want our children to live in their homes as white children do, and to have day school education as white children have."⁴⁰

The brief summaries from within the American Indian experience of negotiating a foreign educational system set in motion with the subsequent founding of the United States of America, raises multiple questions that continue to have relevance today. For example, what did it mean for "the Navajo (Nation and its' members) who had produced one doctor, one lawyer, one Ph.D. and several engineers" by the 1960s.⁴¹ A dean at Navajo Community College is said to have remarked, "We are searching for how to change without destroying ourselves." Changes were rapid and abrupt at the start of the period of Indian self-determination that began in the 1970s. Yet, it is clear that even those making the policy had even less understanding than did the Indian leaders based on a quote by a non-Indian educator, who pondered: "It is difficult and perhaps impossible to state what Indians want their children to get from the school."⁴²

Leading Navajo educator Dillon Platero is among those who help lead the movement on the Navajo Reservation to develop alternatives to boarding schools believing Navajo language, history, and culture should definitely be included in the curriculum based on concerns that Navajo was spoken in greater numbers among the youth.⁴³ The innovations at Rough Rock and Ramah were two examples of education reform on the Navajo Nation including the founding of the first American Indian college in the U.S., Navajo Community College in 1968, renamed Diné College.

In the early 1970's, the Pueblo of Zuni embarked on a series of projects intended to project their community vision toward the year 2000. Among these efforts was a pioneering initiative sponsored at the Pueblo of Zuni by the All Indian Pueblo Council and the University of New Mexico.⁴⁴ Students in the Zuni Alternative Learning Program (which comprised students from 6 schools) were partnered with teachers and professional educators to develop a vision for Indian education at Zuni. As stated in their

³⁷ Howard C. Ellis, 1987, p. 255.

³⁸ Ibid, p. 257.

³⁹ Ibid, 1987, p. 259.

⁴⁰ Sophie Aberle, "The All-Pueblo Council ; A Veteran Confederation", United Pueblos Quarterly Bulletin, vol.1 no 4, July 1940, p. 8.

⁴¹ Howard C. Ellis, 1987, 258.

⁴² Ibid, 1987, 259.

⁴³ Ibid, 1987, 259.

⁴⁴ Education at Zuni, 2000 A.D., unpublished manuscript, n.d..

preface, “The importance of these materials lies in the fact that they are Zuni views, expressed by Zunis involved in education, many of whom are preparing for careers in education.”⁴⁵

This effort paralleled another community initiative entitled “Toward Zuni 1985: Zuni Comprehensive Development Plan,” which covered a ten-year planning period.⁴⁶ Like the student-based effort, this document projected the needs of the community into the future in order to “relat[e] individual projects to major external sources for development economically, socially and educationally (sic).”⁴⁷

On April 30th, 2004, US President George Bush, Sr., signed Executive Order 13336. Entitled simply, *American Indian and Alaska Native Education*, its purpose was to “assist AIAN students in meeting the challenging student academic standards of the NCLB Act of 2001.” It further went on to clarify that such standards “be consistent with tribal traditions, languages, and cultures.” With the issuance of this Executive Order an Interagency Working Group was formed to oversee the implementation of the order as well as hold regional roundtables to consult with tribes. In October, 2004, five on-site mini-roundtables were conducted in New Mexico.

From these regional discussions, five major themes were identified. They are (1) culture and language; (2) AI/AN teacher training and development; (3) disparities in AI education to closing the achievement gap; (4) best practices in Indian education; and (5) inter-agency collaboration. Of special interest to this study was the theme of best practices. Therein, participants indicated that they “hope[d] to see the identification of best practices in AIAN education” with special attention given to those involved that “offer prototypes in AIAN cultural standards.” (OIE Roundtable Report, 2004)

In 2006, the NM Indian Education Advisory Committee issued its own statement on Values & Beliefs (NMIEAC, Sept. 18, 2006). Of the 14 points outlined, the following are of particular relevance to this study; affirmation of tribal commonalities and diversity; support for local decisions and approaches that facilitate community driven school operations and student-driven learning; respect for local community-based empowerment processes based on cultural self-determination; support Native people-relevant Best Practices; facilitation of meaningful, nurturing, and balanced lives in Native communities and our environment; support for a “whole child, whole community” approach to Indian education; engaged support for youth leadership preparation, empowerment to live successfully in the traditional and contemporary world living; and support for community school concepts to that meet cultural and linguistic needs and aspirations of Native people.

Cultural Issues

Early theoretical propositions, dating back to the mid 19th century, reflect scientific thinking and religious beliefs centering on the supremacy of Caucasians and the eventual extinction of the inferior American Indian race (Menand, 2001). Subsequently, educators and some researchers were influenced by an assimilationist ideology that concentrated on the deficits of the individual, family, and community. These studies were to determine whether or not the American Indian was educable focusing on the cognitive and psychological deficiencies of the students, their social behaviors and their home life. The reviews of Berry’s (1968) and Trimble’s, et. al (1977) revealed that much of the literature was devoted to quantifying that Indians did not perform as well as whites in school. Psychological tests, normed on White middle-class populations, consistently revealed that American Indian children performed less well than white children. Later, many researchers began to challenge the validity of these tests and the assumptions that were derived from them.

⁴⁵ Ibid, pg. 1.

⁴⁶ *Toward Zuni 1985*, Branch of Resources, Bureau of Indian Affairs, 2nd Revision, July 1976.

⁴⁷ Ibid., pg 1-1.

Educational historians, researchers, and various national studies point to the fact that those who have been involved in the formal education of American Indian/Alaska Native students assumed that the primary purpose of schooling was to assimilate the American Indian into mainstream society (Adams, 1995; Berry, 1968; Connell-Szasz, 1999; Deyhle & Swisher, 1997; Fuchs & Havighurst, 1972; Klug & Whitfield, 2003; Lomawaima, 1999; Merriam, 1928; Spring, 1994; U.S. Senate, 1969; White House Conference on Indian Education, 1992). In 1991, the research report presented to the Commission on the Rights, Liberties and Responsibilities of the American Indian entitled, *The Indian: America's Unfinished Business*, researchers argued that schools were failing in their jobs in that "...assimilation was their business, and yet there remained the "Indian Problem" (Deyhle & Swisher, 1997).

The Indian Nations at Risk Task Force (1991) and the White House Conference on Indian Education (1992) studied the conditions of schooling for American Indians. They cited such problems as poorly trained teachers, lack of Native teachers and administrators to serve as role models, lack of parent participation in school, lack of language and culture programs, mismanagement of funds identified for Native children, and unchallenging curricula. These Native researchers and educators advocated for self-determination efforts to be made by tribal leaders and educators, community-based and culturally-based initiatives, strong language and culture programs, and Native teacher training programs to name a few.

Other researchers have looked at the nexus between the individuals-families-communities and the institutions that serve them (Belgarde, 1992; Belgarde & LoRé, 2004). Most recently, researchers studied the merits of teacher training for Native students; expanded teaching approaches; Native learning styles; cooperative learning; motivation; language and culture programs; bilingual education; community-based, culturally-based education; Indigenous philosophies; local knowledge and local control; Indigenous art and creativity; Indigenous science, mathematics, and reading initiatives and; Indigenous research, assessments, and evaluations as examples.

In the broader field of Indigenous education, many researchers cite many conditions that negatively impact Native schools, such as unchanging economic, social, and health problems in the surrounding community; inadequate, unequal, and unpredictable funding for schools; assimilation agendas; lack of respect for the use of Native languages; lack of culturally relevant and culturally appropriate curricula; lack of acknowledgement for the academic, social, cultural, and spiritual development of Native students; and poor teacher training (Adams, 1995; Belgarde, 2002; Belgarde, Mitchell, & Moquino-Arquero, 2002; Indian Nations at Risk Task Force, 1990; Lomawaima & McCarty, 2006; NM Public Education Department, 2008). The *No Child Left Behind Education Law* of 2001 created additional barriers to Native reform efforts in education by focusing on limited, number driven determiners of success tied to standardized indicators (National Indian Education Association, 2006).

However, within the past several decades, educators and scholars have documented influential and successful efforts to create positive and transformative changes in schools (Alaska Native Knowledge Network, 1998; Belgarde, 2004; Blum-Martinez and Pecos, 2001; Holm & Holm, 1995; Lee, 2006, 2007; Lomawaima and McCarty, 2006; May, 1999; McCarty, 2002; McLaughlin, 1992; Powers, Potthoff, Bearinger & Resnick, 2003; Sims, 2002). Current research has also addressed what it means to be culturally responsive in Indian education (Belgarde, Mitchell, & Moquino-Arquero, 2002; Castagno and Brayboy, 2008; Demmert and Towner, 2003; Lee, 2009; Yazzie-Mintz, 2007). These efforts have set the stage for "visioning" future educational prospects for Native students. Most importantly, it underscores that the tremendous advances of these progressive communities was staged not by accident, but by a design that facilitated individuals to imagine themselves and their communities in the distant future.

LITERATURE REVIEW⁴⁸

(by areas of inquiry)

EDUCATED NATIVE AMERICAN PERSON (STUDENT SUCCESS)

Carlotta Bird, Vincent M. Romero and Shynoke Ortiz

ABSTRACT

This literature review begins with an introduction to federal and state determinations of student success, i.e. NCLB and HB 212, and moves the discussion to tribal perspectives about student success indicators. Examples regarding how success is interpreted are shared from tribes including the Diné, Zuni and Cochiti. The review concludes with a brief discussion about the educational reforms that have been utilized by schools to address the “deficits” associated with teaching Native American students.

Federal and State Indicators

In January of 2002, President Bush signed the No Child Left Behind Act of 2001 (NCLB) into law. This policy set into motion the most intrusive and all-encompassing changes for the public and federal schools in the United States. Purported to provide more accountability and higher standards at all levels of education, the requirements linked to standardized achievement tests have narrowed the context of learning to a limited interpretation of determinants of success. The data requirements alone dictate that evaluation and comparisons across schools, districts and states be tied to the results of standardized indicators of student success, such as making adequate yearly progress (AYP) on the state adopted, and approved, assessment(s), attendance, and high school graduation.

In New Mexico, as in other states, legislators and the state department of education, worked to align state statutes (i.e., HB 212) to the implementation of NCLB. Numbers now define whether a student or a school is achieving at the level acceptable in the procedures established by state and national policy makers to implement the requirements of NCLB. “When policymakers create accountability systems centered on student’s tests scores, they assume that higher test scores reflect better instruction (Popham, 2001).”

NCLB has been lauded by some, in regards to the attention it draws to the inequities and deficiencies in the education of children across the nation, and one would hope to ameliorate them. However, it has long been reported “among the lowest performing schools in the nation are those with the highest numbers of Native Americans. Much of the research on Indian education points to the fact that schools serving Indian students are bad schools—schools with poorly trained teachers, culturally inappropriate curricula, and a lack of Native American staff and students to serve as role models (Aguilera, 2003).”

With local control effectively curtailed by state and national policy, Indian communities are finding it difficult to incorporate into the schools the factors of success they believe would truly benefit the education of their children. The balance between an educational program that prepares their children for skills and opportunities outside the community are constantly weighed against those that are important to the maintenance and survival of their community and way of life (Boyce, 1991; Casebolt, 1980; Lomawaima, 2006; Osborne, 1989; Rivera and Tharp, 2001).

⁴⁸ All references are cited in the annotated bibliography that follows this section.

Tribal Perspectives of Student Success Indicators

Indian parents, grandparents and community leaders within the communities have known what is important to the success of their children. In the context of Indian family and community, knowing their language and culture is crucial to the development of a child into a well-respected adult. “On a daily basis, from the time of their birth, Juan and Faye were surrounded by a multitude of home and community caretakers, who taught them the essential linguistic, social and cultural knowledge needed to competently participate in the Cochiti world. In this collectivist world of orality and interdependence, each member of the community was ‘obligated to share knowledge’ by ‘passing it on’ to others, especially to the youngest members of the village. Thus everyone in the community was caretaker and teacher to the children (Romero, 2003). Through this traditional education process, children became aware of the expectations the community held for them.

In the more progressive world of the Diné, the mission statement for the tribe states that “it is the educational mission of the Navajo Nation to promote and foster life long learning for the Navajo people, and to protect the cultur[al] integrity and sovereignty of the Navajo Nation (DODE, 2005).” How this mission becomes actualized is found in the establishment of their educational institutions, i.e., regarding the curriculum to be taught in their schools (PreK-PostSecondary), “the instruction shall foster competence in both the English Language and Navajo Language skills and knowledge of both American and Navajo culture (DODE, 2005).”

Within the two examples presented above there are vital indicators of student success being articulated for schools to pay attention to as they plan and develop their instructional programs. However, the models being identified and utilized by the schools that have not met AYP goals, and are reported as “failing” or “in need of improvement,” do not look to these strengths from the tribes, but rather employ the “research based” models required for support and resources by NCLB. Unfortunately these models are based upon outside institutions. “Perhaps the strongest method by which the dominant culture has maintained power has been to construct schools that replicate the value system and language system used in the culture of the middle class [American] home (Aguilera, 2003).” The challenge to our democratic nation, and now the state, is the acceptance of diversity and tribal sovereignty at the same time federal and state education initiatives and accountability measures have called for increased standardization (Lomawaima and McCarty, 2002).

In the often-cited report, *Indian Nations at Risk: An Educational Strategy for Action*, ten goals were adopted that reflected and were consistent with the National Education Goals of 1993. With those goals looking to the year 2000, there was great hope for more wholistic approaches to the education of Indian Children, as schools in New Mexico experimented with models promoted by Re-Learning NM, The Coalition of Essential Schools, Effective Schools and the Center for Research on Education, Diversity and Excellence. Basic to this work was the search for curricula and instruction that emphasized cultural strengths.

An example from those times is the Zuni Public School District, who took to heart the building of an empowered learning community. Taking certain facets from models that were compatible to their philosophy, they worked on a culturally appropriate curriculum that incorporated high achievement outcomes for all their students and utilized authentic measures of student achievement, i.e., demonstrations and displays of knowledge in the form of projects, art, graphics, exhibitions, portfolios and self-evaluation. One memorable public presentation was by a team of eighth grade students who demonstrated their knowledge fluently in both the written and speaking domains of English and Ashiwi. For those who saw the presentation, it was a grand achievement.

Although there may be agreement on educational goals and objectives, there is not clear agreement on how those goals can be reached, especially with respect to culturally and linguistically diverse populations. While schools may no longer actively attempt to destroy the culture of Native American students,

neither do they necessarily value the student's language and culture and attempt to sustain them (Westby and Roman, 1995).

In a unique study that explored concepts of giftedness in the Keres speaking pueblos in NM, the participants' comments were developed into the following definition:

Gifted is described as an inner desire to contribute to the well-being of one's community (or others) and to the perpetuation and preservation of the Native way of life, its culture, values, traditions and language—a responsibility of all community members. This concept of gifted extends far beyond one individual in a way that intimately binds the Keresan [speaking] people together and creates a society in which each individual is viewed as having inherent worth and value and who possesses an ability or "gift" with which to contribute to the well-being of the community. This life principle creates a society in which relationships and cooperation rather than individualism and competition are emphasized and valued; where community contribution and helping others rather than self-promotion and self-interest are encouraged; and where all individuals are equally valued rather than differentiated and separated (Romero, 1994).

These noble attributes are rarely considered in the "gate-keeping" processes schools use to identify students for gifted programs; but rather schools report a disproportionate overrepresentation of Indian students in remedial and special education classrooms (Powers, 2006).

Education Reforms for Student Success

In the education world of high stakes assessments, the notion of strengthening the schools through local knowledge has given way to the identification of many research-based reforms. State and federal mandates play a large part in what is taught, who teaches it and how it is taught. Administrators devote a considerable amount of time following the mandates because they are the source of sanctions and rewards, as well as the funding. However, the incorrect interpretation and implementation of these reforms by administrators continue to reinforce remedial education. Schools select programs like Success for All (SFA) as they are seen to be research-based models recommended to address standards based reform in "low-performing schools (Aguilera, 2003)." SFA, and similar others, do not begin to address the high expectations and success indicators envisioned by Indian students, parents, grandparents, mentors, and educators who advocate for quality and equity in the learning systems.

Deficit focused education programs have missed the message of Indian communities. These communities are experiencing all the stress of an ever-changing world that continues to press upon their people. A number of researchers maintain that contemporary social problems can only be understood in the context of historical trauma related to colonization. Contemporary researchers are examining the relationship between historical trauma related to human rights abuses and social problems such as substance abuse and violence. Resiliency theory research from the fields of psychology and sociology are identifying the strengths that students and educators may employ to build stronger support systems for Indian children. How this is manifested in education is exemplified by the work of Hawaiians and Alaskan natives, who have seen this and developed educational curricula centered on key values and philosophies from their own cultures. Unfortunately, institutionalized oppression of Indian people is not just a historical artifact—it persists in contemporary life (Waller, Okamoto, Miles and Hurdle, 2003). "The oppression of assimilationist educational systems is what Indigenous students and communities reject, not education itself (Aguilera, 2003)."

LANGUAGE

Tiffany S. Lee and Carolene Whitman

ABSTRACT

The intent of this short literature review on the status of American Indian languages and language education is to focus on specifically New Mexican Native languages. While much of the research specified here has specifically focused on New Mexico's Native communities and languages, it also includes research from the broader southwest, and some from national and international perspectives. They all help to inform our understanding of the nature of language loss, language shift, language attitudes, and language revitalization efforts among Indian communities in New Mexico. Although many Native languages are represented in New Mexico (such as Comanche and Lakota), the languages that are home to New Mexico include Apache, Navajo, and the Pueblo languages of Tewa, Keres, Tiwa, and Towa.

Language Shift

One widely cited research study with regard to the status of American Indian and Alaska Native languages across the United States and Canada was completed by linguist Michael Krauss (1998, 1996). He classified these languages and their percentage of speakers left according to a generational scale. Approximately 13% of the 155 languages still being spoken in the US are in Class A, where all generations still speak the Native language. 20% are in Class B (parent generation and up speak the language); 40%, the largest concentration, are in Class C (grandparent generation and up); and 30% are in Class D (elderly). At this rate, Krauss argues no language is "safe" from extinction as the world's languages are in a state of language loss and language shift as well (Nettles and Romaine, 2000). Many authors have hypothesized as to the reasons for language loss, such as from oppressive language policies, decreasing subsistence and traditional lifestyles, non-Native religious influences, ineffective language education efforts, and internal changes in attitudes and values toward one's own heritage language (Benally and Viri, 2005; Crawford, 1995 and 1996; McCarty, 1993; Peacock, 2006; Sims, 2001; White, 2006).

The transfer of a Native child's first language from the Native language to a dominant, often colonial, language is known as *language shift* (Fishman, 1991). Fishman's theoretical conceptualization of language shift has informed much of the work by linguists and language educators working on behalf of New Mexico's Native languages (Holm and Holm, 1995; Lee, 2007; Lee and McLaughlin, 2001; McCarty, Romero, and Zepeda, 2006; Reyhner and Tennant, 1995; Sims, 2001). Fishman's framework and model for reversing language shift, which was based on European minority language groups, has also been critiqued for its appropriateness for current realities in Indigenous communities today and for its privileging of intergenerational mother tongue transmission (Romaine, 2006). Romaine reconceptualizes the possibility for a language to be revitalized without intergenerational transmission. Similarly, when addressing language learning for Native communities, authors such as Berlin (2000) argue that second language acquisition theories (SLAT), pedagogical approaches, and techniques, which are based on language-specific theoretical research, can provide helpful and effective ways to teach Indigenous language as second languages. However, both White (2006) and Blum-Martinez (2000) critique SLAT and methods as inapplicable to Native language acquisition because these theories and methods were based on populations with very different histories, contexts, and contemporary circumstances. White's analysis includes a case study of Tewa language communities, and Blum-Martinez discusses Pueblo language communities more generally.

Culture, Identity, And Human Rights

The importance of language to culture and identity has also been discussed by many scholars, educators, and community members (AILDI, 2006; Lord, 1996; Morrell, 2007; Wilson, 1998). These authors document the experiences and beliefs of Native people across the US about the role of language in main-

taining Indigenous knowledge systems, cultural identity, access to spirituality, and connections to land. These authors and others (May, 1999; McCarty, 2003) extend their discussion to convey that the maintenance and revitalization of Native languages is a human rights issue. This issue becomes all the more significant with the detrimental impacts of globalization in that Native languages represent communities with limited land bases. Historical and contemporary hegemonic conditions that oppress the linguistic rights of Native peoples have also contributed to community change and assimilation into Western ideologies that position Native languages, peoples, and cultures as inferior. Both Benally and Viri (2005) and Sims (2001) describe this type of communal change in Navajo and Acoma Pueblo communities respectively.

To better understand the characteristics in Native language use today, there has been a vast amount of research around language usage, attitudes, and values among American Indian populations in New Mexico and the broader southwest. In particular, there have been several studies that have examined Navajo and Pueblo teenagers' and young adults' patterns of and influences on language use (Lee, 2007) and language attitudes and values (Lee, 2009; McCarty, Romero, and Zepeda, 2006; McCarty, Romero-Little, and Zepeda, 2006). These studies provide insight into means for intervention and effective language revitalization programs for teenagers and young adults. For example, all of the studies found the youth expressed great respect and sentimentality for their heritage language but were conflicted and embarrassed by scolding messages about their language abilities from adults.

language revitalization

Reclaiming Native languages, language education, and revitalization efforts is another thematic area strongly represented in the research. The Native American Language Act of 1990 and 1992 and the Esther Martinez Native American Languages Preservation Act of 2006 have been addressed by various scholars and advocates in terms of both its importance and its limitations (Hinton, 1993; Romero Little and McCarty, 2006; Springer, 2007; Wilson, 2007). While Congress has increased funding for implementation of the act, the authors recognize the needs in teacher training, parental participation, and enrichment or additive approaches in education (where the language is utilized as a resource for learning, rather than viewed as a deficit to learning). Romero Little and McCarty point out that the No Child Left Behind Act (NCLB) of 2001 conflicts with language immersion such as by providing no provisions for instruction and assessment in Native languages. The challenges of NCLB and other federal, state, and school policies, such as bilingual education implementation goals and special education assessment practices, to Native language immersion and revitalization have been widely critiqued to clarify the need for inclusion of local control and cultural knowledge, and the understanding of sociocultural influences and contexts that impact student learning (Allison and Vining, 1999; Holm and Holm, 1995; McCarty and Watahomogie, 1998; Samuels, 2006).

Various types of language education methods have been surveyed by scholars to demonstrate the different ways to implement language immersion (Johansen, 2004; Pease, 2004; Pease-Pretty On Top, 2004). Immersion methods can be integrated into educational approaches such as through a Master-Apprentice, Total Physical Response, and Montessori pedagogical techniques.

Many authors have also provided specific examples of language education and immersion programs from community and school-based contexts. Benjamin, Pecos, and Romero (1996) discuss the language revitalization efforts in Cochiti Pueblo, which has become well known for its comprehensive approach from language nests, to summer programs, to school-based courses. Morrell (2007) and Rivera and Tharp (2006) examine the language changes, needs, community responses, and school programs in the Pueblo of Zuni. Fillerup (2000) describes a Navajo language immersion project in the community of Leupp, Arizona. Navajo perspectives on academic content and standards are shared along with a detailed overview of the program. Zepeda (1995) offers examples of storytelling among Tohono O'odham youth in school contexts, and Bo-yuen Ngai (2006) provides suggestions for grassroots efforts to include language and cultural knowledge in schools with both American Indian and White students based on interviews with

Flathead Indian community members. Harrison (1998) describes the development of language immersion schools among the Maori in New Zealand. The Maoris have been considered one of the leaders of Native language immersion education. The article by McCarty and Watahomogie (1999) offers a good overview of multiple communities' language revitalization efforts, many from the southwest. Finally, Hinton and Hale (2006), well known for their Native language linguistic and education work, edited an important book called *The Green Book of Language Revitalization in Practice*. This book includes chapters by some of the authors previously mentioned. Each chapter focuses on a particular Native community's language revitalization efforts through community, schools, families, and individuals.

CURRICULUM

Mary Jiron Belgarde and Leola Tsinnajinnie

ABSTRACT

A review of the literature on “curriculum” focuses is replete with national efforts that date back to the early 1970s when Indian education initiatives were jump-started by the Indian Education Act of 1972. The Act recognized the unique cultural, linguistic and education needs of American Indian students living in urban and reservation areas and provided monies for public institutions to train Indian teachers, develop curricula, and reaffirmed the federal government’s responsibility regarding the education of American Indian and Alaska Natives.

Culturally Relevant Curricula

This review of the literature includes research and practice on curriculum from a regional and national perspective. This review of the literature identified numerous refereed journal articles, booklets, books, and curriculum guides and other documents regarding culturally-based curricula was developed, field tested and used in public and government schools beginning in the early 1970s to the twenty-first century. Some of the authors who implemented the culturally-based materials in schools compared students who were taught using culturally relevant curricula with students who were enrolled in the same schools without the specialized approaches and some used pre and post-tests to show effectiveness and reliability measures. Most of the curricula studies, books, guides, and booklets under review were conducted by Native and non-Native educators working among tribes and education institutions throughout the country.

Most of the materials reviewed provided detailed information about how the curriculum was developed, by whom, and covered a plethora of topics in various subject categories, such as language arts, science, mathematics, social studies (e.g., history, geography, law, government), health (e.g., diabetes, smoking, alcohol), gender equity, and list of references of southwestern communities and reveals efforts to incorporate language and culture into existing pedagogical practices.

Several other articles authored by Native educators, centers, and organizations provide examples of curricula developed for other Native populations. Some address specific topics such as alcoholism (American Indian Science and Engineering Society, 1994), gender equity (American Indian Resource Center, 1992), self-identity / self esteem (Brown, V. H. & Native American Educational Services, Inc., 1986), and cardiovascular education; tobacco use and good dieting (Davis, S. et.al, 1995). Some additional articles provide resources for effective approaches to developing Native cultural curricula (Butterfield, R., 1983; Butterfield, R. & Northwest Regional Educational Laboratory, 1985; Chisholm, A. & Oklahoma University, American Indian Institute, 1991; Disney, D. Comp & Tacoma School District 10, 1977, 1978; Dorris, M. n.d; Fox, S. J., & Montana State Office of Public Instruction, 2006). There are also annotated bibliographies such as one published by Fairbanks, P. & Minneapolis Public Schools, 1979.

Navajo Bi-Lingual Studies

Much of the literature centers on the work of the Navajo Bilingual – Bicultural Social Studies Curriculum Center and the initiatives that were an outgrowth of the U.S. Department of Education demonstration grants that funded Rough Rock Demonstration Schools (Bia, F. et. al., 1982; Johnson, G., et. al., 1981a.; Johnson, G., et. al., 1981b; McCarty, T. L., 1989; McCarty, T. L. & Wallace, S., 1983; Wallace, S., et. al., 1982; Wallace, S., et. al., 1983a; Wallace, S., et. al., 1983b; Wallace, S. & McCarty, T. L., 1983). This body of literature provides teachers with guides and textbooks pertaining to Navajo social studies in general and Navajo history and government in particular. Some areas of the literature also helps reinforce Navajo and English literacy, communication, math and science skills, with the idea of helping to enhance an appreciation and respect for the Navajo people (all are based on Navajo belief systems and ontology

(ways of understanding the world). Many chapters contain sections on the main ideas, purposes, skills-to-be-developed, materials needed, activities, and teaching strategies that can be employed. Some of the curricula describe and provide materials that are written in Navajo as well as in English. Most of the material produced by the Navajo Bilingual – Bicultural Social Studies Curriculum Center was designed for middle and high school students with some intended for fourth grade students as well. The curriculum guides generally provide a “built-in” evaluation system to help determine student mastery of concepts and skills while also helping students develop inquiry and test-taking skills.

An article authored by the Bureau of Indian Affairs, Department of Interior (1973) provides summary findings of meetings held on Bilingual Education in Bureau of Indian Affairs schools during 1969-1972. Although somewhat dated to the early 1970s, the article cites Dr. Bernard Spolsky, Director of the Navajo Reading Study, University of New Mexico, concluding that through bilingual education the quality of schooling for Navajo children had improved. The article discusses bilingual curriculum ideas and summaries of the conference proceedings in 1972. The final portion of the document provides an “Analytical Bibliography of Navajo Reading Materials and a listing of 49 materials published between 1970-1972; it includes information about the authors, titles, publisher, information sources, educational levels, and brief descriptions of the content.

Navajo Traditional Teaching

The book entitled, *Reservation Schools and 95-561: The Administrator and the Curriculum*, (Foster, C. G., et. al., 1980) is a collection of nine essays and reports published by members of the Diné Teacher Corp Project '78 to stimulate the thinking of curriculum practitioners. The content is aimed at affecting administrative styles and constructing and implementing curriculum. The administrator's role in the development of instructional programs; bilingual programming and its relationship to Indian values, experiences, and needs; and in-service, financial planning, and leadership programs affecting changes in Indian education are also discussed.

The article, “Aspirations: The Ganado Public School Curriculum (Ganado Public Schools, AZ, 1992) for example, describes an elementary school curriculum based on traditional Navajo teachings associated with the four cardinal directions. Its goal is to help students live harmonious lives by developing sound belief and value systems, learning ways to make a living, learning social competencies, and developing respect and reverence for all living things. Their reading and writing program consists of a mini-lesson, an activity period, and a sharing period. The article also describes other curricular areas and schools programs such as “videocy” (intelligent viewing of television and films), English as a second language, thematic studies, natural and social sciences, mathematics, fine arts, physical education, library, a Navajo Enrichment Acceleration Program, multiage programs, and many other school district programs. Finally, the article outlines a framework for curriculum planning that includes the principles of learning, characteristics of learners, general resources, and curricular approaches to various modalities.

Some of the Navajo social studies curricula was designed by others working in Navajo communities and measured to be “organically developed” from tribally specific perspectives by tribal members (Blanchard, R. 1994, 1999). The author refers to this approach as coming into development from a “Community Social Profile” – recognizing the Navajo community's location (geographical and physical environment), history, economics, political structure(s), and cultural world views. The author encourages the pedagogical use of the ‘co-construction of knowledge’ with students conducting research under the guidance of an teacher's oversight committee, elders, and other representatives of the school and community.

Navajo Legal & Math Studies

Three articles are content specific to Navajo Nation law-related education and two others are related to mathematics (Frank, K.W., 1982) and special-education (Foster, C. G., et. al., 1980). The law-related curricula (Carey, et. al, 1987) provides modules and 32 detailed lesson plans in a curriculum guide. The overall goals are to encourage citizenship, understanding of the law and the legal system, and lawful conduct. Particular attention is paid to Navajo citizens living within the “checkerboard” area. The lesson plans are organized into six chapters dealing with an introduction to law, individual rights, consumer law, family law, student and school law, and criminal law. Each lesson includes objectives, opening questions that introduce the topics, background information for the teacher, suggested methods and materials and a list of activities. Example lesson topics include Indian voting rights, marriage on the Navajo Nation, and tribal jurisdiction of non-Navajos on the reservation. An annotated list of recommended films and a bibliography is also included.

The mathematics curricula (Frank, 1982) provide a secondary school mathematics curriculum that was implemented at the Navajo Mission/Academy located in Farmington, NM, during the 1980-1981 school year. The curriculum called, Unified Mathematics, was based on New York State’s “Three-Year Sequence for High School Mathematics. The curriculum sequence of algebra, geometry, and trigonometry met graduation requirements helping in the preparation for college; the units designed for completion in 3-4 weeks and repeated throughout a three year period with each unit taught at a more advanced level.

The special education curricula (Foster, et. al, 1980) developed and implemented by the Chinle Agency’s Special Education Department includes sequential criteria for mathematics, reading and writing language arts, and behavior. The math curricula however, was considered the easiest to implement (and the only subject area completed) and followed the San Diego Sequential Task for Educational Planning (STEP) process. The math curricula include learning experience packets, exit-tests for each math objective and pre and post-tests for the program.

Other New Mexico Tribes

Scant curriculum literature exists to address the needs of other New Mexico tribes such as the Pueblos and the two Apache nations. Hakes, et. al (1980) however, did publish a pilot study on curriculum improvement for Acoma and Laguna Pueblo Indian students. The study compared a pilot program of culturally-relevant curricula with that of students enrolled in a conventional curriculum. The experimental groups employed culturally relevant materials and strategies designed to enhance learning for fifth grade students in mathematics and reading; seventh grade students in mathematics, and ninth grade students in social studies. The findings of this study suggested that teacher training was an important variable contributing to the achievement of these students. Pre- and post-testing indicated that in almost every case, where materials were used correctly and the teacher had received training, the pilot curriculum produced significant positive results.

Sando (1978) published an article describing teaching techniques used at the Albuquerque Indian School in Albuquerque, NM. The teaching techniques were used among students and their families with learning activities that required consultation in search of answers and understanding. As an example, in one lesson, students defined what is meant by a “strong Indian culture.” They then identified the factors that create it, and analyzed their own situations accordingly. The learning activities included class discussions, supplementary reading, and written reports. Other lessons examined the early form of Indian education (Carlisle Indian School and the Americanization of Indian Students) and Indian land holding, Indian water rights, and the fight of the Taos Pueblo Indians to regain ownership of Blue Lake. In addition, Edmo, K and the All Indian Pueblo Council, Inc. (1987) published an article describing a vocational education program curriculum materials aimed at post-secondary opportunities to attain associate degrees with concurrent and related on-the-job training materials. Training was available in accounting, business technology, computer science, and secretarial studies.

PEDAGOGY

Nancy Lopez & Neomi Gilmore

ABSTRACT

The purpose of this brief literature review is to examine the key themes and promising classroom practices – pedagogy -in the education of Native American youth. Work on the unique experience of Indigenous communities in the Southwest, point to the disconnect between schools and Native American communities. Factors contributing to this disconnect include Western-based curriculum and pedagogy as well as the dearth of Native American educators in most schools with significant numbers of Native American students. The promising practices identified in the literature include engaged pedagogy, community-based power sharing and project based work that connects schools to students' lives. We end with a call for more research on the relationship between pedagogy and student outcomes.

Introduction

The purpose of this brief literature review is to provide highlights of the existing literature on the key themes and promising teaching practices for Native American students. We searched Sociological Abstracts, ERIC, and other social databases for articles that contained any one of the following terms: Indigenous; Native American; American Indian; First Nations; Aboriginal AND any one of the following terms: pedagogy; education; schooling. We reviewed over two dozen articles that met these criteria (See annotated bibliography).

Before reviewing some of the major themes and promising classroom and school practices in the education of Native American youth, it is important to conceptualize the sociohistorical context for the education of Native Americans in the United States as unique. While there is a tendency to equate the educational experiences of Native Americans as comparable to that of other ethnic groups, we argue that it is important to conceptualize Native Americans as colonized minorities who were incorporated into the United States through a process of European imperialism and colonization (Blauner, 1972). We find that most multicultural approaches to pedagogy and marginalized communities often ignore the qualitative difference in lived experiences and identity of American Indians (Grande, 2000). Osborne clarifies the importance of understanding the qualitative differences between colonized minorities and immigrant minorities:

Native American, African Americans, Australian Aborigines, and Torres Strait Islanders, among others, were at once at the center of their cultural worlds. By a variety of forms of force they have all been marginalized by Western nations ... Their worldview were ignored and even used against them. They were excluded from Western political processes, provided with inferior schooling, health care, sanitation and social services and dealt with paternalistically. They were seen as inferior and needing to be civilized as defined by Westerners (Osborne, 1996:288).

These hegemonic ideologies contributed to the creation of boarding schools designed to strip Native American children of their so-called “deficient culture” (Peshkin, 1992). It is also important to acknowledge that Native Americans have always resisted imperialism and colonization and have been able to fight for their sovereignty, language revitalization and self-determination (Collins, 2000; Josephy, Nagel & Johnson, 2000; Braveboy, 2004).

Conceptualizing Pedagogy

Broadly defined pedagogy refers to the learning activities, classroom practices and teaching strategies that are utilized in and outside of the classroom to create lifelong learners (Rivera and Tharp, 2006: 447; Freire, 1985, 1993). Freire (1993, 1985) distinguishes between “banking education,” whereby students are constituted as empty receptacles to be filled by an omniscient teacher as an instrument of oppression.

Freire advocates for dialogic education, whereby students are valued for the worldviews, culture and experiences they bring to the classroom: “For the dialogical, problem-posing teacher-student, the program content of education is neither a gift nor an imposition--bits of information to be deposited in the students--but rather the organized, systematized, and developed ‘representation’ to individuals about which they want to know more” (Freire, 1993:74). This type of pedagogy fosters critical thinking and lifelong learning in the pursuit of social justice for a community.

Schooling, namely curriculum and pedagogy, are never neutral or apolitical. Pedagogy is an inherently political process: “Pedagogy is not only a system of information or subjects that are organized for students but an ordering of social fields [cognitions, worldviews] ... Pedagogy is a system of discipline by which hierarchies – markers of social distinction and aspirations – are established (Popkewitz, 1988:80).” In order to examine how pedagogy works, we must always begin by asking: “Whose values are being taught in the school? And whose culture are we aiming to preserve through the schooling process?” (Rivera and Tharp, 2006:438)

Popkewitz (1988) argues that the dominant literature on the education of Native American youth frames their problems of Indigenous youth as a cultural problem; however, this framing needs to be rearticulated as a question of power. The key insight is that constructions of culture and self occur against the backdrop of power inequalities and resistance. Popkewitz examines some of the paradoxes of tokenistic attempts to include Native American community members in school decision-making in the Teacher Corps project. In spite of the good intentions, “the discourses about change legitimated the status, privilege and initiative of those authoritatively define the content of schooling (84).” Ironically school experiences never surfaced as part of the problem.

Bhavantri and Hernandez Prosperi argue that pedagogy of hope must be anchored in working toward the elimination of oppression and fighting injustice through the establishment of coalitions. The cognitive goal should include critical thinking skills about hegemony and social justice that links past to present. “Red Pedagogy as that which maintains: (1) quest for sovereignty and the dismantling of global capitalism as its political focus; (2) Indigenous knowledge as its epistemological foundation; (3) the Earth as its spiritual center; and (4) tribal and traditional ways of life as its sociocultural frame of reference (Grande, 355).”

Promising Practices

Our review of the literature did not find studies on the direct impact of pedagogy on student outcomes is scarce; however, we did find several studies that identified promising practices for student and community engagement. These practices usually included engaged pedagogy, holistic approaches, parental involvement and integration of community in the school. The importance of deep learning and creating highly engaging art is the focus of Lopez and Hall (2007) community based action research project with the National Indian Youth Leadership Organization and their work with Native Youth. Deep learning through the infusion of art, murals and gardens in formerly drab and uninspiring schools was key to Native American students’ success.

Regarding pedagogical praxis (action and reflection), Sparks suggests that teachers continually engage in self-reflection and sharing about promising practices. Teachers should allow audio taping, using visual aids and giving real life examples during lessons as well as hands-on engaged pedagogy. Teachers should also present English grammar by presenting “the entire sentence first, and then break it apart by its grammatical components (Sparks, 2000:262). Sparks (2000) also lauds the “extended classroom” model where lessons are taken outside the classroom door through field trips into the community. This would be meaningful if it was part of the community school connection. Similarly, cooperative strategies—versus competitive—have been seen as a productive pedagogies for Native American students. Sparks also points to the importance of generating classroom learning activities from the actual interests of the students. It is also important that teachers evaluate their sense of time so that they allow for flexibility and

patience. These strategies are not only beneficial for Native students but promote meaningful learning for all students. “When Native American students encounter a meaningful, relevant curriculum, they will react with positive feelings and performance (Sparks, 2000:263).”

Pewewardy (1992) points to the ways in which American Indian education may be the foundation of a paradigm shift in holistic education. The magnet school is premised on the assumption that “Indian cultures possess a rich and varied tapestry of approaches to life (Pewewardy, 1992:2).” At this school, there’s an absence of bells and clocks and instead encourage student journal writing and critical thinking skills. Classrooms are arranged in a family style layout where each classroom is linked to another classroom with connecting doors. Team teaching and cross-age groups are the pillars of cooperative learning. “Our students achieve the desired learner outcomes because American Indian sports, games, music and crafts are incorporated across the curriculum: therefore, learning is relevant to the students’ knowledge base and culture (Pewewardy, 1992:3). Pewewardy posits that action research that is anchored in improving culturally responsive pedagogy is also an important promising research strategy.

The diversification of the teaching force, particularly Native American educators, and on-going professional development were two ingredients that were important to creating successful pedagogies for Native American teachers. There is a real need to “recruit and select ...teachers who bring knowledge, experiences, commitments, and dispositions that will enable them to learn and teach culturally diverse student populations well (Sleeter, 2001:96).” Osborne (1996) underscores the importance of seeking funding to set aside time for professional development for teachers to provide them time to reflect on social justice and their pedagogical strategies. This reflection must be done in concert with efforts outside the classroom to change school policy. In this effort, community based action research can serve as one vehicle for initiating systems change that advances social justice (Sleeter, 2001). Pewewardy (1992:5) argues that teacher training programs should include: “cutting-edge culturally relevant research on learning styles of diverse learners; teaching pedagogy; community participation; open communication; and evaluation strategies.”

The literature points to the importance of including opportunities for both individual and group work; however the dominant pedagogy is anchored in teaching students as individuals who are in competition with one another. Hanks (1996) advocates for engaged pedagogy. In this model teachers serve as facilitators, problem-based instruction that is anchored in students’ culture and lived experience as well as cooperative vs. competitive instruction. The promising practices included being time-generous. The cooperative teacher promotes autonomous and group learning, whereby students take ownership of their own learning. “...For instruction to be culturally sensitive, content and pedagogy cannot be separated (Hanks, 1996:6). Student should also be engaged with contextualized problems. There is also the care-taking of a bonded community.

The inclusion of both classroom-based instruction as well as community-based cross-cultural experiences is also noted in the literature (Sleeter, 1992). Brown, et. al., crossed the US-Canadian border to provide us with a model for community-based participatory research by working with Aboriginal youth, and young men in particular. Their guiding question was: What is a healthy community? They begin with an examination of the challenges of living in an urban setting. Colonization, dislocation from traditional territories and forced assimilation all shape the experiences of these youth. Controlling images rarely portray Aboriginal youth as “community assets, yet they are the future leaders and best positioned to maintain momentum of long-term renewal efforts underway in urban neighborhoods (Brown, et. al., 2005: 83).” Mutual engagement model involves partnering with a community-based organization to formulate the research agenda and carrying out the research so the results can be used to lobby for social change. “A necessary ingredient for effective school reform includes the involvement of the community in the processes of decision-making, as well as in the everyday classroom activities (Rivera and Tharp, 2006:445).”

ACCOUNTABILITY

Carlotta Bird, Vincent M. Romero & Neomi Gilmore

ABSTRACT

This brief literature review focuses mainly on how New Mexico is implementing its accountability system within the public schools that serve 90% of Native American students in the state. It begins with a brief overview of New Mexico's accountability system including its impact on the Indian Education Act of 2003. Presented in this context is the perspective of native tribes, with an example from the Navajo Nation Sovereignty in Education Act of 2005. A short section examines issues about English Language Learners as it relates to Native American students.

No Child Left Behind And New Mexico's Accountability System

At the time this study began, the federal legislation known as "No Child Left Behind (NCLB)" had been enacted across the United States for five years. In New Mexico, HB 212, which restructured oversight of the public school system to align the state's education statutes with NCLB, had been in operation for four years. With these developments, schools receiving federal and state funding became accountable for the legislated provisions of both laws. This meant that all public schools in NM, including those serving Native American students, were accountable for increasing academic achievement and closing the achievement gaps among different student groups, with a particular focus on those who are economically disadvantaged, who represent major racial and ethnic groups, who have disabilities, and who have limited English proficiency (Francis and Rivera, 2007).

Prior to NCLB and HB 212, New Mexico had in place a Statewide Accountability System centered on five indicators: student achievement, attendance, dropout rate, parent and community involvement, and school safety. Ratings for these statewide indicators were used by the NM State Department of Education to create an "overall school rating" using a "data point matrix" that indicated whether a school was Exemplary, Exceeds Standards, Meets Standards, or Probationary. Using these ratings, at the time NCLB became law, fifteen public schools in New Mexico were recommended for corrective action. Ten of those schools were "heavily populated with Native American students" (NMSDE, 2002).

In addressing the issues presented, the state chose to define, understand and interpret high achievement as a perfunctory process that has expanded the number of tests that students must take throughout the school year. Administrators, teachers, and professional support staff were exhorted to collect and analyze data on a systematic cycle based upon the school's Education Plan for Student Success and the Baldrige Approach to School Improvement (Shipley, 2006). Both are templates that the NMPED has prescribed for schools to utilize in developing goals addressing the gaps in performance at schools not making AYP and therefore identified in need of improvement. These templates serve the NMPED as a quick method to account for progress. A cursory review of the plans submitted to the state from schools with sizeable populations of American students show that the majority of goals are focused mainly on "improving" reading and mathematics instruction, to improve performance on the state's tests.

The Indian Education Act of 2003

The Indian Education Act (IEA) passed by the legislature in 2003 was a means to begin addressing the needs of Native American students. The initial stated purposes of the IEA were to ensure: equitable educational opportunities for American Indian students enrolled in public schools and the maintenance of native languages. It also called for the study, development and implementation of educational systems that positively impact the educational success of American Indian students and developing formal government-to-government relationships with NM tribes, the education division of the Bureau of Indian Af-

fairs and other entities that serve American Indian students. Attached to these provisions was a requirement for schools to report the status of their performance to tribes as measured by not only the five NMSDE established indicators, but the addition of data related to: educational programs targeting American Indian students; financial reports; the current status of federal Indian Policies and Procedures; initiatives to decrease the number of student dropouts and increase attendance; the use of variable school calendars; and school district consultations with parent advisory committees. (NMSDE, 2003)

The issues in attaining the measures of performance occur in the implementation of the law: at the local school level when they apply state processes and at the state level as they direct and oversee the NCLB requirements with little coordination with the IEA. The Legislative Finance Committee called for an accounting for the implementation of the IEA in 2006. The resulting report reviewed the implementation of the IEA to determine whether the “activities and uses of the Indian education fund are appropriate to address the Native American achievement gap” (LFC, 2006). The report stated, “the Act is vague, overly ambitious and extremely difficult to implement...” The report then proceeds to review the complexity of issues related to meeting the requirements of NCLB and those relating to meeting the needs of American Indian students. The report acknowledges the unique challenges in addressing the education of these students and recognizes the sovereign tribal communities by stating they must be involved and control the education of their children, but at the same time recommending that the NMPED develop prescriptive measures and plans for schools to use in providing activities, curricula and programs for these students. The report also acknowledged that the implementation of the IEA and the state’s emphasis on NCLB requirements to make Adequate Yearly Progress (AYP) are working at cross-purposes. Other findings could be challenged and debated as the study “mixes apples and oranges” in comparing the tribes in New Mexico with those in other states and then generalizes the findings to all the tribes and schools (LFC, 2006).

Tribal Perspectives

The State’s accountability process places the onus for performance on the students and the communities they come from. However, the call for high academic achievement was welcomed by many tribal communities who had been receiving a regular education services that was considered mediocre, or less. They began to envision the transformation of their children’s schools through the implementation of the IEA in the schools.

From the tribal perspective, the understanding of the intent of the IEA is to hold the NM public education system accountable for the education of American Indian students in its schools. While education is very important to the tribes, a higher priority for those in New Mexico is the continued survival of their native languages and culture. That these be sacrificed for the sake of achieving AYP is not within the understanding of what education for their children is about. Tribes see that their children require additional resources, more meaningful learning experiences, enriched curricular content, and respectful relationships with those that arrive in the community to teach them. It holds the agencies that provide educational services for their children accountable and responsible in ways the NMPED and the Bureau of Indian Education (BIE) have yet to address. In the words of an Indian Education Director from a Northern Pueblo, “...Indian children need to be given the opportunity to pursue their dreams. Schools need to be held accountable for those who do not succeed...(Tribal Education Summit, 2005).

The Navajo Nation (NN) is the largest tribe in New Mexico, and has reservation land in two additional states, Arizona and Utah. With this land base, the NN has pushed forward their sovereignty into the area of education. They developed educational plans that envisioned the tribe assuming more control over the education of it’s children. In 2005, they amended Title 10 of the Navajo Nation Education Code to initiate greater authority and partnerships with all schools serving Navajo children. They stated their responsibility and authority as “the Navajo Nation:

- ◆ has the authority and inherent right to exercise responsibility to the Navajo people;

- ◇ has authority to prescribe and implement education laws and policies;
- ◇ recognizes the legitimate authority of the actual education provider; and
- ◇ will work cooperatively with all education providers.

NMPED's and the other State Education Agencies initial reaction to this initiative was to remain steadfast in their determination of education programs for all students including Navajo. One of the major provisions of the NN plan was for all schools serving Navajo students to include Navajo language, culture and history in their curriculum.

English Language Learners

A major sub-group that has received considerable attention at state and national level discussions are English Language Learners. In New Mexico as in other states with sizeable "minority" student populations, many students have been categorized as English Language Learners (ELL). In the assessment process, ELL students are one of the sub-groups considered in schools making AYP. Another sub-group is special education students. In NM, both of these categories impact the assessment and education of Native American students in disproportionate numbers. Decisions regarding classification, placement, progress reporting, planning curriculum, delivery of instruction, selection of resources and materials, and student classification are impacted by these designations. Therefore, the issue of assessing these students appropriately has grown to be an issue that has received considerable attention in New Mexico and across the nation.

As a sub-group for making AYP, the fair and valid assessment of ELL students is among the top priorities on the national educational agenda. The definition of ELLs includes among others, "(d) a Native American, Alaskan Native, or a native resident of the outlying areas (Abedi, 2007)." This discussion impacts the tribes in New Mexico as the focus has been on the development of English proficiency with a narrowed curriculum rather than an enriched curriculum that encourages multiculturalism and multilingualism.

New Mexico and other states looked to the US Department of Education to provide guidance regarding how best to assess these students. So, during the summer of 2007, the US Department of Education conducted hearings regarding assessing ELL student English proficiency. Each hearing began with a panel of experts in assessment, test development, policy analysis, project directors of regional resource centers, and the State Department of Education. They discussed issues that included: the need for developing academic English language proficiency because "it's clear that unless our students are exposed to the language of school they will not succeed;" the overlap of English as a Second Language (ESL) instruction and "what the regular teacher is responsible for;" content validity as opposed to construct validity...and forgetting about other aspects of validity because inherent in content validity is the idea that the standards set are what we want and then we set the measures...but in reality we are serving kids. And what is in the standards matters."

A panelist who had visited a school on the Navajo reservation shared that experience explaining "when you have kids who are there, who are trying to learn, were trying to learn in a language that is organized expressively, cognitively in a way that is just functionally different from how we speak in English. And having standards that try to reflect that is going to be incredibly hard (USDOE, July 17, 2007, p. 74)" Only one panelist ventured that the amount of time spent testing kids takes away from instruction, "which is really what we need to be doing (USDOE, July 26, 2007, p. 47)." It seems that even for the experts there is no easy answer.

A Look Back and Forward

Nevertheless, the state and federal agencies press forward with their initiatives, or interventions, and a deficit mind set in regards to addressing what they define as achievement gaps. From the tribal perspective they are “doing the same thing but expecting different results.” One Native American professor, Jack Forbes, observed that:

In any case, there is reason to believe that the push for ‘standards’ is actually an attempt to destroy multiculturalism, pluralism, and non-Anglo ethnic-specific curriculum by forcing all public schools to adhere to a curriculum approved by centralized agencies controlled by white people. The standards are to be enforced by means of constant testing of students (and often teachers) based solely on the centrally approved curriculum. What standardized tests surely do is to force upon states, localities and regions a collectivist ‘testing culture’ that negates the unique heritages, dialects, and values of a particular area. Native nations and the schools serving their pupils will most likely become as assimilationistic as the pre-1928 BIA boarding and mission schools (Forbes, 2000).

Another Native American professor, David Beaulieu, shared his favorite quote from the 1928 Meriam Report on Indian education:

The most fundamental need in Indian education is a change in the point of view. ‘When it comes to the education of American Indians and Alaska Natives, it seems we still need not only an attitudinal change on the part of the general public, but also more efficient and creative approaches by educators (Beaulieu, 2000).

A NM Indian Education Advisory Council member, Larry Emerson, stated recently that

An ongoing “modern” problem contradicting Native self-determination occurs when Native learners are forced to wear a Western lens that makes Native culture appear backwards, stagnant, or lacking. Often the Western or modern lens is more concerned with power, control, hierarchy, materialism, enterprise, conquest, and domination—values that historically subjugated Native people and rendered Native knowledge marginal and inconsequential (Emerson, 2005).

A number of national stakeholders that includes the Council of Chief State Officers and the National Indian Education Association have conducted conferences and provided opportunities for the voices of Native American educators and tribes to interact in formal meetings and hearings addressing the issue of Native American achievement. It is hoped that these recommendations are considering the strengths of Native people and that resulting school curriculum, instruction, and resources reflect the multilingual and multicultural world that students will continue to participate in as they solve problems and issues in new ways that we can only prepare them for by providing a foundation rich in experiences, knowledge, skills and ideas, not a narrow curricular context based on “teaching to the test.”

SCHOOL CLIMATE, ENVIRONMENT AND PLACE

Ted Jojola & Genny Giaccardo

They kept out both animals and old people. All large rocks and natural trees had been removed a long time before I was a student and there were but a few foreign elm trees within the barren, isolated landscape. ...The vitality of the school came from faraway worlds, from lands described in books. Appreciation of the immediate landscape was impossible.

Rina Swentzell on the Santa Clara Pueblo Day School (Swentzell, 2006, pgs 19, 27)

ABSTRACT

The role of the environment and the meaning of place have been largely downplayed in school climate. Although the literature is sparse, there is conclusive evidence that elements of design such as architecture, incorporation of cultural elements and spaces, and site planning are important factors in native student success and retention. By and large, schools and campus facilities are not readily accessible to the communities they serve. This creates social distance between the institution and families and alienates the community from the school. With the resurgence of school construction among tribes, there is the opportunity to change this. It is necessary, however, that community participation be an integral aspect of planning and design.

Place

The role of the material, sociocultural, and symbolic meanings of place often go unstated in education (Wallerstein, et.al, 2003, pg 1517). This is attested by the rather meager amount of scholarship focused on this subject. It is also indicated through community voices that call for appreciating the value of traditional knowledge and incorporating it into building design and construction (Barnhart & Dubbs, 1998, pg 13).

From the earliest inception of reservation life, school building construction and placement to the community were significant elements of community development (Jojola, 2007, Manasc, 2005). The major periods of such construction began with the advent of the Indian Boarding School of the 1880s, continued into the 1930's B.I.A. Indian Day School Indian New Deal era and into the present campus development efforts under P.L. 93-638 tribal contracting (Franz, 1999, pg 137). In addition, there were private and parochial schools, usually established and maintained through the efforts of missionaries. President Johnson's War on Poverty created Head Start programs on Indian lands. Most recently, Charter schools have been instituted under the reform agendas of the No Child Left Behind policies. All of these institutions are present in the tribal communities studied.

Each regime ushered forth its own approach to school construction. The Indian Boarding system is considered to be the most dislocating, both physically and culturally. The military-institutional compound championed at the Carlisle Indian Boarding school in Pennsylvania during the turn of the 20th Century made no pretenses about removing children completely away from their home communities for the entire period of their youth. Both the Albuquerque Indian Boarding School and the Santa Fe Indian Boarding School were originally founded in the 1880s to emplace this system in the Southwest.

With the inception of education reform during the 1934 Indian Reorganization Era, this policy was discontinued and replaced with Day Schools that were intended to keep younger children within their community (Ellis, 1987). The schools were limited, however, and only served the earliest grades (usually K to 6th). Parents then had to choose either the Boarding Schools or had their children bussed to the nearest Public School to continue their education. Only after the advent of Tribal Contract Schools, however, were efforts made to integrate cultural and traditional designs, particularly in the design of new facilities and schools (Claflen, n.d., Illia, 2006).

Tribal communities, however, have not all progressed equally. By and large, funding for the improvement, expansion and construction of physical infrastructure has been driven by demographics and geography. There are only a few studies, however, that examine factors associated with demographic changes and urbanization influences on traditional communities and schooling (Ferris, 2008, Machmer, 1998).

Many N.M. tribes are small in population, physically remote and largely rural in character. The only exceptions are the Navajo Nation—with its feeder Chapter communities of Alamo, To'Hajiilee & Ramah— and the two Apache reservations, Dulce and Mescalero. This has resulted in a pattern of consolidation with adjoining non-native communities resulting in lengthy commutes and a demographic shift from majority status in their home school to minority status in the non-native school (Wilson, 1991).

For reservations that are bordered by multiple townships, it is sometimes the case that the children are divided among several school districts. This situation results in the community fractionation of the school-age populations. Children from traditional villages where they are the racial majority are suddenly faced with social isolation and being subjected to a minority status among their peers (Martin, 2001). It was exactly these type of factors that motivated the Pueblo of Zuni to become the first tribally controlled public school district in the nation (Zuni, n.d.).

It is assumed that infrastructure to support the construction of schools resides principally in the domain of border townships or urban centers. Because funding for school construction by the Bureau of Indian Affairs has been chronically neglected for generations, tribal communities have had few alternatives but to bus their children to adjoining public schools. A lesser alternative is to send their children to Indian boarding schools like the Santa Fe Indian School.

The dislocation of Indian children has been inadvertently supported through special entitlements that had been established by the Johnson O-Malley Act of 1934. Its provision for the compensation off-reservation Public Schools for the education of non-taxed Indian children, however, was not fully implemented until the 1960's. Ironically, this program was resurrected to advance the agenda of the Federal Indian Removal and Termination policy. Another residual affect is the heightened competition among public schools to enroll tribal students because of the JOM funds that they can leverage in addition to the regular formula funding.

School Climate

School climate refers to how environmental design factors impact the social and cultural atmosphere of place. Community proximity and access to the school has been cited as one of the most important factors in retention and educational achievement (Ferris, 2008, Kerkhoven, 2005). It is a key factor in promoting family connectedness, which in turn significantly contributes to lower risk of absenteeism, substance abuse and cultural conflict. Long commuter distances to off-reservation schools result in fatigue and the inability of Indian children to participate in before or after-school programs and activities (Machamer & Gruber, 1998). Schools that are geographically close to the community allow social interaction, community involvement and experiential based learning styles among teachers and pupils (Ferris, 2008).

The experience of transplanting children away from their own community is an alienating experience (Bibra, 2005). Public policy efforts to mainstream children through education forwarded and enforced attitudes of Euro-western superiority and creating a social and physical environment that was devoid of cultural and/or local identity. It has been asserted that the built environment, itself, constitutes a non-verbal language system intended to reinforce mechanisms of institutional power and dominance (Ward & Shueng, 1996, pg 136). This was certainly the case with the military barracks architectural style associated with Indian Boarding school campuses. It was not until the construction of Indian Day Schools in the Southwest that some of these visual impacts were mitigated especially after attempts were made to stylize them after vernacular styles or the so-called Spanish-Pueblo adobe tradition (Swentzell, 2006).

Environment

Environmental factors contribute enormously to the sustainability of community. Today, there has been resurgence of new infrastructure development and building construction on tribal reservations. This implies that communities have the opportunity to design and shape their school environments in accordance to their own cultural and social practices.

Two factors have contributed to this growth. One is the ability of tribes to contract their own services, including schools, as a result of provisions granted through the 1975 Indian Self Determination Act. Following closely in succession, though, is a second major economic development factor. This is the establishment of tribal casino operations, beginning in the 1980s, which, for the most part have netted significant profits. For those tribes that have opted to pursue such development, revenues have allowed a number of the gaming tribes to augment funding for school infrastructure, building improvements and new schools (Rever, 2008).

In spite of the opportunity that tribes have to reform the role that schools play in the community, few have chosen to do so. Instead, patterns of urbanization have infiltrated the lifestyle of tribal communities. Suburban cluster style HUD housing, for example, has created a dependency on the automobile. Inadequate or poorly planned road systems have resulted in unwalkable and unsafe environments for children. The reliance on the automobile for daily activities is increasingly being cited as directly contributing to public health situations, such as obesity and onset diabetes. Increases among native children are the highest of all race groups (Halpern, 2007).

Schools are sited less to create safety and social systems and more to provide convenience and direct access to thoroughfares. Schools constructed next to interstates, for example, do not conform to strict zoning ordinances developed in California (Title 5, CA Code of Regulations, § 14010.e) for reasons of public safety and protecting children from environmental pollutants such as noise and air quality. In addition, schools constructed next to high volume traffic corridors require higher security. Coupled with restrictive school policies, facilities remain off-limits to the community.

Overall, factors related to the successful implementation of school design are remarkably similar to those related to successes in implementing school technology programs (Sirous,et.al, 2001, pg. 4). They are:

- ◇ strength of the tribal economy
- ◇ commitment and support of the local tribal government
- ◇ the tribe's relationship to other agencies, and
- ◇ leadership within the tribe.

The only other major variable not listed is the role of community participation in the school system. Remarkable positive results have been achieved when the community has access to school facilities and becomes involved in school planning (Barnhardt & Dubbs, 1998, Claflin, n.d. Manasc, 2005, Peters, 2005, Ward, 1996).

VISION

Mary Jiron Belgarde and Leola Tsinnajinnie

ABSTRACT

Legislative initiatives, research and local initiatives over the last forty years have initiated reform and broadened the venues for visioning the role of education for Indigenous communities. National conferences and research have become open to many of the best and brightest Native students and tribal leaders in the country. They, in turn, have become advocates and influenced policy makers to broaden the scope of what it meant to become self-determined, not only individually but communally.

National Policy

The review of the literature reveals that major studies (e.g., Meriam, 1928; Fuchs & Havighurst, 1972; Indian Nations at Risk Task Force, 1991; Kennedy, 1969; National Advisory Council on Indian Education Report, 2005; National Indian Education Association's NCLB's Preliminary Report, 2005; National Indian Education Study, 2006; U. S. Civil Rights Commission Report, 2003; White House Conference on Indian Education, 1992) acknowledged tribal sovereignty, endorsed Indian control over education, development of culturally relevant and bilingual curriculum materials, training of Native teachers in schools, expanded parental roles in education, as well as expanded supplemental monies to support academic related programs in schools.

The Indian Education Act of 1972, the revised Johnson O'Malley Act of 1974, and the Indian Self-Determination and Education Assistance Act of 1975 granted more control to Indian groups and provided collaborative voices toward the schooling of American Indian, Alaska Native, and Native Hawaiians. These organizations included for example, the development of the National Advisory Council on Indian Education, National Indian Education Association, the National Indian School Board Association, National Grant School Association, Tribal Education Director National Assembly, National Indian Headstart Directors Association, American Indian Science and Engineering Society, Kanu o Ka 'Aina Learning Ohana, National Johnson O'Malley Association, the Center for Native Education, the American Indian Higher Education Association, and the Native American Alliance for Charter Schools (<http://www.niea.org/departments/stateassoc.php>). Many other sub-groups also emerged, such as the Indigenous Peoples Topical Interest Group (TIG) of the American Evaluation Association, and the Indigenous Peoples of the Americas Special Interest Group (SIG) of the American Educational Research Association, and the Indigenous Bilingual Education Special Interest Group (SIG) of the National Association of Bilingual Education. Many of these organizations initiated and completed their own research, created policy changes, held joint congressional hearings on Indian education, and collaborated with one another for social and educational changes in schools (pre-Kindergarten to College).

Student Performance

Many Native leaders, college graduates, and community members were/are extremely passionate about reversing the historical legacy of Native student performances in schools. Many Natives were convinced that in order for things to change they had to do it themselves. The Indian Self-Determination and Education Assistance Act (1975), the New Mexico Indian Education Act (2004), the Esther Martinez Native Languages Preservation Act (2006) helped to strategically incorporate culturally-relevant curricula, formulate interagency collaborations among state, federal and tribal entities, provide for the training of teachers for Native students, resolve language issues (language policy, teaching of oral-based languages; addressing language shift, language loss, language maintenance and language revitalization), maintain school accountability (including the lack of and misuse of funding, government oversight, etc.). Thus, universities, (e.g., University of New Mexico, New Mexico State University, Arizona State University, University of Arizona, Ft. Lewis College, Penn State University, Harvard University) and Tribal Colleges (Navajo/ Diné College, Southwestern Indian Polytechnic Institute) offered Native early childhood certifi-

cates, teacher and administrative training programs (Belgarde, Mitchell, Moquino-Arquero, 2002). Native-based academic journals also emerged, such as the *Journal of American Indian Education*, the (former) *Navajo Journal of Education*, the *Canadian Journal of Native Studies*, *Tribal College Journal*, *Wicazo Sa- Journal of Native American Studies*, *American Indian Quarterly* and the *American Indian Culture and Research Journal*. Native-based articles and oral presentations were also archived by the U.S. Government, Educational Resource & Information Center.

Indigenous Philosophies

Native authors and some non-Native professionals who devoted many years in the field of Indian education began completing their own research on Indian education, acknowledging Indigenous philosophies, documenting their own stories, dispelling stereotypes, and looking at the whole child from early childhood to college in holistic, community-based and culturally-relevant ways (Ambler, 2003; Beaulieu & Figueira, 2006; Belgarde, LoRé, Meyer, 2009; Belgarde, & LoRé, 2004; Bielenberg, 2000; Child, 2000; Cleary & Peacock, 1998; Connell-Szasz, 1999; Darnell & Hoem, 1996; Deloria, & Wildcat, 2001; Demmert, 2001; Demmert & Towner, 2003; Deyhle, & Swisher, 1997; Jacobs & Reyhner, 2002; Kawagley, 1995; Lipka, 2002; Lynch & Charleston, 1990; McNerney & Swisher, 1995; Michie, 1999; Mihesuah, 1998; Slapin & Seale, 2003; Reyhner & Eder, 2004; Smith, 2002; Swisher & Tippeconnic, 1999; Pavel, 1999a; Pavel, 1999b; Pavel, Curtin, Christenson, Rudes, & Whitener, 1995; Pewewardy, 1998; Reagan, 2005; Reyhner, 1989; Rindone, 1988; Skinner, 1999, Smith, 1999; Tierney, 1992; Tippeconnic, 1999; Tippeconnic, 2000; Yazzie, 2000; Wilson & Yellowbird, 2005; Zinth, 2006. Many local agencies and universities (e.g., Arizona State University and University of Arizona), such as the Navajo Division of Education and the New Mexico Public Education Department – Indian Education Division began developing their own curriculum and developing handbooks for teachers (e.g., Arizona State University – Center for Indian Education’s “Functional Navajo-English Bilingualism/Biliteracy:: Revitalization Training for Teachers at Rough Rock Community School” also known as the Training for All Teachers Project). Few scholars were completing case studies of Native schooling (Lomawaima, 1994; McCarty, 2002; Peshkin, 1997).

Visioning

Tribes and Pueblos of New Mexico have embarked on a series of visioning seminars and/or strategic plans to improve the education of their communities. For example, in the 1970’s, at the Pueblo of Zuni, students from the Zuni Alternative learning Program were partnered with teachers and professional educators from the University of New Mexico to develop a vision of education for the Pueblo (Zuni, 2000). Their effort paralleled another initiative entitled “Toward Zuni 1985: Zuni Comprehensive Development Plan,” which covered a ten-year period (Toward Zuni, 1985).

The Pueblo of Jemez also conducted a similar effort with a tribal Vision Workshop, entitled “Vision for 2010: Towards Fortifying Our Identity through Cultural Preservation to Achieve an Enhanced Quality of Life.” In this workshop, they addressed achieving a comprehensive education through cultural excellence. They expressed their desire to strengthening Walatowa education and valuing their educators; sustaining culture and history through the curriculum; comprehensive youth initiative that builds self-esteem, identity, and parental involvement; viable educational alternatives and opportunities; and, ownership of their own educational system (Pueblo of Jemez, Vision for 2010, March 26-27, 1999).

The Central Consolidated School District # 22 is also developing a 20 Year Plan on Heritage Language Revitalization. In this effort, they are envisioning a summer school full-language immersion classroom, a kindergarten full-immersion classroom, and creating partnerships with the Central Consolidated School District Indian Education Committee, the Navajo Division of Education, the New Mexico Public Education Department – Indian Education Division, the University of New Mexico – College of Education, American Indian Language Policy, Research, and Teacher Training Institute, as well as the Navajo/Diné community language resource teachers (Central Consolidated School District, Heritage Education Office, June 10, 2010).

ANNOTATED BIBLIOGRAPHY

- Abeyta, Carlos Raymond. (1998). "A profile of New Mexico public school board members: Perceptions of their role, training and its effect on policy and decision-making." Albuquerque, NM: The University of New Mexico.

The purpose for this study was to provide a portrait of public school board members in the state of New Mexico. Characteristics such as ethnicity, household income, geographical region, years of service, education level, age, etc. were used to describe and compare the differences and relationships of their "perceived roles," "training," "policy making," and their effects on "decision making style." Perceptions of school board member "roles" were diverse. The primary roles were coded into three categories: "legislative role," "executive role," and "judicial role." Of those responding, 51 percent perceived their primary role as legislative, 28 percent as judicial, and 16 percent as executive. Chi Square tests were used to analyze the hypotheses at a 0.05 alpha level, and statistical significant differences and relationships were found between many demographic characteristics of school board members and their perceived roles. For example, it was found that Hispanic and Native American board members were in higher agreement to be "creators of direction" for their school district in comparison to Anglo board members. As another example, a statistical significant relationship was found between the education level of school board members and their perceived role. Those who had some college but no degree were less likely to see their primary role as a "legislative role." This group saw their primary role as a "judicial role." Those who perceived their primary role as a legislative role, were more likely to possess a Masters Degree or higher, and the group who saw their primary role as "executive" were more likely to possess a Bachelors Degree.

- Agbo, S. A. (2001). "Enhancing Success in American Indian Students: Participatory Research at Akwesasne as Part of the Development of a Culturally Relevant Curriculum." Journal of American Indian Education 40(1): 44.

Efforts to improve schooling under the banner of raising standards are taking hold throughout New York State. The emphasis on standards means that all students must meet a range of expectations held by the standards designers. But is there a chance that the rhetoric about standards can improve the education of American Indian children? Given the enormous disparities in the cultural conditions of Aboriginal students, the attainment of standards suggests necessary structural changes in the curriculum, instructional methods and materials, and the standards used to judge performance. This paper looks more closely at the utilization of participatory research in a curriculum development and teaching project that addresses the intercultural or interethnic needs of American Indian students. The paper addresses itself to examining the crisis of the education of Aboriginal children and to developing a new school orientation that sees Aboriginal educational endeavors in a new light. The contexts and arguments suggest that whereas Aboriginal perspective to learning is useful in redefining old problems and proposing fresh alternatives, there are some grounds for careful optimism about what might be possible.

- Aguilera, D., & LeCompte, M. D. (2007). "Resiliency in Native Languages: The Tale of Three Indigenous Communities Experiences with Language Immersion." *Journal of American Indian Education*, 46(3), 25.

- Allen, Nancy J. (1997) "Indigenous Models for Science-and-Culture Curriculum Development"

This study examines Indigenous models for the integration of science and culture into curriculum and instruction and was conducted in 13 Native American Indian schools over an 18-month period. In the summer of 1996, the Four Directions Challenge in Technology Project brought together teams of teachers, administrators, community members, and students from the schools for a two-week institute

in culture, technology, and curriculum development. The teams produced thematic curricula and multimedia projects that incorporated science and culture. Classroom discussions, electronic journals, informal interviews, and curriculum products were used to determine group priorities and concerns, models for cultural integration, and effective ways to support local curriculum reform. Results indicate that although teams often shared areas of concern--and thus targeted similar science content--the models used for curriculum development differed according to community values concerning culture and instruction. Suggestions include providing communities with continued instruction in curriculum design and encouraging local control of content. Contains 39 references.

Allison, S. R. and C. B. Vining. (1999). "Native American Culture and Language: Considerations in Service Delivery". *Bilingual Review* 24(1&2): 193-206.

The article focuses on Native American children with special educational needs in areas of culture and language. Because some of these children are taken out of the home environment, they feel alienated and not wanted by relatives, especially if they lose their native language, as illustrated in the story of Ben. According to the authors, "Virtually every aspect of Native American life and the Native American worldview is influenced by culture and language. A person's values and beliefs have both a deep and subtle impact on thought, behavior, decision making, expression, time and interpretation of events." The use of translated materials, from English to Navajo, does not correctly assess the needs of these students. There are many promising assessment practices to evaluate language skills.

Ambler, M. (2003). "Cultural Resilience." *The Tribal College Journal*, 14(4), 1.

Ambler, Marjane. (2003). "Indigenizing Our Future: Listening to Indian Voices will Help Us Face the Challenges Ahead." *Tribal College Journal* 15(1), p8-9.

Students with traditional upbringing can contribute specialized Indigenous knowledge in the classroom, i.e., tribe's language, beliefs, scientific knowledge, or leadership traditions. She said: "We cannot afford to marginalize the voices of Native people in our classrooms and in our society."

American Indian Resource Center, Tahlequah, OK. (1992) "A-Gay-Yah: A Gender Equity Curriculum for Grades 6-12". WEEA Publishing Center, Education Development Center, Inc., 55 Chapel Street, Newton, MA 02160.

This two-part guide frames gender equity lessons within the context of Native American history and culture, thereby increasing student awareness and knowledge in these key equity areas as they study U.S. history and social studies. Part 1, "Understanding Gender Equity," describes activities that increase student understanding of general gender equity issues: sex-role stereotypes, effects of biased language, the relationship between stereotypes and prejudice, stereotypes in the media, and students' own assumptions and prejudices. Part 2, "Stories That Teach Gender Equity," uses focused student readings and activities to prompt student thought and discussion on cultural and gender roles. Emphasizing critical thinking and cooperative learning, lessons lay out measurable objectives for teachers and include lessons plans, procedures, handouts and worksheets, teacher background information, and evaluation tools. Lessons focus on Cherokee leaders Nanyehi' (Nancy Ward) and Wilma Mankiller; the Kaw (Kansa) initiation rite, a survival test for boys and girls; the Osage ballerina Maria Tallchief; traditional roles of Indian women and their part in the tribal decision-making process; a drama in which four teenage girls discuss major life decisions; and a story of a day in the life of a dysfunctional family.

American Indian Science and Engineering Society, Boulder, CO. (1994) "Science of Alcohol Curriculum for American Indians (SACAI): An Interdisciplinary Approach to the Study of the Science of Alcohol for Upper Elementary and Middle Level Students."

This curriculum provides American Indian youth with a framework for learning about the effects of alcohol on the body and the community. The curriculum stresses the development of scientific think-

ing skills and was designed for upper elementary and middle level students. The guide consists of four units: How Does Alcohol Circulate through the Body and Community?; How Does Alcohol Deprive the Body and Community of Energy?; What is Fetal Alcohol Syndrome and How Does It Affect a Community?; and How Does Alcohol Impact the Brain and the Community? Units explore the meaning of community and discuss types of communities, ways communities solve problems, and how alcohol contributes to the breakdown of community values and functioning. The involvement of community members helps to provide meaningful applications of what students learn through the curriculum. Each unit includes an Indian story that allows students to draw upon traditional knowledge to better understand problems associated with alcohol. The concept of the medicine wheel is emphasized throughout the curriculum to provide students with a holistic and interdisciplinary approach to studying the effects of alcohol. Each unit also includes a holistic statement, goals and outcomes, interdisciplinary connections, instructions for student journals, instructions for use of a student sharing box, alcohol and science background summaries for teachers, science learning activities, unit review activities, small group activities, needed materials, teacher preparation, and assessment.

Apthorp, H. S., E. DeBassige D'Amato, et al. (2003). Effective Standards-Based Practices for Native American Students: A Review of Research Literature. Aurora, CO: Mid-continent Research for Education and Learning.

Research and related literature were reviewed to summarize evidence on the effectiveness of different instructional practices for helping Native American students meet standards. In English language arts, 16 reports were reviewed. In mathematics, 8 reports were reviewed. Findings were mixed for the effectiveness of teaching Indigenous language and literacy first, followed by English literacy and bilingualism. In some content areas, Native American students participating in these programs met grade-level expectations; in some areas, they did not. Findings were indeterminate with regard to the effectiveness of culturally congruent practices for Native American student achievement in reading and mathematics. Promising practices were identified, such as successful collaboration among community members, teachers, researchers, and teacher education faculty for creating culturally congruent classrooms with an emphasis on developing language and thought, but causal conclusions could not be drawn about the effectiveness of these conditions for helping students meet standards. Plans for further collaborative research are presented in an appendix, and a link to the Center for Research on Education, Diversity and Excellence (CREDE) is provided to assist readers in locating related and ongoing research and reviews.

Apthorp, H., & Clark, T. (2007). "Using strategy instruction to help struggling high schoolers understand what they read" (Issues & Answers Report, REL 2007-No. 038). Washington DC: U.S. Department of Education, Institute of Education Sciences, National Center for Educational Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL_2007038.pdf

To address a request by teachers to research practices and policies for teaching diverse groups of high school students, this study was conducted by the Regional Educational Laboratory Program (REL). Throughout this study, struggling readers and strategy instruction are used to focus the research. Recommendations include requesting that more research be done in the area of peer-assisted learning, with a broader focus to include more students, as it was concluded that these report findings are limited by the scope of the searches and the research available. The authors suggest that more research and study is needed in this area, but that it appears to be highly affective in student academic achievement.

Barnhardt, R. (2007). "Creating a Place for Indigenous Knowledge in Education: The Alaska Native Knowledge Network." Hillsdale, NJ.

Discussion that focuses on the development and implementation of the Alaska Rural Systemic Initiative (AKRSI), it is a system that integrates traditional native cultures and knowledge into a state-

approved curriculum for serious students. AKRSI has helped on both sides; easing American Indian student education development, while reinvigorating traditional beliefs. This program has led to the development of the Spiral Pathway for Integrating Rural Alaska Learning (SPIRAL) education mode, the Alaska Standards for Culturally-Responsive Schools, and the Handbook for Culturally Responsive Science Curriculum, which have all proved to be successful in assisting students.

Barnhardt, R. and P. J. Dubbs (1998). *The Log School: A Case for Appropriate Design*. Fairbanks, Center for Cross-Cultural Studies, Alaska University: 22.

For many remote northern communities, especially Native American communities, school design, construction, and heating would be more culturally and technologically appropriate if local materials and expertise were utilized. Following World War II, the period of the most rapid "de-localization" of northern communities, the allegedly uncomfortable log/frame schools were gradually replaced by larger, more modern, structures. The de-localized school's design is not congruent with local cultural configurations. Expensive, physically unsuitable, imported materials are used in construction done by imported laborers. The facility's electrical, heating (dependent on imported fuel), water, and sewer systems are costly to install and maintain. All of these factors lead to the school building being an alien object in the local Indigenous community. Students are more likely to have a successful learning experience if the physical school environment reflects a culturally compatible social and physical environment in which the Indigenous culture is recognized and built upon. The standardized approach to school design has not allowed for local user participation in planning and design. Log schools provide a physically, technologically, and economically appropriate alternative for northern communities in forested areas that wish to maintain local control. An example of the construction of a rural Alaska high school illustrates conflicts between outside architects and local citizens and the influence of building codes and health and fire safety standards. Examples are given of other alternative construction designs in northern areas that take advantage of local resources and labor.

Batt, L., Kim, J., & Sunderman, G. (February 2005). *Limited English Proficient Students: Increased Accountability Under NCLB* (pp. 19). The Civil Rights Project at Harvard University.

This policy brief offers an overview of Title I under NCLB, and how it relates to LEP students. Sections include: summary of Title I requirements, commonly asked questions, and issues for considerations. Although no specific references are made to American Indian students, the brief does specify that students can fall into multiple classification groups.

Benally, A. and D. Viri (Spring 2005). "Diné Bizaad [Navajo Language] at a Crossroads: Extinction or Renewal?" *Bilingual Research Journal* 29(1): 85-108.

Until about 20 years ago, the Navajo language was one of the most resilient American Indian languages in modern U.S. history. Today, at the dawn of the 21st century, that has all changed. Some changes can be attributed to the normal dynamics of cultural transmission that affect language use. Some others, such as the dramatic shift toward English that is occurring—largely due to the agency of public education and mass media—are jeopardizing the survival of the Navajo language. The Navajo language is at a crossroads; it can still be renewed among the growing number of non-speakers so it can be strengthened, or it can continue to decline in its use. On several levels the language appears to remain strong and viable, but on others the telltale signs of impending extinction are becoming apparent. This paper addresses the differences between the normal changes and adaptation of Navajo as a living language and those that are indicative of language loss or other dramatic linguistic shifts that threaten its viability and survival.

Benjamin, R., R. Pecos, M.E. Romero. (1996). "Language Revitalization Efforts in the Pueblo de Cochiti: Becoming 'literate' in an Oral Society". Chapter in N. Hornberger (Ed.): *Indigenous Literacies in the Americas: Language Planning from the Bottom Up*. Berlin: Mouton de Gruyter: 115-136.

Traditional cultural preferences are honored in considering the native language revitalization efforts undertaken by the Pueblo de Cochiti. "Literacy" is understood as the ability to interpret the complex system of cultural symbols that are used in the ceremonial calendar such that an individual can participate actively and appropriately in his or her respective role. With the help of a planning grant and through community self-study, a plan to preserve and revitalize the Keres language in Cochiti was developed. Four community goals were set: (1) to re-establish the sole use of Keres in traditional activities; (2) to bring older and younger generations together to be re-engaged; (3) to re-establish the use of Keres in the home and in everyday life; and (4) a priority for all children will be to learn Keres. Tribal members see that an effort of this breadth and depth is needed to ensure the preservation of their language and culture.

Bergstrom, A., Miller Cleary, L., & Peacock, T. (2003). "The Seventh Generation: Native Students Speak About Finding the Good Path." Charleston, W.V.: ERIC.

Berlin, L. N. (Spring 2000). "The Benefits of Second Language Acquisition and Teaching for Indigenous Language Educators." Journal of American Indian Education 39(3): 24.

This paper proposes the field of second language acquisition and teaching (SLAT) as beneficial to educators who want to implement or are currently engaged in Indigenous language education. The point of view being presented here is that, in most cases, American Indian/Alaska Native children are not learning their tribal languages as their first languages, but rather as a second or subsequent language. For this reason, schools can play a pivotal role in reversing language shift by addressing the circumstances specific to second language learning. Awareness of SLAT theory, can help teachers understand the developmental and cognitive processes that make learning a second language different from the first. In turn, SLAT pedagogical approaches and techniques, which are based on language-specific theoretical research, can provide helpful and effective ways to teach Indigenous language as second languages. These approaches and techniques are also discussed as they are congruent with different cultural beliefs and practices, and different ways of knowing.

Bertenthal, A. D. (Summer 2002). "Providing Equal Educational Opportunities: Title IX and Indian Tribal Schools." The University of Chicago Law Review 69(3): 21.

The author of this paper discusses the conflicting laws related to American Indian education in regards to tribally controlled schools. To illustrate the conflict, the statute designed to prohibit discrimination based on sex is examined in relation to tribal sovereign immunity. Title IX allows private persons to sue an institution for monetary damages, yet tribal sovereign immunity protects a tribe or tribal entity from suit in a non-tribal venue. A background of the history and application of Title IX is provided, with a discussion of tribal self-governance laws. The author argues for the subjectivity of tribal schools to general federal policy designed to protect all citizens of the United States because some laws were meant to apply to tribes, tribes agree to comply with regulations when accepting federal funding, and the laws protect tribes as well.

Bhavnagri, Navaz Peshotan and Jorge Dante Hernandez Prospero. (2007). "The Challenge to Equality: 'We Made It, Why Can't You?'" James A. Banks & Cherry M. Banks (Eds.) Multicultural Education: 56-60.

Bia, Fred ; And Others (1982) "Our Community -- Today and Yesterday. Book One (*Nihil Hahoodzodoo -- Dijiidi doo Adaadaa. Naaltsoos T'aala'i Gone Yits'iligii*). Fourth Grade Navajo Bilingual-Bicultural Social Studies Curriculum. Rough Rock Demonstration School, AZ. Navajo Curriculum Center." Navajo Curriculum Center, Rough Rock Demonstration School, Star Route One, Rough Rock AZ 86503 (\$12.00).; 1982-00-00 Description: 193 p.

Presented in five chapters, book 1 of the Rough Rock fourth grade Navajo social studies program text is written in Navajo and English. The first chapter is on the community of Rough Rock (Arizona) illustrated by photographs of the community and people. Chapter II discusses the four elements (air,

water, earth, and fire) the community needs to survive. Chapter III tells about the weather and the community explaining the four seasons, the cycle of rain (both the Navajo version and scientific version), and the need for different types of weather. Chapter IV looks at plants and animals in Rough Rock. Presented are a geographical description of Rough Rock, effects of elevation on weather and plant life, animal life in the community, and how Navajos take care of the land. Chapter V is on the people and our community. Chapter topics include: people's dependence on plants for food, use of human resources in the community, the helping relationship of Navajo families, and what makes a community. At the end of each chapter is a list of vocabulary building words spelled in Navajo and in English.

Bibra, G. (2005). "Designing Education Facilities with and for Indigenous People in the Northern Territory of Australia." *Educational Facility Planner* 39(4): 3.

The Bachelor Institute of Indigenous Tertiary Education serves the cultural, social and economic needs of Australia's Indigenous peoples by providing opportunities for higher education and vocational training. The history of the Institute and its efforts to create culturally appropriate educational spaces is described.

Bielenberg, Brian. (2000). "Charter Schools for American Indians." Chapter in *Learn in Beauty: Indigenous Education for a New Century*, Jon Reyhner, Joseph Martin, Louise Lockard, and W. Saki-estewa Gilbert (Eds.). Flagstaff, AZ: Northern Arizona University. Link: <http://jan.ucc.nau.edu/~jar/LIB/LIB11.pdf>

The charter school movement is a reform through which American Indians can gain back their sovereignty, a way in which they can step forward. This study also indicates that despite the best of intentions, it is often difficult to change common mainstream educational practices. Rather than simply changing what we teach, it is necessary to look more deeply at how we teach and how we structure the learning environment.

Billig, S.H., Brown, S., Krueger, A., Northup, J., Root, S. (2006). Research brief on American Indian education: Closing achievement gaps. Denver, CO.

This brief summarizes a review of research covering practices related to national American Indian achievement in education. Research on students from kindergarten through college was considered through academic (English, math and science) and other education-related topics (e.g. culturally-based school programs, instructional strategies, student characteristics, and learning styles, etc). In conclusion, issues encountered are discussed. Recommendations were considered significant were in effective culturally responsive teaching (i.e. cultural literacy, self-reflective analysis of personal attitudes and beliefs, classroom development, respect for diversity, and curriculum adaptation). Student immersion, i.e. mixing students with low English proficiency with students who had high proficiency in English, was also discussed as a possible approach.

Blanchard, Rosemary Ann (1994) "Learning Citizenship for and from Dine Communities: Developing Organic Social Studies Curriculum for the Navajo Nation." *Journal of Navajo Education* v12 n1 p32-39 Fall 1994 Standard No: ISSN: 1042-3265

Describes a framework for social studies curriculum in Navajo schools that fosters critical citizenship through student research into the physical, historical, economic, political, and cultural dimensions of community life. Aims to promote social studies that reflect the human environment in which Navajo students live and also arm students with critical thinking skills to understand and transform their environment.

Blanchard, Rosemary Ann (1999) *Forging a Civic Relationship between Native Youth and Their Indigenous Nation: A Tribally-Specific, Tribally Formed Social Studies Curriculum*. 25 p.

Native students experience social reality through their Indigenous nation/society, and this reality must be reflected in the school curriculum for education to be meaningful. Indigenous communities should consider the strategy of developing an organic social studies curriculum grounded in all the social science disciplines, centered in the Indigenous communities, and taught in an interactive community-centered manner. An organic curriculum is one in which fundamental concepts are introduced in the first grade in an interdisciplinary manner. Student understanding develops in depth and complexity throughout the 12 years of public school. This organic, tribally-specific social studies curriculum is developed from the Community Social Profile (CSP), a written description of the community's physical environment, history, economic aspects, political structures, and cultural world view. The very process of developing the CSP brings elders, community leaders, educators, and youth together in a community-based learning enterprise. Much information can be gathered by students, under the guidance of an oversight committee composed of representatives of the schools, Nation, and community. The community's goals for its children should be articulated and incorporated into the curriculum as grade-specific objectives and competencies. A number of awareness's, such as social awareness and cultural awareness, should be cultivated in the resulting curriculum. Activities appropriate to student grade levels should be developed to foster these awareness's.

Blanchard, R. A., Charlie, P., DeGroat, J., Platero, P., & Secatero, S. (2003). "Borderlands of Identity: Revitalizing Language and Cultural Knowledge in a Navajo Community Living Apart".

This study focused on the community of To'Hajiilee (formerly Canoncito), which is a 'satellite' of the main Navajo Reservation. Interviewing four Navajo (Diné) educators who worked in various programs for Diné youth both on and off the reservation, information was gathered on the contemporary experiences of the group. Issues related to traditional and western learning obstacles and barriers, and language preservation were identified. The need for Diné cultural and language learning were seen as necessary components to the education and well-being of these students.

Blauner, Robert. (1972). "A critical, cultural, & contextual analysis of NCLB's impact on early childhood & elementary students." in Racial Oppression in America. New York, NY: Harper and Row.

Blum-Martinez, Rebecca (2000). "Languages and tribal sovereignty: Whose language is it anyway?" Theory Into Practice, Bowman, N. (2005).

Paper presented at the Rural Early Childhood Forum on American Indian and Alaska Native Early Learning, Little Rock, AR., (4), 1-9. Argues that the ways in which other languages, such as Spanish, have been dealt with in the schools, particularly in bilingual programs, should not be applied to Pueblo languages. Pueblo culture, history, and politics have evolved a different way of thinking about language and require different educational solutions. Partnerships between Pueblo communities and schools must be founded on mutual respect.

Bo-yuen Ngai, P. (2006). "Grassroots Suggestions for Linking Native-Language Learning, Native American Studies, and Mainstream Education in reservation Schools with Mixed Indian and White Student Populations." Language, Culture, and Curriculum 19(2): 220-237.

Indigenous-language education is critical in the rural and small-town communities with mixed native/non-native populations that constitute the headwaters of many dying tongues. Emerging from interviews conducted in 2002 and 2003 on the Flathead Indian Reservation with 89 study participants holding diverse perspectives is the need for a unifying reservation-wide preK-16 language curriculum that will bring about continuous and meaningful connections (1) across Indian-language-education programs, (2) between Indian-language classrooms and mainstream classrooms, and (3) between native language education and Native American Studies. This paper considers the grassroots suggestions for building such a curriculum encountered among cultural and community leaders, educators and parents, historians and politicians, Indians and non-Indians, and advocates and skeptics of Indigenous-language education. The study findings indicate that framing Indigenous-language learning

as part of place-based multicultural education is a promising approach. Prospects for Indigenous-language survival can be enhanced by moving native language education in a direction that is acceptable to and beneficial for most, if not all, members of mixed communities in a global age.

Bradley, G. (2007) Profile for Dulce Independent Schools, NM (school district). Retrieved August 28, 2007, from http://www.kidscount.org/cgi-bin/cliks.cgi?action=profile_results&subset=NM&areaid=25

This profile offers education and ethnic related statistics that reflect the Dulce School District from 2003-2005. 2005 Dropout rate for grades 9-12: 4.1% PED's Drop-Out Rate is calculated by taking the number of dropouts during a school year divided by the 40th day enrollment figure. This rate reflects students who left before the end of a single school year. Ethnic distribution percentages are also included: 1% are White, 6% are Hispanic, 93% are Native American, and 0% are listed as being African American.

Bratt, L., J. Kim, & G. Sunderman. (2005). Policy Brief- Limited English Proficient Students: Increased Accountability under NCLB. MA: Harvard University. Retrieved from: http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/b8/8b.pdf

This policy brief offers an overview of Title I under NCLB, and how it relates to LEP students. Sections include: summary of Title I requirements, commonly-asked questions, and issues for consideration. Although no specific references are made to American Indian students, the brief does specify that students can fall into multiple classification groups. The author also discusses how inconsistencies exist among institutions and agencies in trying to identify who LEP students are and what assessments should be used to gauge the progress of these students.

Braveboy, Bryan McKinley Jones. (2004). "Hiding in the Ivy: American Indian Students and Visibility in Elite Educational Settings," Harvard Educational Review 74(2): 125-152.

Bray, Scott W. (1999). "The Emancipation Proclamation for Indian Education: A Passion for Excellence and Justice." (ED432421)

This document addresses an educational system that is failing Native American children. Despite the trappings of equality, the system is failing to teach Native American children the essential skills of reading, writing, math, and thinking. The mission in Indian education is to enable each child to reach full potential in spirit, mind, and body by providing essential skills and ensuring that all students achieve or surpass national norms and standards. Fifteen steps are outlined that are necessary to achieve this mission. The first step is to meet students' basic needs, including cleanliness and hunger. Second, physical fitness should be emphasized by establishing programs such as 50 Mile Clubs. Third and fourth, accountability of school boards must increase, and racism must end. Fifth, school leadership must be improved. Suggested techniques include showing inspirational movies at schools and holding rallies with students. The sixth step would be to change the elementary system so that the same teacher teaches the same children from kindergarten through third grade. Seventh, students should be taught metacognitive strategies such as how to manage time and how to study. Classroom instruction should also be improved. Eighth and ninth steps involve connecting the classroom to the real world and improving reading skills. Steps 10 and 11 would improve special education services and use technology wisely. Step 12 calls for ending corporal punishment and reporting child abuse. Thirteenth, staff housing should no longer be segregated, but integrated into the community at large. As a 14th step, every school district serving Native American students must establish a private non-profit educational foundation so that private moneys can be raised to counter cuts in Indian education funding. The 15th step in educational reform is to practice accountability in time and finances.

Brown, Jason, N. Higgitt, S. Wingert, C. Miller, L. Morrisette. (2005). "Challenges Faced by Aboriginal Youth in the Inner City." Canadian Journal of Urban Research 14(1):81-106.

Brown, T. (Autumn 2004). Tradition and Change in Eighteenth-Century Pueblo Indian Communities. *Journal of the Southwest*(46), 37.

Brown, Violet H. (1986) "The Integration of Self-Identity and Self-Esteem through Curriculum Development." Native American Educational Services, Inc., Chicago, IL. 52 p.

Written specifically for bilingual Native American teachers, this guide discusses the importance of self-esteem for Native American students and provides a set of lessons designed to develop self-esteem and cultural identity. The first section of the guide discusses the relationship among culture, individual identity, and self-esteem, stressing the importance of developing self-esteem in early childhood. Topics include native language maintenance, naming practices, child rearing practices, and the significance of sharing and other cultural values. Personal experiences of growing up in Bridger, South Dakota, on the Cheyenne River Sioux Reservation--are described. Urban and reservation Indian experiences are compared. The first section concludes by urging Native American teachers to plan a curriculum that helps students achieve educational goals by being sensitive to their values and cultures. The second section of the guide consists of six lesson plans that focus on developing self-esteem and clarifying values. The lessons, intended for fifth graders, are based on readings from "Are You an Eagle" by Howard Ranier in which the eagle symbolizes human qualities such as strength, commitment, and self determination. Each lesson lists an overall goal, specific objectives, materials, vocabulary, and a language arts activity.

Bureau of Indian Affairs (Dept. of Interior), Albuquerque, NM. (1973) "Bilingual Education for American Indians. Vol. II--Navajo." Curriculum Bulletin 13. 68 p.

Bilingual education for Navajos is the central element in changing education from an alien function to one shared and controlled by the community. A number of community-controlled educational systems have become the driving force in Navajo bilingual education, and the past three years have produced not just higher quantity, but considerably improved quality, according to Dr. Bernard Spolsky, director of the Navajo Reading Study at the University of New Mexico (UNM). Spolsky's paper "Advances in Navajo Bilingual Education, 1969-72" is featured in this curriculum bulletin, which seeks to enlarge the case for Navajo bilingual education and update the state of the art. Three conference reports are also included. The first, which covers a Navajo bilingual-bicultural materials conference held in Albuquerque in October, 1972, discusses curriculum ideas shared by persons involved with Navajo language teaching. The second report includes a student proposal requesting implementation of a Navajo bilingual education program at UNM along with a description of the faculty-student meeting that responded to the proposal. The third paper summarizes proceedings of a November, 1972, conference at UNM which examined questions relating to the training of Navajo bilingual teachers. Final portion of the document is a supplement to the 1970 "Analytical Bibliography of Navajo Reading Materials". It features 49 listings, most of which were published between 1970-72, and includes information on author, title, publisher, source, and educational level, along with a brief description of the publication's content.

Butterfield, Robin A. (1983) "The Development and Use of Culturally Appropriate Curriculum for American Indian Students." Peabody Journal of Education v61 n1 p49-66 Fall 1983.

The development of a curriculum for American Indian students should address the issues of traditional skills, competencies, and knowledge of cultural community. Instructional elements involved in curriculum development include materials, teaching techniques, and learner characteristics. Suggestions for use in development of culturally appropriate programs are offered.

Butterfield, Robin A. (1985) "Effective Practices in Indian Education. Curriculum Monograph. A Monograph for Using and Developing Culturally Appropriate Curriculum for American Indian Students." Northwest Regional Educational Lab., Portland, OR 294 p.

Based on national effective schooling research translated into practices which have been tested in actual school settings, the monograph is designed to assist elementary educators develop and use culturally appropriate curriculum for American Indian students. The preface identifies contemporary American Indian values and traits; objectives of culturally appropriate curriculum; assumptions of culture learning; and the document's point of reference relative to the terms "curriculum," "culturally appropriate curriculum," and "culturally appropriate curriculum excellence." Part 1, which offers suggestions to help institutionalize culturally appropriate curriculum, is organized around key questions often asked by school staff attempting to locate, organize, and implement culturally appropriate curriculum. Issues are related to resources, content, integration, instructional techniques, community involvement, and staff inservice. Part 2 focuses upon issues and special strategies needed to develop culturally appropriate curriculum including Indian community and school responsibilities, sources of funding, use of goals/objectives, guidelines for selecting culturally appropriate curriculum, accuracy of content, copyright/ownership maintenance, quality assurance, product dissemination, staff inservice curriculum training and product evaluation. Part 3 is a 33-item selective bibliography.

C. de Baca, Mary Rose., Cecilia Rinaldi, Shelley H. Billig & Beatriz Martinez Kinnison. "Santo Domingo School: A Rural Schoolwide Project Success." *Educational Evaluation and Policy Analysis* 13(4), 363-368.

Cajete, G. (1994). "Understanding the depth of relationships and the significant of participation in all aspects of life are the keys to traditional American Indian education." In *Look to the Mountain: An Ecology of Indigenous Education*. Durango, CO: Kivaki Press.

American Indians have struggled to adapt to an educational process that is not their own. AI forms of cultural education can create new models for American education as a whole by incorporating 'cultural roots' – rooted in Tribal education and reflecting the needs, values, and socio/political issues Indian people perceive." "It is time for Indian people to define Indian Education in their own voices and in their own terms".

Cajete, G. A. (2005). *Serving Native American Students: American Indian Epistemologies*. New Directions for Student Services, Wiley Periodicals, Inc. 109: 69-78.

This chapter provides general insights into American Indian epistemologies that can assist student affairs professionals in their work and examines the shared understandings of American Indians with regard to tribal knowledge and education.

Carey, John J. (1987) "Curriculum Guide." Crownpoint Inst. of Technology, NM. 130 p.

Law related education learning modules and lesson plans are presented in this curriculum guide, which is designed to meet three broad goals: (1) to encourage good citizenship and respect for the law by teaching students how to effectively function within the law and to demonstrate and value lawful conduct; (2) to promote a better understanding for the law and the legal system; and (3) to identify and explain those areas of the law that affect the lives of Navajo students living in the "checkerboard" area of the Navajo Reservation. The 32 detailed lesson plans are organized into six chapters dealing with introduction to law, consumer law, individual rights, family law, student and school law, and criminal law. Each lesson begins with objectives for the learner, an opening question that introduces the topic of the lesson, background information for the teacher, suggested methods and materials, and a list of activities for extending the lesson. Topics of individual lessons include categories of law, collection agencies and debtor rights, Indian voting rights, marriage on the Navajo Reservation, school due process, and tribal jurisdiction over non-Indians. An annotated list of 21 recommended films and a bibliography of instructional materials are appended. (JHZ)

Carey, J. M. (2001). "Continuing Cultural Viability Via Cultural Tourism As An Economic Survival Project for Pueblo Indian People." Northern Arizona University, Flagstaff, AZ.

Cech, S. J. (2007). Ed. Dept. holds firm on racial-data rules: but guidance now says reporting system to take effect for 20-10-11 year. *Education Week*. Retrieved November 13, 2007, from <http://www.edweek.org/ew/articles/2007/10/31/10race.h27.html>

This article discusses a new system of how schools are to report their students' ethnic and racial backgrounds. Focus is on a new question that attempts to further distinguish Hispanic students from other groups. Under final guidance issued by Secretary of Education Margaret Spellings and published in the Federal Register on Oct. 19, schools must depart from the long-standing practice of reporting student information to the department with only a single race or ethnicity option and begin collecting data on students' multiple racial and ethnic identities.

Chambers, Cythnia. (2006). "The Land is the Best Teacher I Have Ever Had": Places as Pedagogy for Precarious Times". *Journal of Curriculum Theorizing*, pp. 27-38.

Chavez, C. L. (1997). *Felice Lucero and Her Art: Working In and Around Cultural Boundaries*. University of California, Los Angeles.

Chisholm, Anita, et.al, (1991) "Making Education Relevant for Contemporary Indian Youth: A Handbook for Cultural Curriculum Developers Focusing on American Indian Tribes and Canadian First Nations." Oklahoma Univ., Norman. American Indian Inst. 126 p.

This guide was developed to assist American Indian and Canadian Native educators in developing cultural curriculum materials for use in the classroom. The purpose of developing authentic cultural materials is to enhance the educational experience of Indian students and White students. The guide covers the following topics: (1) cultural curriculum development including goals of multicultural education and cultural learning; (2) format for cultural curriculum development; (3) writing specific and clear objectives for classroom instruction; (4) sample unit outlines for curriculum development; (5) rules for effective, clear writing; (6) interviewing techniques and example of a lesson prepared from an interview; (7) setting up curriculum teams; (8) scope and sequence of curriculum; (9) documenting cultural curriculum resources and available resources on American Indian tribes and Canadian bands; (10) considerations when using books, films, filmstrips, etc.; (11) learning styles; (12) creating a good classroom environment; (13) interpretive illustration and authentication; and (14) examples of cultural lessons.

Claflen, G. L. J. (n.d.). *The Navajos as a Developing Nation: Seeking an Authentic Architecture for Rural Cultural Landscape*.

Navajos, and Native Americans in general, are among the most deprived and ignored peoples in all of rural America. The great traditions and undeniable authenticity of their way of life present challenging problems of environmental design as new facilities for education, health care, and commerce are developed. Through a study of the process of designing two Navajo schools, possibilities for the facilitation of culturally responsible design procedures and cross-linkages between the study of environmental design in Native American communities and rural third world are explored.

Cornell, S. (April 1998). "Strategic Analysis: A Practical Tool for Building Indian Nations." Malcolm Wiener Center for Social Policy; Harvard Project on American Indian Development; John F. Kennedy School of Government Harvard University.

Cornell, S., & Jorgensen, M. (May 2007). "*The Nature and Components of Economic Development in Indian Country*." Paper presented at the National Native American Economic Summit.

Council, N. L. (1999). "Languages of the Land: A Resource Manual for Aboriginal Language Activists". Yellowknife, Northwest Territories, Canada: Crosscurrent Associates, Hay River. (pp. 52)

Cramer, Renee Ann. (2006). "The Common Sense of Anti-Indian Racism: Reactions to Mashantucket Pequot Success in Gaming and Acknowledge". *Law & Social Inquiry* 31(2): 313-341.

Crawford, James (1995). "Endangered Native American languages: what is to be done and why?" The Bilingual Research Journal, 19(1), 17-38.

Language loss, a global phenomenon, is accelerating among Indigenous groups in the United States. A large majority of Native American vernaculars are spoken only by elders and the remainder are fast approaching that status, as growing numbers of children speak only English. Inevitably comparisons are drawn between the threat to language diversity and the (better-publicized) threat to biological diversity. This article addresses three questions that need to be explored: (1) What causes language decline and extinction? (2) Can the process be reversed? And (3) why should we concern ourselves with this problem? The article first provides details about the situation of Native American languages in the United States. It concludes by offering arguments on the scientific merit and political appeal for caring about whether Native languages survive.

Crawford, James. (1996). "Seven Hypotheses on Language Loss: Causes and Cures". Chapter in G. Cantoni (Ed.), Stabilizing Indigenous Languages (pp. 51-68). Flagstaff, AZ: Center for Excellence in Education, Northern Arizona University.

Adapted from a 1995 speech given at the second Symposium on Stabilizing Indigenous Languages at Northern Arizona University, this essay draws on both historical research into US language policies and Crawford's own observations and discussion with people in Native American communities to illustrate seven hypotheses for language shift. In explaining these reasons, he offers examples from several Native communities at different stages of language shift. He feels compelled to raise the alarm of imminent language extinction but also the hope that concerted effort by concerned speakers will reverse that trend. He also suggests possible solutions or "cures" for reversing language shift.

Crawford, J. (2000). "At War with Diversity- US language policy in an age of anxiety". Tonawanda, NY: Multilingual Matters Ltd. Retrieved from: <http://books.google.com>

Crawford, J. (2007). "Testing the Limits of No Child Left Behind". Hispanic News Service. Retrieved from: http://www.elladvocates.org/issuebriefs/Crawford_NCLB_Testing_the_Limits.pdf

This article points out problems with No Child Left Behind. Crawford makes reference to the state of Virginia which is in the process of defying federal mandate by not using standardized tests with all their students, including LEPs. Crawford goes on to point at politics as the driving force behind the No Child Left Behind legislation.

Cummins, J. (2000). "Language, power, and pedagogy: bilingual children in the crossfire". Tonawanda, NY: Multilingual Matters Ltd. Retrieved from: <http://books.google.com/books>

Daniels, T. L., & al., e. (1995). The Small Town Planning Handbook (2nd ed.). Chicago: American Planning Association, Planners Press.

Darling-Hammond, L., Ancess, J., & Falk, B. (1995). Authentic assessment in action: studies of schools and students at work. New York: NY: Teachers College Press.

Davis, Sally M.; And Others (1995) "Southwest Cardiovascular Curriculum Project: Study Findings for American Indian Elementary Students." *Journal of Health Education* v26 n2 pS72-81 Mar-Apr 1995

This article describes the Southwestern Cardiovascular Curriculum, a school-based, culturally relevant curriculum designed to prevent tobacco use and promote a good diet. Comparisons of American Indian students in participating and nonparticipating schools indicated that participants had significant increases in knowledge, better diets, increased exercise rates, and decreased smoking rates.

Deloria Jr., Vine, and D. R. Wildcat. (2001). Power and Place in Indian Education. Golden, CO: Fulcrum Publishing.

The educational journey of modern Indian people spans two distinct value systems and worldviews, as the Native American sacred view inevitably encounters the material and pragmatic focus of the

larger American society. In that meeting ground lies an opportunity for the two cultures to teach and learn from each other. The 15 essays in this book are a criticism of the formal and official institutions of American Indian education and constitute an effort to open discussion about what a truly American Indian educational practice would look like. Such an indigenization of the educational system would explicitly explore ways of knowing and systems of knowledge that have been actively repressed for five centuries. Presented in 15 essays by both authors.

- Delpit, L. D. (1988). "The Silenced Dialogue: Power and Pedagogy in Educating Other People's Children." *Harvard Educational Review* 58(3): 19.

Lisa Delpit uses the debate over process-oriented versus skill-oriented writing instruction as the starting-off point to examine the "culture of power" that exists in society in general and in the educational environment in particular. She analyzes five complex rules of power that explicitly and implicitly influence the debate over meeting the educational needs of Black and poor students on all levels. Delpit concludes that teachers must teach all students the explicit and implicit rules of power as a first step toward a more just society. This article is an edited version of a speech presented at the Ninth Annual Ethnography in Education

- Demmert, Jr., W.G. (2001) "Improving academic performance among Native American Students: a review of research literature". Charleston, WV. Retrieved from:
http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/19/fa/4d.pdf

Based on a project developed by the Center for Research on Education, Diversity, and Excellence (CREDE), this report provides literature review of American Indian education topics in six themed areas: early childhood environment and experiences; Native language and culture programs in schools; teachers, instruction, and curriculum; commentary and parental influences; student characteristics; and factors leading to success in college. Author perspectives, i.e., a preference for empirical and quantitative studies over qualitative studies is apparent, as he dismisses the value of recent work which include a combination of research methods. The study does identify areas for promising study.

- Demmert, W.G., Jr., & Towner, J.C. (2003). "A Review of the Research Literature on the Influences of Culturally Based Education on the Academic Performance of Native American Students". Portland, OR: Northwest Regional Educational Laboratory. Link: www.nwrel.org/indianed/cbe/

This is a comprehensive review of the literature, which includes primarily quantitative and a select group of qualitative studies. The authors explore the impact of language and culture on the academic performance of Native students. From a tribal and Native American professional perspective, the creation of lifelong learning environments and meaningful educational experiences for both the youth and adults of a tribal community requires a language and cultural context that supports the traditions, knowledge, and language(s) of the community as the starting place for learning new ideas and knowledge. There is a firm belief within many Native tribal communities and professional Native educators that this cultural context is absolutely essential if one is to succeed academically and to build a meaningful life as adults.

- Demmert, Willam G., Jr. (2001). Improving Academic Performance Among Native American Students: A Review of the Research Literature. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. Link: http://www.sfu.ca/mpp/aboriginal/colloquium/pdf/Improving_Performance.pdf

- Dewes, W., Laird, A., Martinez, A., & O'Hara, C. (May 1988). *Managing Organizational Change: A Report to the Crow Tribe of Montana*: Malcolm Wiener Center for Social Policy; Harvard Project on American Indian Development; John F. Kennedy School of Government Harvard University.

- Deyle, Donna, and Karen Gayton Swisher. (1997). "Research in American Indian and Alaska Native Education: From Assimilation to Self-Determination". In Review of Research in Education, edited by M.W. Apple. Washington, DC: American Educational Research Association: 113-194.

A comprehensive review of Indian education research, including discourse on the need for American Indian researchers, the role of AI researchers, methodological considerations, and need for AI people to set the research agenda.

Dietel, R. (1992). What Works in Performance Assessment? Proceedings of the 1992 CRESST Conference. The 1992 Center for Research on Evaluation, Standards, and Student Testing (CRESST) Conference, UCLA.

Although LEP students were not mentioned, the idea of developing a standardized test to evaluate all students, nationwide, is discussed. Without additional proper training, allocated resources, and communication among agencies, teachers will continue to have a hard time developing tests and activities to assess the development of their students. Creating student portfolios is emphasized as a good approach to tracking student progress through school.

Dietel, R. (1993). "What works in Performance Assessment?" Proceedings of the 1992 CRESST Conference. Retrieved from: http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/13/1d/bf.pdf

This early conference on assessments, was to bring attention to the issue of developing a standardized test to evaluate all students, nationwide. The experts agreed that proper training, additional resources, and communication between agencies, was required by teachers to assess appropriately the development and academic progress of their students. Creating student portfolios was emphasized as a good approach to tracking student progress through school. Performance assessments were also emphasized as a key to understanding and monitoring student academic achievement. These assessments were seen to be adaptable to the diversity of students, with the communication between educational institutions and agencies required to be concise and consistent. NCLB legislation did not include the recommendations or findings regarding alternative assessments from these experts.

Disney, Dick, Comp. (1978) "Materials Developed from American Indian Culture-Based Curriculum Workshop (Tacoma, Washington, October 24-28, 1978). Book Two." Tacoma School District 10, WA. 135 p.

Developed as a result of the second 5-day American Indian Culture-Based Curriculum Workshop conducted in Tacoma, Washington, the resource guide presents materials oriented toward Native American dance, music, and games, which were the major thrust of the workshop. The guide provides four flannelboard stories/legends (How **Man** Was Created, The Gull Tells a Story, Why the Bear Waddles when He Walks, and Thunderbird and Whale); six games, dances, and physical activities (including Double Ball: Billets, Hand Games, Juggling, The Totem Pole); a legend of Mount Adams; a music activity (What's in a Powwow); four puppet shows (Grandpa Littlebear Talks About Northwest Indian Music, Origin of the Sweat Lodge, The Day the Thunderbird Brought a Message from the Creator of Life, and The Witch and Her Four Sons); and eight crafts and things to make (including Cherokee Horn Rattle, Chippewa Style Ribbon Work, Indian Suitcase, Micmac Canoe). Each activity contains the purpose of the activity, materials needed, learning objectives, extended activities, resources used, background information (if available), narrative test of story, procedure of conducting activity, and patterns or illustrations to present the activity.

Disney, Dick, Comp. (1979) "Materials Developed from American Indian Culture-Based Curriculum Workshop (Tacoma, Washington, April 18-19, 1979). Book Three." Tacoma School District 10, WA. 68 p.

The major thrust of the third American Indian Culture-Based Curriculum Workshop was the development of ideas and materials oriented toward American Indian stories and legends in such a manner that librarians could acquire the needed skills and knowledge to ensure their authenticity and proficiency of presentations to both Indian and non-Indian children. Materials presented in this resource include eight flannelboard stories/legends (How the Bear Lost His Tail, How Rabbit Stole Fire, I Am

Raven Who Makes Things Right, Mt. Rainier and the Great Flood, Raven Helps the Indians, Skunk, The Girl Who Loved Wild Horses, and Why Bluejay Hops); a puppet story (Hand Puppet Legends); and three miscellaneous activities (Burlap Mask, Storytelling Campfire, and Portable Puppet Stage). Each entry consists of purpose of activity, materials needed, technique to use for activity, references used, narrative text of story, background information (if available), procedure to conduct activity, and patterns/illustrations to present the activity.

Disney, Dick, Comp.(1997) "Materials Developed from American Indian Culture-Based Curriculum Workshop" (Tacoma, Washington, April 25-29, 1977). Book One. Tacoma School District 10, WA. 224 p.

Materials presented in this resource guide are the direct result of an American Indian Culture-Based Curriculum Development Workshop. Activities consist of nine flannelboard stories (including The Fire War, How Coyote Made the Columbia River, Legend of the Mayan Moon God); two games (American Indian Games and Indian Picture Symbol Checkerboard); three panel stories (Maiden of Deception Pass, Why the Buffalo Lost a War, and Raven and Snipe--A Fable of the Tse-Shant People); an Indian picture writing activity; seven puppet stories (including Brother Salmon and Sister Clam, Grandfather Calls, Origin of the Chinook Indians); and a sign language activity (Thunderbird and Lightning). Each activity contains the purpose of the activity, the technique to use, materials needed, narrative text for the story, procedure for telling the story or playing the game, suggested activities, background information (if available), the reference used, and patterns/illustrations to present the activity. An agenda for the 5-day workshop and a list of participants are also included. (ERB)

Dorr, J. and R. Akeroyd (October 2001) New Mexico Tribal Libraries: Bridging the Digital Divide. Computers Libraries 21, 8

Written from the perspective of a staff member from the Bill and Melinda Gates Foundation, this article discusses the Native American Access to Technology grant program for tribal libraries. Foundation staff joined New Mexico State Library staff on a tour of tribal libraries in New Mexico and learn of the special circumstances each library experiences in regards to technology. Lack of basic infrastructure, resources and funding limitations are identified as major barriers to access. The foundation finds communicating with library stakeholders as an important factor in designing their grant program. Community involvement and capacity building are seen as positive outcomes of the program. A brief evaluation and discussion of next steps are also included.

Dorris, Michael A. (nd) "Native American Studies and Curriculum." 15 p.

The Native Studies curriculum has an important role to play in the development of meaningful community control for Native American education. Native Studies may legitimately take many forms and employ many methods; the essential element is that educators adopt a clear and consistent attitude toward Native Studies based on respect for Native people as the real experts on the objectives and goals of Native Studies. Educators need not fear that a Native controlled school would ignore the traditional curriculum--literature, science, and philosophy are not foreign to Native learning and Native parents are not oblivious to the educational demands of modern life. What would be innovative in Native controlled schools would be the recognition that the serious study of Indigenous history and culture is as productive as the study of foreign societies. This assumption underlies the existence of Native American Studies on the college and university level, where the discipline encompasses an immensely complex historical, linguistic, and cultural sphere that has been largely ignored by popular history. If the new discipline succeeds it may provide a scholarly base and meeting ground for Native people throughout the Americas and afford non-Native Americans the opportunity to learn of and from the first and oldest inhabitants of this land.

Edmo, Kesley, Jr. (1987) "All Indian Pueblo Council, Inc. Vocational Education Program Curriculum Materials." All Indian Pueblo Council, Albuquerque, NM. 60 p.

The All Indian Pueblo Council, Inc., Vocational Education Program provides its student participants with the opportunity to attain an associate degree along with concurrent and related on-the-job training (OJT). Job site training is intended to enable students to learn both basic job skills and the work ethics required in the real-world job market. Each participant attends full-time classroom training and receives up to 15 hours of OJT weekly. Job sites are located within the following organizations: All Indian Pueblo Council, Inc.; Indian Pueblo Marketing, Inc.; American Indian Scholarships, Inc.; and the National Indian Youth Council. Job site supervisors oversee student training within each organization. Training is available in accounting, business technology, computer science, and secretarial studies. Training is conducted in accordance with a cyclic model that provides for feed back and feed forward, depending on the OJT training issues to be addressed. The model includes the following components: initial interview, designation and referral to an OJT supervisor, job acclimation, basic skills training, job proficiency improvement, job development, job transition, OJT evaluation, job search and placement, referral, and evaluation of all services provided. (The major portion of this report consists of OJT work progress assessment outlines that have been completed by site supervisors involved in the program's various training components.) (MN)

Ellis, H. C. (Summer 1987). "From the Battle in the Classroom to the Battle for the Classroom." *American Indian Quarterly* 11(3): 10.

The changes in American Indian education as a result of the Self-Determination era beginning in the early 1970s, is the focus of this article. Research conducted by the American Indian Research Project was based on almost a thousand tapes of recorded interviews with hundreds of people, mostly Navajo and Pueblo. The interviews did not focus on Indian Education, but the subject is discussed frequently because of its impact on individuals and communities. The interviews provide an abundance of information, which provides opportunity to understand overall problems with American Indian education prior to 1972. The transition from assimilation efforts by federal government to self-determination goals by American Indian leaders is clearly discussed.

Fairbanks, Paulette (1979) "Annotated Bibliography of the Indian Elementary Curriculum Project." Minneapolis Public Schools, MN. Special School District No. 1, Minneapolis Public Schools-Planning, Development and Evaluation, 807 Northeast Broadway, Minneapolis, MN 55413-2398 (\$3.40, plus \$5.00 billing charge unless prepaid). 81 p.

More than 340 elementary classroom resources evaluated by the Minneapolis Public School Indian Elementary Curriculum Project are cited in this annotated bibliography. Materials dating from 1949 to 1979 are grouped into five categories: print (266 entries), non-print (31), curriculum units (22), Ojibwe bilingual materials (18), and Dakota bilingual materials (7). Printed materials are listed alphabetically by author and coded for primary, intermediate, or adult usage. Tribal affiliation is indicated. The content or kind of material is noted for the following categories: arts and crafts, autobiography, bibliography, culture, contemporary fiction, historical fiction, history, legends, magazine, newspaper, poetry, or reference. Author, title, publisher, copyright date, and price information (when available) are provided along with a brief annotation. Non-print materials are listed alphabetically by title and include motion pictures, filmstrips, and slide lecture kits. Emphasis is upon Dakota and Ojibwe materials; therefore bilingual sections for these tribes are included. A list of names and addresses of 120 publishers and producers of cited materials concludes the document.

Ferris, M. (July 2008). Staying Home Makes the Grade for KIHS Students. Windspeaker, Aboriginal Multi-Media Society: 1.

First Nations in Canada explore alternatives to institutional western education in order to overcome barriers to student success. The Keewatinook Internet High School (KIHS) is a relaxed school environment, which provides full 9th and 10th grade, and some courses in 11th and 12th grade, in an internet classroom with small sizes and a teacher for assistance as needed. Local educational opportunities do not otherwise exist and students must leave their reservations to attend high school. The main

goals are to provide continued connection with the native communities of the students during a key age period where connection is important. Parental and community support, traditional activities outside of the classroom, and attending educational forums at universities to round out the internet curriculum are discussed.

Fillerup, M. "Racing Against Time: A Report on the Leupp Navajo Immersion Project".

This paper describes a U.S. Department of Education Title VII funded language preservation program at Leupp Public School in the Navajo Nation. Funded in 1997 for five years, this school-wide project is designed to help students become proficient speakers, readers, and writers of Navajo while enhancing their English language skills and preparing them to meet state academic standards. The program combines Navajo immersion with ESL inclusion, literacy initiatives, sheltered English/Navajo, parental involvement, and takehome technology. Academic content and state standards are initially presented from a Navajo perspective via four global themes with a unifying concept of hozho or "peace, beauty, and harmony." This paper (1) presents the need for the program and how it was developed with staff, parental, and community involvement, (2) presents a program overview, (3) describes the Navajo-specific curriculum, and (4) discusses some of the inherent challenges in developing and sustaining a language preservation program based upon a Navajo-specific curriculum in the English-only era of high stakes testing.

Foster, Carl G. (1980) "Chinle Agency's Special Education Curriculum Revisions: It's Rationale, Process, and Wanted Outcomes." Bureau of Indian Affairs (Dept. of Interior), Chinle, AZ. 11 p.

Because Special Educator turnover and existing modes of instruction were causing minimal progression of exceptional Indian students, representatives of the nine schools involved in Chinle Agency's Special Education Department decided during the fall of 1979 to develop and implement programs that better met the needs of exceptional students. By revising the curriculum agency-wide to include sequential criteria for math, reading, language arts, and behavior, hopefully the turnover rate of Special Education teachers would be decreased. A majority of the committee felt that math was the easiest discipline to adjust and that the Agency-adopted San Diego Sequential Task for Educational Planning (STEP) could be revised to establish objectives to meet chosen math goals. The remainder of 1979 was devoted to the development of "learning experience packets" and "exit-tests" for each math objective and a pre-posttest for the program. Use of the math objectives for the entire agency was expected to eliminate problems associated with students changing schools and to act as a guide for teachers in meeting the needs of exceptional students. Only math has been completed and implemented, and it is anticipated that three more years will be needed to complete all of the components of the curriculum.

Foster, Carl G., Ed. (1980) "Reservation Schools and 95-561: The Administrator and the Curriculum." Northern Arizona Univ., Flagstaff. 79 p.

This collection of nine essays and reports which deal with issues of importance in the progression of Native American education was published by members of the Dine Teacher Corps Project '78 in an effort to stimulate the thinking of curriculum practitioners; content is aimed at affecting administrative styles and the construction and implementation of curriculum. An introduction relates a brief history of Indian Education and reports that the most fundamental need presently is for a change in point of view. Chapters one and two are devoted to the administrative leadership styles necessary for programming; the third and fourth discuss the administrator's role in the development of instructional programs; the fifth and sixth use specific bilingual programming to show the relationship a curriculum must have to particular Indian values, experiences, and needs; and the seventh, eighth and ninth chapters report studies on inservice, financial planning, and leadership programs which are designed to assist the administrator to successfully facilitate effective changes in Native American education.

Fox, M. J. T., Lowe, S. C., & McClellan, G. S. (2005). *Serving Native American students*. San Francisco: Jossey-Bass.

Fox, Sandra J., Ed. (nd) "Connecting Cultures & Classrooms. K-12 Curriculum Guide: Language Arts, Science, Social Studies. Indian Education for All." Montana State Office of Public Instruction, Helena. 197 p.

This curriculum guide is but one of the resources that the Montana Office of Public Instruction is providing to help teachers implement Indian Education for All. The philosophy of this document promotes the use of Indian literature as an instructional tool. There are no textbooks presently for including aspects of Montana Indian cultures into the K-12 school curricula, but there is a body of Indian literature written and/or reviewed by Indian people that can supplement regular textbooks and help to teach state standards as well as provide knowledge about Indian people and their views in regard to academic content. This guide is patterned after the Creating Sacred Places curriculum series of the National Indian School Board Association. In those books, Indian literature and activities are tied to content standards outlined by the Midcontinent Regional Educational Laboratory and to American Indian Standards developed by the Bureau of Indian Affairs. In this document, Indian literature (mainly relating to Montana and Montana tribes) and activities have been matched to the state standards and the Essential Understandings Regarding Montana Indians. Appended are: (1) Essential Understandings Regarding Montana Indians; (2) Literature Resources; and (3) Center for Research on Education, Diversity and Excellence (CREDE) Standards for Effective Pedagogy. [This project was done in partnership with the National Indian School Boards Association.]

Frank, K. W. (1982) "Unified Mathematics: Scope, Sequence, and Goals for the Three-Year Curriculum of the Navajo Mission/Academy, Farmington, NM." 42 p.

Beginning with the 1980-81 school year, the Navajo Mission/Academy implemented a new secondary school mathematics curriculum, Unified Mathematics, based on New York State's "Three-Year Sequence for High School Mathematics." The comprehensive package meets the school's 3-year mathematics graduation requirement and provides preparation for college-bound students. Each student receives a copy of open-ended learning goals (examples are attached), allowing creation of further and alternative goals, at the beginning of each unit and a list of units to be covered for the year. Each instructional unit contains teaching goals and behavioral learning objectives designed to be completed in 3 to 4 weeks. Many of the units are repeated throughout the 3 years, each time in a more advanced manner. Thus algebra, geometry, and trigonometry, normally segmented into year-long pieces, become blended and unified with topics such as logic, probability, and computer programming. Curriculum features integration of Navajo cultural background in geometrical design in a pioneering approach to teaching geometry. Activities in drawing and construction invoke students' cultural background in craft work, drawing, and design. Students investigate not only applications of mathematics in careers and the necessity of studying various mathematical topics for college preparation, but also lives of people who have made significant contributions to mathematics

Frantz, Klaus, (1999) "Indian Reservations in the United States: Territory, Sovereignty, and Socioeconomic Change." University of Chicago Geography Research Papers, 1999 Series: Published May 1999.

Freire, Paolo. (1985). The Politics of Education: Culture and Power and Liberation. New York, NY: Bergin and Garvin.

Freire, Paolo. (1993). Pedagogy of the Oppressed. New York, NY: Continuum.

Freire, P. (1998). *Teachers as cultural workers: letters to those who dare teach*. Boulder, CO: Westview Press.

Furman, N. (Winter 1975). Technological Change and Industrialization Among the Southern Pueblos. *Ethnohistory*, 22(1), 14.

Ganado Public Schools, AZ. (1992) "Aspirations: The Ganado Primary School Curriculum." 126 p.

This document describes an elementary school curriculum implemented at the Ganado Primary School in Arizona. The curriculum is based on traditional Navajo teachings associated with the four cardinal directions. The goal is to help students live harmonious lives by developing a sound belief and value system, learning ways to make a living, learning social competence, and having respect and reverence for earth and all living things. The reading and writing program consists of three components: a mini-lesson, an activity period, and a sharing period. During the mini-lesson, the teacher explains and models a specific aspect or strategy of the reading or writing process that enhances skill development. During the activity period, students work individually or in groups experimenting with and practicing the strategy demonstrated during the mini-lesson, or they work on self-selected activities. During the sharing period, teachers discuss students' reading and writing skills with students individually or with small groups. The document also describes other curricular areas and school programs including *videocy* (intelligent viewing of television and films), English as a second language, thematic studies, natural sciences, social sciences, mathematics, fine arts, the Navajo Enrichment Acceleration Program, physical education, library, multiage programming, the Success Program, computer programs, the instructional resource center, and counseling programs. The last section of the document outlines a framework for curriculum planning that includes principles of learning, characteristics of the learner, and general resources.

Garvey, T. K. (1999). *American Indians and graduate studies*. Unpublished Thesis (Ed D), University of Minnesota, 1999.

Gersten, R., Baker, S.K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). "Effective Literacy and English Language Instruction for English Learners in the Elementary Grades: A Practice Guide" (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/pdf/20074011.pdf>

This report offers recommendations for instruction to educators when working with LEP students at the elementary school level. These recommendations have been identified to assist teachers in overcoming language and cultural barriers between them and their students to improve instruction for any student. Some recommendations include: utilizing formative assessments to identify English learners who need additional assistance; bringing students into smaller, more focused groups to intensify student instruction; utilizing complex English vocabulary within daily instruction with clear definitions and examples; incorporating language learning into other aspects of academic learning, such as math, to further encourage language proficiency; and ensuring that teachers provide English-learning students time to work with other more advanced learners, in small groups to perpetuate peer reinforcement.

Grande, Sandy. (2000). "American Indian Identity and Intellectualism: The Quest for a New Red Pedagogy." *Qualitative Studies in Education* 13(4):343-359.

Grinder, B. (1995). Role-modeling Project to Help Urban Youngsters. *Alberta Sweetgrass Newspaper*, p. 1.

Gruenewald, David A. (2003). "Foundations of Place: A Multidisciplinary Framework for Place Conscious Education." *American Educational Research Journal* 40(3), 619-654.

Guardia, Juan and Nancy Evans. 2008. "Student Development in Tribal Colleges and Universities," *NASPA Journal*, 45(2):237-264.

Gulibert, F.A. (1998). THESIS- Effects of community-based education on student engagement at Santa Fe Indian School. University of Illinois at Champaign-Urbana. Urbana, IL.

Focusing on high school seniors from the Santa Fe Indian School (SFIS), the author conducted this study to determine whether student participation in the Community-based Education Program (CBE) could be related to improvement in student engagement levels- attitude, homework, attendance, and participation. The study concludes with a discussion on interview themes in relation to student attitudes and experiences. Limitations of the study, as well as recommendations for SFIS to continue CBE enhancement among students is expressed.

Haase, Susan E. (1981) "Thoughts on an Integrated Approach to Curriculum." *Journal of American Indian Education* v20 n3 p32-33 May 1981.

Where children of different cultural backgrounds are concerned, cultural variables and value systems as applied to knowledge must be given equal consideration when designing a curriculum that tranverses all content areas.

Haberie, J.A. (1994). THESIS-Native American Indians: determinants of educational achievement. University of Nevada-Reno. Reno, NV.

This thesis discusses elements of American Indian education, including a historical perspective and analysis of U.S. Government policies, as well as more contemporary legislation and issues facing American Indian students. Looking at the roles of state and federal governments, efforts by schools and educational administrations, and standardized assessments to monitor student progress, the author states that the responsibility of education is interconnected and must be defined as such. "Multicultural education and changes in assessment bias of standardized testing should be at the forefront of national policy and changes. Educators and administrators must be encouraged to understand the multiple realities at work in the educational setting."

Hakes, Judith A. and others (1980) "Curriculum Improvement for Pueblo Indian Students: A Pilot Study." All Indian Pueblo Council, Albuquerque, NM. 56 p.

A curriculum pilot project was initiated for purposes of helping the Acoma and Laguna Pueblo Tribes (2 of 19 Pueblo Tribes located in New Mexico) to improve the education of their children. A majority of these students were bilingual and the overall educational program did not seem to meet their particular learning needs, resulting in poor academic achievement, standardized test scores far below grade level, high absenteeism, increasing drop-out rates, and curriculum programs that are insensitive to the needs of the bilingual/bicultural student. After a thorough investigation, it was ascertained that these students were experiencing greatest difficulty in mathematics, reading, and social studies and that the curricula used for these subject areas were not culturally relevant. In an effort to measure whether cultural relevance would improve learning, a comparison was made of "intact" classroom situations employing a conventional curriculum and those employing the culturally relevant pilot curriculum. The experimental groups employed culturally relevant materials and strategies designed to enhance learning for fifth grade students in mathematics and reading, seventh grade students in mathematics, and ninth grade students in social studies. Findings suggested that teacher training was an important variable contributing to the achievement of these American Indian students. Pre- and post-testing indicated that in almost every case where the materials were used correctly and the teacher had received training, the pilot curriculum produced significant improvements.

Hall, Carroll. (1995). "The New Mexico 1994-95 Accountability Report." (ED402350)

The "Accountability Report" provides indicators of the condition of Public Education in New Mexico, and is published each year by the State Department of Education. The report provides narrative and statistical information on an array of educational indicators, which include enrollment trends, funding and expenditures, graduation and college-bound statistics, specialized program support, and

student achievement information. Over the past 3 years student enrollment in New Mexico schools has grown by 3% to 325,000 students. Growth has been significant in special education, as well as in elementary and secondary education. The past 3 years have also seen a continued shift in the ethnic makeup of the student population, with increases in the percentage of Hispanic and Native American students and decreases in the Anglo population. In the 1994-95 school year, the student population was 39.9% Anglo, 46.4% Hispanic, 10.4% Native American, 2.4% African American, and 1.0% Asian. State appropriations to the public schools have increased over the past 3 years, and teacher salaries have begun to catch up to the national average.

Hankes, Judith Elaine. (1996). "Investigating the Correspondence Between Native American Pedagogy and Constructivist Based Instruction". Annual Convention of the American Educational Researchers Association. New York, NY: 1-16.

Hargreaves, Andy, Lorna Earl & Michele Schmidt. (2002). "Perspectives on Alternative Assessment Reform." American Educational Research Journal 39(1), 69-95.

Harris, Richard R. ; Cox, Randi (1997) "Curriculum on Ecology and Natural Resource Management for Indian Natural Resource Workers." *American Indian Culture and Research Journal* v21 n3 p33-48 1997. ISSN: 0161-6463

A curriculum developed by the University of California for American Indian natural resource workers blends traditional knowledge of ecology and management with Euro-American scientific principles. The trophic pyramid provides an example for teaching the underlying principles of natural resource management, including reciprocity and interdependence among all life forms.

Harrison, B. (nd) "Te Wharekura o rakaumangamanga : the development of an Indigenous language immersion school": 19 p.

In the early 1980s, the Maori people of New Zealand began a dynamic language revitalization movement. The establishment of Maori immersion programs in state funded schools constituted one major aspect of the movement. This article describes the development of the Maori language immersion program in one New Zealand school for children ages 5 to 17. In 1985, the first immersion classroom of 5-year-olds was established. Immersion classrooms were added year by year as the first class of children progressed through primary school, junior high, and high school. The first class completed the final year of high school in 1997, and students entered polytechnics or university programs in 1998. The article briefly summarizes the historical background, cultural context, and program of the school. Indicators of school performance, including student achievement on national examinations, are considered. The findings are examined in terms of a selection of the research and theoretical literature. This case study has implications for researchers and educators who are working in Indigenous language schooling and for those who are interested in theoretical explanations relating to the success or failure of minority students in school.

Harrison, B. (1987). *Rakaumanga School : a study of issues in bilingual education*. [Hamilton, N.Z.]: Centre for Maori Studies and Research, University of Waikato.

Harrison, B. (1991). "Tainui education strategy : second report, 1992-1997." [Hamilton, N.Z.]: Tainui Maori Trust Board.

Harrison, B. (2001). "Collaborative programs in indigenous communities : from fieldwork to practice." Walnut Creek, CA: AltaMira Press.

Harrison, B., & Papa, R. (2005). The development of an indigenous knowledge program in a New Zealand Maori-language immersion school.

Hartman, Chester. (2003). "Introduction and Overview: Student Mobility: How Some Children Get Left Behind." *The Journal of Negro Education* 72(1), 1-5

Hickling-Hudson, A., & Ahlquist, R. (February 2003). Contesting the Curriculum in the Schooling of Indigenous Children in Australia and the United States: From Eurocentrism to Culturally Powerful Pedagogies. *Comparative Education Review*, 47(1), 26.

Hinchey, Patricia. (2004). "Making Race Visible: Literary Research for Cultural Understanding." *Teachers College Record* 106(5):901-921

Hinton, Leanne. (2003). "Language". *News from Native California* 17(1), p24-25.

The Native American Languages Acts of 1990 and 92 have helped many native communities in their efforts to revitalize their native languages. An amendment to this bill would help the native language programs with needed funding to carry on the work. According to Hinton, "...the fastest and most effective way to get a critical mass of new fluent speaker so an endangered language is through the school – the same institution that was used to destroy these languages in the past." Hinton give Hawaiians and Blackfeet as places with successful language nests and language programs. Most federal funding is about three years in length, so finding long term funding is difficult for these language programs and that's what Senate Bill 575 addresses. Included in SB 575 is the need for Indigenous language instruction, teacher training and parent participation.

Holm, Agnes., Wayne Holm. (1990). "Rock Point, A Navajo Way to Go to School: A Valediction." *Annals of the American Academy of Political and Social Science* 508, 170-184

Holm, Agnes and W. Holm (1995) "Navajo Language Education: Retrospect and Prospect". *The Bilingual Research Journal*, 19, 141-167.

Holm and Holm have been involved as practitioners and action-researchers in Navajo language education for over 30 years. Here they describe the growth and development of bilingual education on the Navajo Reservation and resultant outcomes for Navajo students, educators and communities. From the groundbreaking efforts in bilingual education at Rock Point, to recent work in Navajo immersion programs, this article shows not only how learning is mediated by language and culture in the Navajo context, but also the critical conditions needed to sustain genuine two-language education. The article relates these developments to a sociohistorical analysis of Navajo and the status of Navajo today, and finally, considers prospects for the survival of Navajo, in particular as a child-language.

Idle, P. (2005). "Djidi Djidi Aboriginal Primary School-Celebrating a Noongar Heritage." *Educational Facility Planner* 39(4): 4.

The Djidi Djidi Aboriginal School is a new Department of Education & Training primary school situated in Bunbury, Western Australia. It is a testament to the dedication and commitment of local Noongar group that this school was established. The school provided a culturally appropriate setting that supports children's literacy and numeracy programs with traditional means of expression. Edgar Idle Wade Architects was involved with the Djidi Djidi community in an enriching journey of discovery, culminating in a newly completed school that caters for 250 students, draws on cultural and social intricacies from within the Noongar community and provides an exemplary school for Aboriginal education.

Idle, P. (2005). Djidi Djidi Aboriginal Primary School-Celebrating a Noongar Heritage. *Educational Facility Planner*, 39(4), 4.

Illia, T. (2006). "Tribal Schools Go Modern." *Engineering News-Record* 256(13): 3.

The article focuses on the alternative project delivery approach taken by the Bureau of Indian Affairs (BIA), the federal agency that oversees construction, maintenance and repair of over 7,000 tribal buildings totaling 27 million sq ft in 23 states to change its ways. Alternative project delivery project delivery methods helped open many schools in time for classes. BIA's planning and construction process for schools traditionally took a long time, lasting seven years or more from design to completion. Some delays were unique to the agency. Tribal communities often demand input on the architec-

ture so that it reflects their cultural heritage. And BIA school projects entail an unusually high amount of infrastructure work due to remote work sites, adding \$25 per sq ft or more to the total cost, say BIA officials.

Indian Self-Determination and Education Assistance Act, 25 USC 450f; 450h (1975).

Jacobs, Don Trent, and Jon Reyhner. (2002). Preparing Teachers to support American Indian and Alaska Native Student Success and Cultural Heritage (electronic version). Charleston, WV: Indian EduResearch.Net, 2002. Link: <http://www.indianeduresearch.net/edorc01-13.htm>

Jacobson, L. (2007) "Study casts doubt on value of 'highly qualified' status". Education Week. Retrieved on September 20, 2007, from http://www.teachermagazine.org/tm/articles/2007/09/05/ew_quality_web.h18.html

This article addresses the issue of qualifications and performance of educators as required under NCLB. Various perspectives regarding qualifications of teachers is considered, and how much more than a diploma or teaching credential is required. The position forwarded is that additional factors are needed to determine a highly qualified teacher; and can only be determined through observation and experience.

Johansen, B. E. (2004). "Back from the (Nearly) Dead: Reviving Indigenous Languages across North America." American Indian Quarterly 28(3 & 4): 566-582.

This article focuses on the revitalization of native languages through immersion programs, which has proven to be successful in revitalizing the Hawaiian language. Little Bear, a Cheyenne, says, "language is the basis of sovereignty." Language immersion programs are parents and communities answer to high dropout rates and alienation felt by native students. Mary Eunice Romero, a Cochiti tribal member, says, "When we talk about trying to revitalize our language, it is survival of how we think, who we are, and what we truly believe our children should be. We want to pass this information down to our children in the right way, the appropriate way." According to Daryl Kipp native languages can not be taken for granted, they are "living, evolving communities of speech," and is "part of the future." Through the grassroot efforts of the Hawaiian immersion programs many other native language programs have model their program to follow the Hawaiians. Research shows that immersion students do well in learning English.

Johansen, B. E. (Summer & Fall 2004). "Back from the (Nearly) Dead: Reviving Indigenous Languages across North America." American Indian Quarterly, 28(3 & 4), 566-582.

Johnson, Gene and others. (1981) "Developing Culture Curriculum for Native American Children: The Rough Rock Experience." Rough Rock Demonstration School, AZ. Navajo Curriculum Center. **Publication:** Navajo Curriculum Center Press, Rough Rock Demonstration School, Star Rt. 1, Rough Rock, AZ 86503 (\$1.00. 29 p.

The booklet uses both narrative and line drawings to outline Rough Rock Demonstration School's process of developing a K-12 Navajo language and culture curriculum for Navajo children at Rough Rock and other schools on and off the reservation. There are suggestions for writing the proposal, getting community support, and recruiting staff. The next sections discuss finding out what the community perceives to be its needs and problems (including a sample needs assessment survey), and assessing available native-based curriculum materials. The booklet next discusses developing a philosophy of education, setting up a curriculum model, and translating the needs assessment survey into ideas for curriculum. The sections on developing curriculum content, scope and sequence, and writing teacher objectives are followed by a sample fourth grade social studies program. The booklet ends with suggestions for implementation of the curriculum, evaluation, and working with others. A summary of the Rough Rock Community-Teacher-Student survey (with recommendations for curriculum development) is included.

Johnson, Gene, Comp. and others (1981) "Navajo Materials For Classroom Use: K-12 Curriculum Directory (Preliminary Edition)." Rough Rock Demonstration School, AZ. Navajo Curriculum Center. 167 p.

Compiled as part of Title IV-B Materials Development Project at Rough Rock Demonstration School, the bibliography attempts to address: (1) what Navajo-based materials already exist and are available; (2) where Navajo curriculum development is currently taking place; and (3) what needs exist at the present stage of Navajo curriculum development. Materials listed fall into two broad categories: those written primarily in Navajo (132 citations), and those which are bilingual (Navajo/English) or which are written entirely in English (156 citations). Sections I and II contain information on written materials dated from 1949 to 1981--fiction and non-fiction readers, Navajo-based texts on social studies, science, history, mathematics, physical education, music, and teacher's guides which accompany textual material. Materials are first divided into grade levels, then cited alphabetically by author's last name. Each citation includes author's name, title, date and place of publication, grade level, content of material, graphics, size, recommendations for use, and availability information. Section III provides a directory of 8 major Navajo and Native American audio-visual resources; Section IV lists 14 major periodical publications; Section V contains 129 citations on Navajo and Native American culture and language; and Section VI provides a descriptive listing of 44 curriculum development centers, libraries, museums, and publishers.

Jojola, T. (2006). Comprehensive Planning. Paper presented at the Presentation to Tribal Planners Regarding ICIP in New Mexico, Santa Fe, NM.

Jojola, T. (May 2007). Physical Infrastructure and Economic Development. Paper presented at the National Native American Economic Summit.

Joseph, Alvin M. Jr., J. Nagel, T. Johnson. (2000). Red Power: The American Indians' Fight for Freedom. Lincoln, NE: University of Nebraska Press.

Justice, Daniel Heath. (2001). "We're Not There Yet, Kemo Sabe: Positing a Future for American Indian Literary Studies." *American Indian Quarterly* 25(2), 256-269.

Kannapel, P. J. & S. K. Clemments. (2005) "Inside the Black Box of high-performing high-poverty Schools". A report from the Prichard Committee for Academic Excellence. Retrieved from <http://www.prichardcommittee.org/Ford%20Study/FordReportJE.pdf>

A study of eight high-performing, high-poverty Kentucky elementary schools and how they compare to eight similar low-performing, high-poverty elementary schools. Descriptions of various components needed in high-performing, high-poverty schools may be applicable in other schools facing similar problems. Curriculum alignment and continued development, assessments designed to focus on the needs of the specific schools, clear and concise instruction by teachers, a positive school culture, and continued professional development among the staff were among strengths noted in high-performing schools.

Karma, Nelson, Linda Simonsen, Elisebeth Swanson. (2003). "Research Issues for Mathematics Education in Rural Communities: Focus on Native Americans." Working Paper. (ED478056)

Low student achievement for Montana's Native American students has been a recognized fact since the beginning of the reservation period. The current push for mathematics and science education reform, coupled with federal and state accountability mandates, enhances opportunities for learning but also challenges Native students' culture and priorities. Native student learning in mathematics is influenced by contextual factors: federal, state, and local policy mandates; Native culture, community, language, and ways of knowing; the culture of poverty; isolation; and classroom practice. This paper reviews current research on several contextual factors, making connections between the literature and observations in schools on or near Montana's reservations. The first section looks at the history of the

reservations and educational opportunities for Native students; the impact of policy, poverty, and isolation on these students and their schools; and the impact of Native American culture on the educational lives of students. The second section examines issues of standards and equity for mathematics education; it includes research and discussion on culturally responsive teaching, curriculum, and assessment. The third section discusses obstacles, challenges, and opportunities for achieving equity within this system and proposes research topics to help educators address them. Topics include local control; access and isolation; student mobility; and the lack of adequate tracking systems for student attendance, achievement, and district expectations. The conclusion describes what is working in schools on two Montana reservations and the future research needed to define a vision for closing the achievement gap for Native students.

Kerkhoven, I. (2005). "Oak Valley Aboriginal School-A Journey." *Educational Facility Planner* 39(4): 4.

The aboriginal community of Oak Valley is located in one of the most remote areas of Australia and, until relatively, recently, was provided with grossly inadequate school facilities. Population growth in the 1990s, however, provided the impetus for the construction of more permanent, higher quality school facilities. Completed in 2002, Oak Valley Aboriginal School offers parity with other schools in South Australia while addressing the unique cultural requirements of the local community. It was recently awarded with the 2003 Design Share Award of Merit for its highly sustainable approach, simplicity and strong community integration.

Kraus, M. (1998). "The Condition of Native North American Languages: The Need for Realistic Assessment and Action." *Int'l. J. Soc. Lang.* 132: 9-21.

Of about 210 Indigenous language still extant in the USA and Canada, 34 are spoken by speakers of all generations, 35 are spoken by the parental generation and up, 84 are spoken by the grandparental generation and up, and 57 are spoken by only a few aged speakers. This general profile is compared with a survey of the circumpolar North and with that of Indigenous languages in New Mexico and Arizona. Of these, the latter exhibit the greatest retention, but even those languages, at the rate things are going, will face the threat of extinction. The major issue of denial is addressed, along with the effects of bilingual education programs, which, it is argued, may tend to remove responsibility for language transmission from the home to the school. There is an urgent need for facing the facts and psychology of denial, and forge realistic programs that include a commitment to intensive oral immersion. The article concludes with a consideration of the role of linguists in working in the interest of Native American languages and communities.

Krauss, M. (1996). Status of Native American Languages Endangerment. *Stabilizing Indigenous Languages*. G. Cantoni (Ed.). Flagstaff, AZ: Center for Excellence in Education, Northern Arizona University: 6.

Establishing categories of native languages in the United States based on their viability, the author groups and ranks the two hundred or so extant native languages. He further surveys the geographic spread of extant languages in this country and abroad and discusses the reasons we should care about what happens to native languages.

Kushman, J. K. & Barnhardt, R. (2001). "Reforming education from the inside-out: a study of community engagement and educational reform in rural Alaska". *Journal of Research in Rural Education*. Retrieved from: <http://www.ankn.uaf.edu/Curriculum/Articles/RayBarnhardt/ReformingEd.html>

A study of education development projects and activities in rural communities of Alaska. Emphasizing four basic areas for development, the state has implemented programs to assist students by encouraging teachers to develop relationships with community members outside of the school environment. Expanding and educating on the role of parents in their students' education, distributing leadership of the schools to the community to encourage a sense of communal ownership, and recognizing

ing that the health of a student correlates directly with their ability to succeed academically are other themes discussed.

Lacourt, Jeanne ; St. Clair, Darlene ; Kokotailo, Patricia K. ; Wilson, Dale ; Chewning, Betty (2005) "“Know Your Roots”: Development and Evaluation of an Oral History Curriculum for Native American Middle-School Students.” *American Indian Culture and Research Journal* v29 n4 p59-74 2005. 16 p.

American Indian children have systematically been denied the opportunity to learn about their origin stories and oral traditions in the mainstream American public school system and have suffered from approaches long documented as failing them. Tribal entities across the nation are making concerted efforts to revitalize Native languages and cultural practices. Language tables and conferences focusing on language and cultural revitalization strategies are increasingly common as the need for gathering information from community members becomes more apparent. Key to ensuring the continuation of traditional practices is involving the community's youth. While several oral history projects exist across the nation and within American Indian communities, there appears to be little, if any, culturally relevant oral history curricula finding its way into the schools, particularly those serving high populations of Native students. A review of published oral history literature did not locate a formal curriculum designed for a school setting where Indian youth gathered information from family and community members. To strengthen a traditional practice of Indigenous education, the authors undertook the task of developing their own curriculum. Their goals are to describe the oral history curriculum developed by the Youth Intervention Project (YIP) and its evaluation. This article presents results of a survey of Indian students' interest and concerns regarding their tribal culture administered to sixth graders before the oral history program. Evaluation results of the curriculum are presented. (Contains 1 table and 12 notes.)

LaFrance, Joan ; Starkman, Neal (1979) “Development of Native American Curriculum.” 25 p.

The workbook briefly outlines curriculum development with an emphasis on Native American curriculum materials. Written in conversational style, it contains very basic information and examples regarding: the scope, sequence, and definition of curriculum; how curriculum materials get into the educational system; and a 5-step curriculum development process (soliciting community involvement; writing learning objectives; integrating Native American content with academic skills; evaluating curriculum product; disseminating the curriculum into the educational system). A briefly stated curriculum development guide and checklist are included. The appendix contains sample field test, bench test, and evaluation forms as well as descriptions of how to organize public meetings and write performance objectives.

LaFromboise, Teresa D. (1996) “American Indian Life Skills Development Curriculum.” University of Wisconsin Press, 521 p. ISBN: ISBN-0-299-14924-2

This culturally relevant curriculum was developed to teach American Indian secondary school students coping and suicide prevention skills. Although the curriculum was designed for high school students, many of the lesson plans and activities can be used with middle school students. The goal is to address the significant problem of suicide among American Indian adolescents and to help students understand and feel comfortable talking about issues such as depression, stress, anger, sexuality, and grieving. The introduction covers special concerns in teaching about suicide, guidelines for implementing the curriculum, and a checklist for assessing suicide risk. The guide consists of 7 sections that include 37 lesson plans. Sections cover the following topics: building self-esteem; identifying feelings, emotions, and life stressors; developing effective communication and problem-solving skills; recognizing and eliminating self-destructive behavior; exploring reasons why people attempt suicide; identifying ways to help friends who are considering suicide; and planning for the future. Lesson plans include objectives, instructional materials, suggested time frames, lesson content, and learning activities. Learning activities focus on developing social skills and include information on

the rationale and components of a particular skill, modeling and demonstration of a skill, skill practice, and feedback on individual skill performance. Includes student knowledge test, glossary, and index.

Lawrence, Bonita and Enakshi Dua. 2005. "Decolonizing Antiracism," Social Justice 32(4): 120-143.

Lee, T. S. (Spring 2007). "'If They Want Navajo to Be Learned, Then They Should Require It in All Schools': Navajo Teenagers' Experiences, Choices, and Demands Regarding Navajo Language." Wicazo SA Review: 7-33.

Observing the trend away from young people choosing to speak their native language in school, the author notes the discrepancy between this and the stated objective of schools and the federal government to enhance native language acquisition. In studying the question, she asked students themselves what they thought should happen. Noting their thoughtful consideration of the problem, the author compiles a number of suggestions for improvement.

Lee, Tiffany S. (2009) "Language, Identity, and Power: Navajo and Pueblo Young Adults' Perspectives and Experiences with Competing Language Ideologies". Special Issue: Indigenous Youth and Bilingualism. Journal of Language, Identity, and Education 8 (5), 307-320.

Native languages, contemporary youth identity, and powerful messages from mainstream society and Native communities create complex interactions and juxtapositions that require deconstruction for the benefit of Native language revitalization. This study attempted to learn how Native youth negotiate and interpret mixed messages of the need for Native language for cultural continuity and the importance of English for success in American society. Interviews and reflection writing from Navajo and Pueblo youth constituted the counter-narratives that expressed the Indigenous youth's concerns, values, frustrations, celebrations and dilemmas with regard to their heritage language and identity. The perspectives of the youth extended across five thematic areas including: respect, stigmatization and shame, marginalization, impact on identity, and agency and intervention. Implications for Native communities are that language plays an important and complex role in contemporary youth identity. Yet, their Indigenous consciousness was not diminished by limited fluency in their heritage language, which is an important step for inspiring a commitment to language revitalization.

Lee, Tiffany S. and McLaughlin, Daniel (2001). "Reversing Navajo Language Shift, Revisted". In J. Fishman (Ed.), Can Threatened Languages Be Saved? Reversing Language Shift Revisited: A 21 Century Perspective. Clevedon: Multilingual Matters.

This chapter reflects on Fishman's earlier work from 1990 regarding Navajo language shift. Language shift is the occurrence when a child's first language shifts from their heritage language to a dominant or colonial language. For Navajo children, this shift in language is from Navajo to English as the first and primary language. The authors use Fishman's Graded Intergenerational Disruption Scale (GIDS) to determine the status of Navajo language ten years after Fishman's first assessment. Examples according to each scale level are given from the Navajo context. The authors note that while the language was not in a threatened position along the GIDS, it was moving in that direction quickly.

Liebler, C. A. (2004). "American Indian Ethnic Identity: Tribal Nonresponse in the 1990 Census." Social Science Quarterly 85(2):14.

About 11 percent of American Indians did not report their tribal affiliation on the 1990 U.S. Census form. I use several theoretical perspectives as tools to explore the reasons behind this surprising omission. Method. Logistic regression analysis is the method employed. Results. American Indians living with someone who speaks an American Indian language are very likely to report a tribal affiliation, as are those living in "Indian states" (states with historically high numbers of American Indians). Those who are least likely to report a tribal affiliation are Hispanic women with low education who report

no American Indian ancestry, do not live with other American Indians, and live in a metropolitan area of a “non-Indian state.” Conclusions. Lack of knowledge of family history appears to be one of the primary causes of tribal nonresponse. Salience of tribal identity also affects responses.

Lipka, Jerry, & Teresa L. McCarty. (1994). “Changing the Culture of Schooling: Navajo and Yup'ik Cases.” *Anthropology & Education Quarterly* 25(3), 266-284

Lipka, Jerry. (2002). “Schooling for Self-determination: Research on the Effects of Including Native Language and Culture in Schools”. ERIC Digest (2002): EDO-RC-010-12.

Littlejohn, Jim (2000) “The Impact of the Native American Languages Act on Public School Curriculum: A Different View.” *Journal of Law and Education* v29 v4 p481-90 Oct 2000 ISSN: 0275-6072

Responds to Scott Ferrin's argument (EJ 583 598) and, as the former policy director for the U.S. Office for Civil Rights (OCR), decries both Ferrin and OCR for their relentless and, in his view, unwarranted promotion of bilingual education. Contends that no civil-rights laws, including the Native American Languages Act (NALA), support or allow federal control of local school curricula or teaching methodologies. (Contains 40 footnotes.)

Lombardi, M. M. (May 2007). Authentic Learning for the 21st Century: An Overview: Educause Learning Initiative.

Lopez, Alejandro and McClellan Hall. (2007). “Letting the Sun: Native Youth Transform Their School with Mural. *Reclaiming Children and Youth* 16(3):29-35.

Lord, Nancy. (1996). “Native Tongues”. *Sierra* 81(6), p46.

The article describes how language validates the landscape and how the landscape shapes the language. With the help of a linguist, the last Dena'ina speaker wrote the language, authored several books on the culture, developed language lessons and taught the language to other tribal members who had their language stripped from them. The author writes, “A late part of the European ‘discovery’ of America was the discovery of the fit between a native language and its place of origin,” which refers to the native language as being so descriptive and he gives some examples of this. All native languages are in a peril, even the Navajo language, due to historical policies and the influx of the “global culture.” As for preservation, the author says, “...dictionaries are not the same as speech. Books and recordings can preserve languages, but only people and communities can keep them alive.”

Machmer, A. M. and E. Gruber (1998). "Secondary School, Family, and Educational Risk: Comparing American Indian Adolescents and Their Peers." *Journal of Educational Research* 91.

Adolescent self-reports of family connectedness, educational commitment, and education-related risk-taking behavior were examined from a sample of over 6,000 public school students, with a focus on American Indians. Findings indicate that low family connectedness is associated with decreased educational commitment and an increased risk of absenteeism, substance use before and during school hours, and the purchase of alcohol or drugs on campus. American Indian youth report lower levels of connectedness to family and poorer educational performance than African American and Caucasian peers and engage in higher rates of risk taking. American Indian adolescents residing outside of the reservation may be vulnerable to increased familial stress and encounter cultural conflicts in mainstream educational settings.

Manasc, V. (2005). "Design for First Nations Schools: Learning in Four Directions." *Educational Facility Planner* 39(4): 4.

First Nations school design is first about retrieving the forms and ways of sharing knowledge and images that exist in the community and its families. The connection between storytelling and how aboriginal students learn is important and must be reflected in the design and construction of First Na-

tions schools. This article explores the many lessons Manasc Isaac Architects has learned-from the importance of story-telling, to the value of engaging community members in design, to the essential value of involving local people in the construction of the schools. We look to a future when First Nations schools are designed by First Nations architects, who bring their own culture and language to bear on school design and apply the lessons learned about values, culture and community involvement to the design of public and private school facilities across the country.

Manson, S. M., Dinges, N. G., Grounds, L. M., & Kallgren, C. A. (1984). Psychosocial Research on American Indian and Alaska Native Youth: An Indexed Guide to Recent Dissertations (pp. 138-153).

Martin, R. (Winter 2001). "Native Connection to Place: Policy and Play." *American Indian Quarterly* 25(1): 6. By discussing her personal experience as a tribal consultant for federal policy concerning culturally significant public land use, the author articulates the dilemma of an "educated Indian." The dilemma is expressed in several different ways: ties to land being cultural rather than just personal, sharing cultural information for preservation purposes but is available for exploitation by researchers, teaching cultural significance in schools rather than at home, and tribal decisions in accepting non-tribal policies and people to survive as a culturally distinct community. Tribes have been offered an opportunity to participate in forming the policies that affect every part of their lives, yet the barriers to participating are complex. Education has given tribes and tribal members the tools for self-determination, but the price may be the loss of culture and tradition.

Martin, R. (Winter 2001). Native Connection to Place: Policy and Play. *American Indian Quarterly*, 25(1), 6.

May, S. (1999). "Language and Education Rights for Indigenous Peoples". S. May (Ed.), *Indigenous Community-Based Education*. UK: Multilingual Matters, Ltd. (42-66).

In recent and ongoing debates on democracy and representation, Indigenous peoples have been at the forefront in arguing for recognition of their rights to greater self-determination within modern nation-states. These arguments are based on their particular status as Indigenous peoples, historically colonized against their will. Much of the focus of Indigenous claims to self-determination has been upon language and education. This paper explores the wider basis of Indigenous claims in social and political theory, and within international law, and the controversial issues surrounding them. It examines these claims in particular relation to language and education and discusses, by way of example, the development of autonomous Maori language education initiatives in Aotearoa/New Zealand.

McCarty, T. L. ; Wallace, Stephen (1983) "Navajo Leadership and Government: A History. Sixth-Ninth Grade Navajo Bilingual-Bicultural Social Studies Curriculum." Rough Rock Demonstration School, AZ. Navajo Curriculum Center. 68 p. ISBN-0-936008-22-9

This history of Navajo leadership and government, part of the sixth-ninth grade Navajo bilingual-bicultural social studies curriculum from the Navajo Curriculum Centers, covers types of government from the animal leaders of Navajo legend to modern times. The text is divided into five chapters: "The First Leaders," "New Neighbors--New Government," "Fort Sumner and Return," "A Time of Change," and "Modern Leaders--Modern Tribal Government." The history of Navajo leadership before and after the arrival of the Spaniards, and subsequently the Anglo Americans, is given. Hostilities between Navajos and the United State government; Navajo government at Fort Sumner, New Mexico, after the "Long Walk" from Ft. Sumner; the first Navajo reservation; and the beginning of Bureau of Indian Affairs agencies, Navajo chapters, and the Navajo Tribal Council are discussed. Navajo government in the 1930's, the stock reduction problem, changes in the Tribal Council, Navajo participation in World War II, and Navajo leaders since the war are described. Eight blocks, containing from two to six questions to think about, are interspersed throughout the text. Drawings, maps, and photographs illustrate the text.

McCarty, T. L. (1989) "Inquiry-Based Curriculum Development in a Navajo School." *Educational Leadership* v46 n5 p66-71 Feb 1989

At Rough Rock Demonstration School in Arizona, a bilingual, bicultural curriculum helps Navajo students discover the power and validity of their own lives as tools for learning.

McCarty, T. L., Hadley Lynch, R., Wallace, S., & Benally, A. (March 1991). Classroom Inquiry and Navajo Learning Styles: A Call for Reassessment. *Anthropology & Education Quarterly*, 22(1), 42-59.

McCarty, T. L. (1993). "Federal Language Policy and American Indian Education." *Bilingual Research Journal* 17(1&2): 22. Link: http://www.ncela.gwu.edu/pubs/nabe/brj/v17/17_12_mccarty.pdf

The past two-and-a-half decades have witnessed tremendous change in both the content and the context of American Indian education. Content refers to curriculum, pedagogy and the micro processes that occur within Indian classrooms, schools and communities. Context refers to the larger institutional framework in which those processes operate. Change at both levels has resulted from a dynamic interplay between federal language policy on the one hand, and initiatives generated at the level of Indian schools and communities on the other. Integrating an historical analysis of federal language policy with comparative ethnographic data from several well-documented Indian bilingual programs in the southwestern U.S., this paper examines that interplay and its implications for local control over Indian education.

McCarty, Teresa, & Watahomigie, Lucille (1998). "Language and Literacy in American Indian and Alaska Native Communities". Chapter in B. Perez (Ed.) *Sociocultural Contexts of Language and Literacy* (pp. 69-98) Mahwah, NJ: Lawrence Erlbaum Associates.

The chapter explores the linguistic, cultural, and educational diversity of American Indians while it also shares the common historical and contemporary experiences of American Indians and Alaska Natives as a group. The authors attempt to represent the combined perspectives of local and outside educator-researchers. Watahomigie is Hualapai and founder of the nationally renowned Hualapai bilingual/bicultural program at Peach Springs School in northwestern Arizona. McCarty is a nationally recognized scholar of Indigenous language education, a social-cultural anthropologist, and university based teacher-researcher. They examine the sociocultural context for language and literacy development.

McCarty, Teresa and Watahomigie, L. (1999). "Indigenous Community Based Language Education in the USA". Chapter in S. May (Ed.) *Indigenous Community-Based Education*. (Pp. 79-94) UK: Multilingual Matters, Ltd.

Nearly two million American Indian, Alaska Natives, and Hawaiians reside in the USA, representing over 500 tribes and 175 distinct languages. The uniqueness of tribal communities notwithstanding, all Indigenous peoples in the USA share a history as the targets of federal policies aimed at eradicating their languages and lifeways. The legacy of those policies has been Native language loss and sociocultural dislocation, even as Indigenous students have experienced considerable failure in English-only schools. Here, the authors argue that Indigenous language education must be historically situated and as such, viewed as both an affirmation of self-determination and an act of resistance to linguistic oppression. Drawing on published accounts and first-hand testimony, they present several cases that illustrate the role of Indigenous language education programs in strengthening Indigenous languages and promoting Indigenous language and education rights. They conclude with an analysis of the continuing problems these community-based initiatives face, their promise and limitations as agents of language renewal, and their role as catalysts for linguistic self-determination and educational reform.

McCarty, Teresa L. (2003). "Revitalizing Indigenous Languages in Homogenizing Times". *Comparative Education*.

McCarty describes the detrimental impact of globalization on Indigenous languages and specifically those of the United States. Outside of effective communication with the local community, globalization is merely detrimental. People familiar with Indigenous peoples and languages of North America are aware of the limited land base and thus face great(er) endangerment in regard to impeding globalization. McCarty emphasizes this fact when she explains that knowing and speaking one's Indigenous language is a human rights issue. The issues involved in the English-Only schooling are identified and the reader gets a glimpse of some of the contributing factors to Indigenous language loss. On the flipside, there is documentation emphasizing the positive effects of language immersion as becoming the "pedagogy of choice" for Indigenous communities. In contrast, McCarty provides examples of French-English language programs and the success of bilingual education. She identifies her research framework and questions as: 1) How effective have Indigenous language reclamation efforts been in promoting children's bi/multilingualism and their success in school? and 2) What impacts have Indigenous language reclamation efforts had on reversing language shift?

McCarty, T. L., M. E. Romero-Little, et al. (2006). "Native American Youth Discourses on Language Shift and Retention: Ideological Cross-currents and Their Implications for Language Planning." The International Journal of Bilingual Education and Bilingualism 9(5): 659-677.

This paper examines preliminary findings from an ongoing federally funded study of Native language shift and retention in the US Southwest, focusing on in-depth ethnographic interviews with Navajo youth. We begin with an overview of Native American linguistic ecologies, noting the dynamic, variegated and complex nature of language proficiencies and practices across a continuum of sociocultural settings. We then examine two pairs of youth discourses that illuminate social psychological and macrostructural influences on language practices. These discourses juxtapose language identity with language endangerment, and language pride with language shame. As such, they expose the ways in which language allegiance is tied to the distribution of power and privilege in the larger society. Youth discourses, we argue, represent a powerful call to action for communities and schools serving Native American students. We conclude with the implications for future research and for language education planning in Indigenous and other endangered-language communities.

McCarty, T. L., M. E. Romero, and Zepeda, O. (2006). "Reclaiming the Gift: Indigenous Youth Counter-Narratives on Native Language Loss and Revitalization." American Indian Quarterly 30(1&2): 28-48.

Validating the tight bond between language and identity, the authors allow native-speaker youth to give their perspectives on the personal meaning of their native language. The value of the languages - their gift - extends far into the culture, with history and culture embedded in the words, syntax and descriptors. Principal investigators on the Native Language Shift and Retention Project, the authors present their preliminary findings from nearly two hundred ethnographic interviews in which they asked about contemporary causes of language loss and shift.

McCoy, Melanie, Ed. (1993) "Native American Curriculum Resource Guide." 101 p.

This guide aims to assist the faculty member who wishes to integrate Native American materials into core courses of the curriculum. The first section is a bibliography of over 350 entries, primarily books and journal articles, arranged in the following categories: Native American bibliographies and general sources, history, economics, spirituality, music and dance, art, education, politics, and women. Other sections of the guide contain the following: (1) a list of approximately 80 films and videos on Native Americans, as well as sources for films, videos, slides, and photographs; (2) addresses for tribal councils; (3) course outlines, syllabi, and resources for a core course in political science that integrates Native American materials, as well as courses on California's Native Americans, Plains Indian culture, American Indian belief systems, American Indian education, the contemporary American Indian, and American Indian culture; (4) addresses and brief descriptions of 45 Native American groups and associations and related institutions; (5) federal government agencies concerned with Native Ameri-

cans; (6) a list of 35 Native American periodicals; and (7) national museums with Native American materials.

- McCoy, M.L. (2000). "Federal Indian law and policy affecting American Indian and Alaska Native Education. Indian Education legal support project: Tribalizing Indian Education". Boulder, CO: Native American Fund. Retrieved from:
http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/29/cc/a4.pdf

This project provides a summary of federal court cases that have set precedence for existing Native American education legislation as background for more recent pro-Native American activities. Also offered are materials relating to the tribalizing indian education project, as well as questions to consider when addressing this area of interest. Currently, state-funded schools are still under the jurisdiction of the state. Although there have been suggestions that states need to work more with tribes to address the high turnover rates and "negative attitudes" among Native Americans, it is not a requirement by federal law.

- McInerney, Dennis M., and Karen Gayton Swisher. (1995). "Exploring Navajo Motivation in School Settings". *Journal of American Indian Education*, **34**, no. 3, 1-17.

American Indian children appear to be at a particular disadvantage with regard to academic achievement and school retention. Many factors are cited as determinants, but there are inadequate research data available on these factors. The use of psychometric research as a validated instrument to explore some key aspects of Navajo student motivation in predicting school related beliefs and intentions.

- Menzel, Linda L. (2004). "Cultural influences on school completion in a rural multicultural school district." The University of New Mexico, 581 pages; AAT 3156694

The dropout rate is a persistent problem nationally despite funding and programming to combat it. This qualitative research investigation queried why students in Many Groves, a rural, culturally diverse school system, dropped out of school before graduation. The purpose was to facilitate a greater understanding of what might be occurring for dropouts that prompted early school departure and presented implications for schools in addressing these issues. The dropout phenomenon is complex; an examination of all contexts that influence students (familial, cultural, educational, peer and societal) were investigated. Many interrelated internal (characteristics or circumstances that directly relate to the students themselves) and external (historical, political, economic, and sociocultural contexts outside of the control of students) factors were found to influence decisions to dropout. A combination of these factors, rather than a single cause, influence school participation, because of its diversity, cultural issues were found to potentially intensify problems for Hispanic and Native American students if disparity between the home and school cultures existed. In this study, culture was found to have several meanings: the personal ethnic or community background of students, and the school environment.

- Michie, Michael. (1999). "Where are Indigenous peoples and their knowledge in the reforming of learning, curriculum and pedagogy?" Darwin, Australia: Paper presented at the Fifth UNESCO-ACEID International **Conference** "Reforming Learning, Curriculum and Pedagogy: Innovative Visions for the New Century", Bangkok, Thailand, 13-16 December 1999.
 Link:<http://members.ozemail.com.au/~mmichie/handbook.htm>

Issues surrounding the education of Indigenous peoples are examined in terms of cultural diversity and equality. Indigenous peoples have expressed concerns about the loss of identity and culture in the modern world. Their traditional ecological knowledge is being more highly valued by scientists and environmentalists and Indigenous ways of thinking are marginalized by the Western knowledge system. For Indigenous peoples, education needs to balance culture and diversity with development. A number of educational initiatives from Western countries are examined to see how some of these issues are being addressed elsewhere.

Mitchell, R. (1992). *Testing for learning: how new approaches to evaluation can improve American schools*. New York, NY: The Free Press.

Morell, Virginia. (2007). "The Zuni Way". *Smithsonian*. 38(1), P76-83.

This article profiles the Zuni Indians of New Mexico, who still maintain a strong sense of community and religion even after centuries of hardship and dislocation. With 90% of the Zuni living together at Zuni Pueblo, they are one of most intact native american tribes in existence. Through their language and arts, the Zuni have managed to merge their history and culture with 21st century lifestyles.

National American Indian Court Judges Association. (1983) "Process for Developing an Indian Parent Program. Parenting Process Training Curriculum." 112 p.

Based on a concern for the disproportionately high separation rate of American Indian families, the National American Indian Court Judges Association (NAICJA) applied for a grant to develop and offer the Indian-specific parent training program under which this training curriculum manual was developed. Composed of eight sections, the manual provides training in the following areas: an introduction to NAICJA and its 1982-83 parenting process training; the Indian family today; assessing community needs and resources; the mechanics of establishing and operating a parent training group; and defining group focus and developmental stages; developing group leadership skills; options for parent curriculum content; and developing an action plan. Each training area offers an objective or objectives, discussion exercises, suggested activities, and sample handouts. Appendices include a sample letter of agreement between the tribal group and NAICJA, parenting community profiles for four tribes, a survey of parenting needs, and a summary of the Ponca Tribe parenting survey.

National Indian Education Association (NIEA). (2007). "Preliminary Report on No Child Left Behind in Indian Country". Washington, DC: NIEA. Retrieved from:
http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/29/e2/50.pdf

This report summarizes issues identified by the NIEA related to NCLB and its effects on American Indian education. Possible unintended consequences, such as reducing culturally based education and pedagogy in classroom instruction, or reducing emphasis on liberal arts (music, literature, and art), have had implications for the operation of schools on and off the reservation in New Mexico. Also expressed was the idea that any academic success on the part of American Indian students would come at the cost of their Indigenous education and participation.

Native American Housing Assistance and Self-Determination Act 101-103 (1996).

Nelson, Margaret F., Comp. ; Walton, M. Frances,. (1982) "Ohoyo Ikhana: A Bibliography of American Indian-Alaska Native Curriculum Materials." OHOYO Resource Center, Wichita Falls, TX. 264 p.

The 1200-item annotated bibliography on American Indian and Alaska Native resources is presented in four sections: curriculum materials, resource materials, bibliographies, and periodical articles. The first three sections are listed alphabetically by source showing the vast amount of materials being developed by Indian tribal groups and organizations. Each notation includes the title of the resource, author(s), year of publication (1970-1982), brief description, language written in (if applicable), number of pages, and grade level. For easier referencing, the contents of the bibliography are indexed in three ways: regional, audio/visual, and bibliography. The regional index lists printed materials contained in the curriculum, resource and periodical sections alphabetically by title, noting page number, grade level, and subject area (arts/crafts, bilingual, career education, extra curricular, language arts, math/science, social studies) or resource applicability (curriculum development aid, resource reference, reversing stereotyping/bias in textbooks). The audio/visual index provides a title listing of cassette tapes, records, films, slides and videotapes available and appropriate for classroom use. A list of curriculum resource personnel concludes the document.

Nesper, L. (Winter 2001). Remembering the Miami Indian Village Schoolhouse. *American Indian Quarterly*, 25(1), 17.

New Mexico Public Education Department. (2005) "Home school Students 2004-05". Retrieved June 12, 2006, from <http://www.ped.state.nm.us>

This table was created using data submitted to NMPED by school districts. Listed are students who were classified as Home School Students, by school district, going back to the 1994-1995 school year. The school district for Dulce is listed as having 5 for the 04-05 school year, 12 for the 03-04 school year, 9 for the 02-03 school year, and 4 for the 01-02 school year. Grants-Cibola is listed as having 46 for the 04-05 school year, 56 for the 03-04 school year, 59 for the 02-03 school year, and 60 for the 01-02 school year.

New Mexico Public Education Department. (2006). "Indian Education Status Report, 2004-2005 school year". Retrieved August 31, 2007, from <http://ped.state.nm.us>

This report lists School District information for all New Mexico Public Schools, including Dulce and Grants-Cibola for the 2004-05 school year. Covered are: student enrollment, district accountability reports (including district enrollment, grade range, AYP status with ethnic comparison table, attendance rate, and graduation rate), district safety, district dropout rates, support programs, and impact aid tables.

New Mexico Public Education Department. (2006). "High School Graduates, 2005-2006". Retrieved April 19, 2006, from <http://www.ped.state.nm.us>

Listed only, is the number of all 2006 graduates, by school district. 36 graduates are listed for Dulce High School, while 232 graduates are listed for Grants-Cibola. Ethnicity and tribal affiliation are not included in this table. Also omitted is the number of total seniors during the school year.

New Mexico Public Education Department. (2006). "Percent of Population ages 4 to 17 living in poverty, by District 2005-2006". Retrieved June 12, 2006, from <http://www.ped.state.nm.us>

The table lists New Mexico School Districts, poverty levels, populations per district, and the percentage of people within the focus age group that lives in poverty. The Dulce school district is listed, showing a high number in comparison to other districts. Dulce has a listed population of 760, of which 244 are listed as being in poverty for a 32.11 %. The Grants-Cibola district is listed with a general population of 5,466 and poverty population of 1,532, for a percentage of 28.03%.

New Mexico Public Education Department. (2006). "Percent of Students receiving free and reduced lunches, school year 2005-2006". Retrieved April 28, 2006, from <http://www.ped.state.nm.us>

The data provided lists percentages for the number of students in each school district that qualified for either Free or Reduced Lunches. The data is not specified by grade, age group, ethnicity, or school. Dulce Independent is listed as having 0.0% free, and 0.0% reduced, with a total of 0.0. Grants-Cibola is listed as having 56.1% free, and 11.9% reduced, with a total of 68%.

New Mexico Public Education Department. (2006). "Pupil/Teacher ratios by school type, and District total 2005-2006". Retrieved March 16, 2006, from <http://www.ped.state.nm.us>

This table shows ratios of students to teachers in percentages, by student groups (elementary, mid/jr., and high school) for the state of New Mexico during the 2005-2006 school year. These numbers do not include Charter Schools. The Dulce School District is listed as having a 12.9 ratio for its Elementary School, 10.8 for its Middle School, and 13.1 for its High School. Grants-Cibola is listed as having a 12.4 ratio for its Elementary Schools, 12.9 for its Middle Schools, and 14.4 for its High Schools.

New Mexico Public Education Department. (2007). "2007-2008 School Improvement Framework". Santa Fe, NM: New Mexico Public Education Department. Retrieved from: <http://www.ped.state.nm.us/div/psb/dl08/SchoolImprovementFramework.pdf>

A publication of NMPED for accountability and reporting purposes, this work is divided into several elements: adequate yearly progress (AYP) designations and criteria, scaffolding of mandates for SINOI, summary and timeline of 2007-2008 EPSS requirements, and standards for school/district excellence and effectiveness. Also included are listings for contacting various New Mexico education offices.

New Mexico Public Education Department. (2007). "Enrollment by school, 2006-2007". Retrieved August 27, 2007, from <http://www.ped.state.nm.us>

Under each New Mexico School District, all public schools are shown with the number of students per grade. Dulce Elementary has 9 students in "PK", 49 in "KF", 57 in 1st grade, 53 in 2nd, 44 in 3rd, 40 in 4th, and 35 in 5th grade. Dulce Middle has 55 students in 6th grade, 57 in 7th grade, and 55 students in 8th grade. Dulce High has 68 in 9th grade, 61 in 10th, 43 in 11th, and 29 students in 12th grade. The total population for Dulce Public schools for the 2006-07 school year was 655 students. Grants-Cibola has 18 students in "PK", 258 students in "KF", 218 students in 1st grade, 250 students in 2nd grade, 281 students in 3rd grade, 239 students in 4th grade, 283 students in 5th grade, 241 students in 6th grade, 284 students in 7th grade, 259 students in 8th grade, 397 students in 9th grade, 309 students in 10th grade, 293 students in 11th grade, and 275 students in 12th grade, with a total population of 3,605 students.

New Mexico Public Education Department. (2007). "Indian Education Status Report, 2005-2006 school year". Retrieved August 31, 2007, from <http://ped.state.nm.us>

This report contains district information for all New Mexico Public Schools, including Dulce and Grants-Cibola. Jicarilla Apache are listed as having 692 students (2%) in public schools, but there are 633 Native American students listed as being in the Dulce District. Both in the 05-06 and 06-07 school years, the Dulce District is listed as not meeting AYP. Attendance percentages for the Dulce Elementary School are listed as: 93.19% for the 04-05 school year, and 93.47% for the 05-06 school year; the Middle School is listed as: 93.42% for the 04-05 school year, and 93.37% for the 05-06 school year; and the High School is listed as 64.44% for the 04-05 school year, and 76.92% for the 05-06 school year. A Discipline student count, by district, is also included with 15 Drug and Weapon Counts, 10 long-term, 18 short-term, and 28 Unduplicated Count Drug Acts/Weapons (short/long-term) for the 04-05 school year; 4 Drug and Weapon Counts, 0 long-term, 0 short-term, and 4 Unduplicated Count Drug Acts/Weapons (short/long-term) for the 05-06 school year. 9 new efforts were reported as District Efforts to Address School Safety; 5 new efforts were reported as District Efforts to Decrease Dropouts; and 5 new efforts were reported as District Efforts to Increase Attendance.

New Mexico Public Education Department. (2007). "Nonpublic School Students, school year 2006-2007". Retrieved March 4, 2007, from <http://www.ped.state.nm.us>

Under the District data, there is a smaller table listing totals of students in accredited and non-accredited non-public schools. The list is not divided by school, grade, or ethnicity. Dulce is listed as having 58 students in non-public schools, while Grants is listed as having 260 students. Dulce is listed as having the St. Francis Elementary School; Grants-Cibola is listed as having New Sunrise RTC, St. Joseph Mission School, St. Teresa of Avila School, and Victory Christian Academy.

New Mexico Public Education Department. (2007). "Percent of Student Enrollment Ethnic Category by District, school year 2006-2007". Retrieved August 28, 2007, from <http://www.ped.state.nm.us>

The information in this table lists all New Mexico school districts and how each of their students populations break down by five listed ethnic groups (Anglo, Hispanic, Native American, Black, and Asian), as well as the total number of students in each district. Of the 644 students enrolled in the Dulce district, 92.4% are Native American. Of the 3,672 students enrolled in the Grants-Cibola district, 40.5% are Native American students.

New Mexico Public Education Department. (2007). "Student gender by District, school year 2006-2007". Retrieved June 19, 2007, from <http://www.ped.state.nm.us>

This table lists New Mexico's 89 public school districts, by district, and shows the ratio of girls to boys, as well as the total population of students per district. Dulce schools are listed as having a students population of 655, with 49.9% being female and 50.1% male. Grants-Cibola County is listed as having a total student population of 3,762, with 49.3% being female and 50.7% being male.

New Mexico Public Education Department. (2007). "Total Student Enrollment by District and Grade Level, school year 2006-2007". Retrieved April 4, 2007, from <http://www.ped.state.nm.us>

A listing by New Mexico's Public School Districts, the table shows the number of students that were reported for the 2006-2007 in each district, by grade level, as well as the total number of students reported for each district. Dulce is listed as having 655 total students enrolled in the district, with 201 being high school students, 112 students in middle school, and 284 elementary (1st-6th) students. Grants-Cibola is listed as having a total of 3,605 students with 1,274 high school students, 543 middle school students, and 1,512 elementary students.

New Mexico Public Education Department. (2007). "Number of Public School Sites reporting Teachers and Students, school year 2006-2007". Retrieved February 7, 2007, from <http://www.ped.state.nm.us>

The information shows the number of schools per level (Elementary, Middle, Jr., High, Alternative, and Chapter), by School District. This table shows that Dulce has one Elementary, one Middle, and one High school, all public. Grants-Cibola is listed as having seven Elementary, two Middle, and two High schools, all public. Neither district had a charter school listed.

New Mexico Voices for Children. (2003). Minority/Majority-A profile of New Mexico's Children: 2003 A Kids County special report. Albuquerque, NM. Retrieved from: http://www.nmvoices.org/attachments/minorities_report_final.pdf

Statistics listed in this report refer to all Minority populations in New Mexico. Although it breaks down into specific ethnic groups, the categories for Native Americans do not reflect tribal affiliation, but rather general tribal groups (Apache, Navajo, Pueblo, and Other Native Americans). Information regarding income distribution, public assistance, healthcare coverage, language, and other related areas are included.

New Mexico Voices for Children. (2005). New Mexico Kids Count Databook. Albuquerque, NM. Retrieved from: <http://www.nmvoices.org/attachments/2006kcdatabook.pdf>

Statistics listed in this book are arranged by County. Dulce has estimates for General Demographics, Racial & Ethnic Distributions, Births, Deaths, Medicaid enrollment of Children, Child Abuse, Juvenile Justice Convictions, Poverty Distribution levels, Public Education levels, Free & Reduced Lunch percentages, High School Drinking & Driving rates, Violence rates, Suicide, Substance Abuse, Sexual Activity, and Exercise & Nutrition.

Nichols, R. & Associates. (2006) "Final Report on an Analysis of the status of the NM-PED Indian Education Division". Santa Fe, NM: New Mexico Public Education Department. Retrieved from: <http://www.ped.state.nm.us/indian.ed/dl/Nichols%20Report%20IED%204%2007%2006.pdf>

This report offers background information on the continued development of American Indian education in New Mexico. Along with a history of recent legislation and policy development, definitions, challenges and recommendations are offered in support of expanding the capacity of the Indian Education Division within the PED.

NWT Literacy Council. (1999). Languages of the Land: A Resource Manual for Aboriginal Language Activists. Yellowknife, Northwest Territories, Canada, Crosscurrent Associates, Hay River: 52.

The Canadian Northwest Territories Literacy Council has prepared an in-depth, accessible resource to be of use to aboriginal native communities in planning and carrying out language revitalization efforts. Developed by bilingual native speakers, it includes assessments of language health, steps to follow in planning a revitalization program, debunked myths concerning native language use and much more.

Oblinger, (n.d.) Educause Learning Initiative: 12.

Learning-by-doing is generally considered the most effective way to learn. The Internet and a variety of emerging communication, visualization, and simulation technologies now make it possible to offer students authentic learning experiences ranging from experimentation to real-world problem solving. This white paper explores what constitutes authentic learning, how technology supports it, what makes it effective, and why it is important.

Ohanian, S. (1999). "One size fits all: The folly of educational standards". Portsmouth, NH: Heinemann. Retrieved from: http://www.rethinkingschools.org/archive/13_04/size.shtml

Ollerenshaw, Jo Anne., & Delberta Lyons. (2002). "Voices in a Reservation School: A Sonata Form Narrative from a Professor and a Dakota Pre-Service Teacher about Their Professional and Practical Knowledge Teaching Science in Culturally Responsive Ways." (ED465624)

The Umonhon Nation Public School, with federal funding and collaborative support, is revitalizing Umonhon culture and language. Native American pre-service teachers are learning to teach Umonhon children using a standards-based curriculum incorporating Umonhon language and Umonhon culture aligned with the state's local renewal accountability plan. Narrative inquiry methodology was used to produce the final "Sonata-Form" illustrating the worldviews of a Dakota pre-service teacher and a university professor living on the Reservation and learning to teach elementary science in culturally responsive ways. The results indicate "the belief that a firm grounding in the [Umonhon] heritage language and culture Indigenous to a particularly place [Umonhon Reservation] is a fundamental prerequisite for the development of culturally-healthy students and communities associated with that place, and thus is an essential ingredient for identifying the appropriate qualities and practices associated with culturally-responsive educators, curriculum, and schools" (Alaska Standards for Culturally Responsive Schools, 1998, p2). This paper focuses on experiences between one Santee pre-service teacher and a university professor. The purpose of this research study was to collect and analyze the stories about learning to teach elementary school science. The stories describe experiences and intentions while learning to teach culturally responsive elementary science in the Reservation school.

Orfield, Gary, Daniel Losen & Johanna Wald. (2004). "Losing Our Future: How Minority Youth Are Being Left behind by the Graduation Rate Crisis." (ED489177)

In an increasingly competitive global economy, the consequences of dropping out of high school are devastating to individuals, communities and our national economy. At an absolute minimum, adults need a high school diploma if they are to have any reasonable opportunities to earn a living wage. A community where many parents are dropouts is unlikely to have stable families or social structures. Most businesses need workers with technical skills that require at least a high school diploma. Yet, with little notice, the United States is allowing a dangerously high percentage of students to disappear from the educational pipeline before graduating from high school. Nationally, high school graduation rates are low for all students, with only an estimated 68% of those who enter 9th grade graduating with a regular diploma in 12th grade. According to the calculations used in this report, in 2001, only 50% of all black students, 51% of Native American students, and 53% of all Hispanic students graduated from high school. Black, Native American, and Hispanic males fare even worse: 43%, 47%, and 48% respectively. This report seeks to highlight these disparities to draw the public's and policymakers' attention to the urgent need to address this educational and civil rights crisis. Appended are: (1) State Profiles; (2) Methodology and Results of 50 State Survey of Graduation Rate Accountability;

(3) Definitions of Terms; (4) National and State Graduation Rates; and (5) Promoting Power. (Contains 34 endnotes.) [This report also produced by the Civil Society Institute, (CSI), Newton, Massachusetts.]

Osborne, A. B. (September 1996). Practice into Theory into Practice: Culturally Relevant Pedagogy for Students We Have Marginalized and Normalized. *Anthropology & Education Quarterly*, 27(3), 31.

Palma, Gloria M and others (1993) "Curriculum for Individuals with a Developmental Disability: An Overview." *Rural Special Education Quarterly* v12 n2 p27-29

A functional curriculum for individuals who are developmentally disabled was developed at Tohatchi Special Education and Training Center, located within the Navajo Reservation in New Mexico. The curriculum guide includes a contextual framework, extensive background information, and objectives for fine- and gross-motor and language and communication development.

Pavel, D. Michael. (1999). "Schools, Principals, and Teachers Serving American Indian and Alaskan Native Students". (ERIC Digest) Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. ERIC Document Reproduction Service, ED 425895. Survey, using SASS (Schools and Staffing Survey) to create baseline data and monitor progress on schools that serve significant percentage of AI/AN students.

Pavel, D. Michael. (1999). "American Indians and Alaska Natives in Higher Education: Promoting Access and Achievement". In Next Steps: Research and Practice to Advance Indian Education, edited by Karen Gayton Swisher and John W. Tippeconnic III. Charleston, WV: Clearinghouse on Rural Education and Small Schools. Draws on extensive literature review to examine factors that influence the access and achievement of AI/AN in higher education.

Peacock Jr., J. H. (2006). "Lamenting Language Loss at the Modern Language Association." American Indian Quarterly 30(1&2): 138-152.

The author opens with a story of searching to regain his Dakota language taken from his tribal elders through Christianization. He recounts the story of learning his Dakota language by reading the Bible and other translated works. He says the native children were terrorized when they were caught speaking their native language and when these children grew up they did not teach their children the native language for fear their children would also be mistreated. To help with language revitalization, The Native American Languages Act was passed, but more funding is needed help those languages that are on the brink of extinction. He discussed the Modern Language Association efforts to locate native language speakers using the MLA Language Map, which use the 2000 Census data. The author also drafted the "Statement on Native American Language sin the College and University Curriculum," which was passed by the MLA executive council in 2005.

Pease-Pretty On Top, J. Native American Language Immersion: Innovative Native Education for Children & Families. W.K. Kellogg Foundation of Battle Creek, MI: A Project of the American Indian College Fund: 93.

This is a commissioned report describing the current status of Native languages and names existing Native language immersion programs across the United States. Historical reasons for and rates of language loss are given to provide the context for language revitalization efforts. The report summarizes literature and compiles data on existing schools, practices, methods, and reasons for language revitalization. The report also provides definitions and descriptions of the different types of language immersion and language education techniques employed by schools and communities. The report includes excerpts from interviews with language immersion practitioners and conveys compelling reasons for language immersion.

Pease, Janine. (2004). "New Voices Ancient Words". Tribal College Journal 15(3), p14-18.

This article focuses on native language immersion programs taking place across native nations with hopes of language revival, and the promises of higher test scores. Language immersion programs take the approach of learning a language like an infant does, "it concentrates on communication." The learner is immersed in the targeted native language with "learning activities utiliz(ing) traditional Native ways of knowing and learning: highly interactive, hands-o exploration and discovery, observation, and listening." All communication and subjects taught, Math, science, etc, takes place in the target native language. As students discover their language and culture, "they develop stronger identities and knowledge of their individual roles in their culture and family," which strengthen their family ties. This study looked at three immersion methods: "the "Grandparents' Method," Total Physical Response, and/or Montessori." There are many challenges to having an immersion program, such as commitment, using elders as teachers, detailed planning, historical education practices and funding.

Pedagogy for Students We Have Marginalized and Normalized." Anthropology & Education Quarterly 27(3): 31.

This study is a synthesis of ethnographies conducted in both North American and Australian cross-cultural and interethnic classrooms. It establishes nine assertions about culturally relevant teaching in such settings. It argues that both the understandings and classroom practices included in these assertions provide teachers with potential starting points, informed by current best practice, for praxis--reflecting upon their own practices within a framework of participatory democracy for all.

Peshkin, Alan. (1997). Places of Memory: Whiteman's Schools and Native American Communities. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Peters, R. L. (2005). "A New Library and Technology Center for the Institute of American Indian Arts in Santa Fe, New Mexico." Educational Facility Planner 39(4): 3.

The design of the new Library and Technology Center on the campus of the Institute of American Indian Arts in Santa Fe, New Mexico, reflects a planning process that incorporates elements of American Indian culture and traditions while empowering students to learn. The key planning concepts used to design this new high-tech, environmentally sensitive facility are described.

Pewewardy, Cornel. (1992). "Practice into Theory, Journal to the Year 2000: Cultural Responsible Pedagogy in Action. The American Indian Magnet School". Native American Studies: The Academy and the Community. Minneapolis, MN: University of Minnesota.

Pewewardy, Cornel. (1998). "Our Children Can't Wait: Recapturing the Essence of Indigenous Schools in the United States". Cultural Survival Quarterly, 22, no 1: 29-34.

Strategies for reforming public education to meet the needs of Native Americans must include holistic, multicultural approaches that infuse Indigenous content throughout the curriculum; interpret equal education to mean equal accomplishment, not the same educational treatment; and make teachers culturally responsible. Successes with magnet, charter, and tribally-controlled schools are reviewed.

Pewewardy, Cornel. (2000). "Learning Styles of American Indian/Alaska Native Students: A Review of the Literature and Implications for Practice." Journal of American Indian Education 41(3): 81.

A review of theories, research, and models of the learning styles of American Indian/Alaska Native students reveals that American Indian/Alaska Native students generally learn in ways characterized by factors of social/affective emphasis, harmony, holistic perspectives, expressive creativity, and nonverbal communication. Underlying these approaches are assumptions that American Indian/Alaska Native students have been strongly influenced by their language, culture, and heritage, and that American Indian/Alaska Native children's learning styles are different—but not deficient. Implications for interventions include recommendations for instructional practice, curriculum organization, assessment, and suggestions for future research.

Pianta, R. C. (2007). "Measure actual classroom teaching". Education Week. Retrieved November 19, 2007, from <http://www.edweek.org>.

A commentary, the author discusses the vagueness of highly qualified teachers, as defined in the 2002 No Child Left Behind Act. Rather than abandoning NCLB, the author suggests reformation to improve the law. The author recommends defining qualified teachers based on observations of 'good' teachers, with consideration to diversified teacher approaches, rather than only one approach to instruction.

Piper Price, Linda. (2005). "Acting to learn: The place of performance in university retention for African Americans, Native Americans and Latinos." The University of New Mexico, 425 pages; AAT 3201672

The purpose of this research is to examine how performance in the arts affects college admission, success, and retention for African Americans, Native Americans and Latino students. For the purposes of the study, the arts are defined as a performative act of culture. The fields of inquiry investigated are: culture and performance, acting and learning, aesthetics and artistic production. This study also examines the cultural indicator used to identify at-risk students; the nature of institutional education; the social and emotional lives of the students while attending school; choice, freedom, and identity in academic study; motivation and self-regulated learning and the empowering and transforming aspect of the arts. The study was conducted primarily during the Fall 2003 and Spring 2004 school terms. A survey in the Spring of 2003 was given to a random sampling of fifty students from the target groups. Seven students were selected from those completed surveys for the study---three African-Americans, two Native Americans and two Latinos. Another group of six students in the target cultures were interviewed once for the purpose of triangulation. I completed the group as researcher-participant bringing the total number of actors in the study to fourteen. All participants currently attend or have attended Southwestern University in New Mexico.

Popham, W. J. (2001). "The truth about testing: an educator's call to action". Alexandria, VA: Association for Supervision and Curriculum Development.

The assumption that standardized tests and assessments reflect the ability of students and schools is addressed and challenged. Differences in content and purposes between everyday school instructions and assessments are identified. Student's individual socio-economic status, and non-instructional factors are discussed as considerations when assessing student achievement and progress.

Popkewitz, Thomas. (1988). "Cultural, Pedagogy, and Power: Issues in the Production of Values and Colonization," *Journal of Education* 170(2): 77-90.

Quetone, A. C. (1984). Indian Self-Determination-The Human Factor. *Public Administration Review*(November/December), 6.

Rael, Patricia S. Hildebrant. (2004). "The New School Accountability Program: A study of the consequences of identifying schools for low performance." The University of New Mexico, 308 pages; AAT 3156698

The purpose of this qualitative study is to describe and explain what happened when the New Mexico school accountability rating system was first used to identify schools for low performance. The focus of the study was on the first 11 schools, and, more specifically, on three of the districts in which some of these schools were located. I conducted interviews with staffs and parents within schools populated primarily by Native American children. My analysis of the interview data and the documents collected over a period of four years yielded the following findings: (1) The only schools to be identified during the first three years of implementing the Accountability Program were schools that had high populations of minority students and were located in low socioeconomic areas of the State of New Mexico. (2) The State Board of Education and other policy makers did not anticipate the negative

consequences of implementing the Accountability Program. (3) The State was not prepared to address the issues of leadership, politics, change, and diversity. (4) School staffs had ideas about accountability that were not included in the methodology for rating public schools. This study could aid further studies, but the results are intended primarily to inform further development and action toward adopting accountability measures for rating New Mexico public schools.

Reagan, Timothy. (2005). *Non-Western Educational Traditions: Indigenous Approaches to Educational Thought and Practice*. (3rd Edition) Mahwah, NJ: Lawrence Erlbaum Associates.

This text provides a brief, yet comprehensive, overview of a number of non-Western approaches to educational thought and practice. Chapter 5: Finding the True Meaning of Life: Indigenous Education in North America. The Core Belief System of Indigenous, Americans, Indigenous American Educational Beliefs and Practices, Toward A Philosophy of Native American Education

Research Forum, University of Pennsylvania, Philadelphia, Pennsylvania, February 5-6, 1988.

Rever, J. (Jan 2008). "A Model for the State." *School Planning & Management* 47(1): 1.

The article focuses on school building construction in the Indian Country, Arizona. According to the author, when building schools throughout the county, the Bureau of Indian Affairs (BIA) must consult with tribes before planning. Moreover, tribes decide the site location and determine cultural school design aspects, including green building techniques.

Reyhner, J. and E. Tennant (1995). "Maintaining and Renewing Native Languages." *The Bilingual Research Journal* 19(2): 25. Link: http://www.ncela.gwu.edu/pubs/nabe/brj/v19/19_2_reyhner.pdf

This article reviews research on maintaining and renewing American Indian languages. A rationale is given for the importance of maintaining tribal languages in terms of Native students' cross-cultural understanding. Then Joshua Fishman's theoretical paradigm for reversing language shift is summarized and tribal and national language policies are reviewed. Early childhood, elementary, secondary, and tribal college native language efforts are described along with Navajo and Yup'ik examples of school-based native-language maintenance/renewal efforts. Based on the research of tribal native-language renewal efforts and current research on second language teaching, specific suggestions are given for maintaining and renewing native languages.

Reyhner, J. (Ed.). (1997). *Teaching Indigenous Languages*. Flagstaff, AZ: Northern Arizona University.

Reyhner, Jon. (1989). "Changes in American Indian Education: A Historical Retrospective for Educators in the United States" (ERIC Digest). Charleston, WV: ERIC/CRESS. ERIC Document Reproduction Service, ED 314228.

A collection of information that provides a basic understanding on AI education, its history; issues in instruction, culture, understanding Indian communities; language and literacy issues; and integrating AI content into traditional curriculum.

Riddle Buly, Marsha., & Sheila W. Valencia. (2002). "Below the Bar: Profiles of Students Who Fail State Reading Assessments." *Educational Evaluation and Policy Analysis* 24(3), 219-239.

Rindone, Pauline. (1988). "Achievement Motivation and Academic Achievement of Native American Students". *Journal of American Indian Education*, 28, no.1: 1-8.

Rivera, H. H. and R. G. Tharp (2006). "A Native American Community's Involvement and Empowerment to Guide Their Children's Development in the School Setting." *Journal of Community Psychology* 34(4): 435-451. © 2006 Wiley Periodicals, Inc.

This study provides an empirical description of the dimensions of community values, beliefs, and opinions through a survey conducted in the Pueblo Indian community of Zuni in New Mexico. The sample was composed of 200 randomly chosen community members ranging from 21 to 103 years

old. A principal component factor analysis was conducted, as well as a multivariate analysis of variance, to explore gender, age, education, language, and socioeconomic (SES) differences on values, beliefs, and opinions from survey participants. Overall, the findings suggest a strong agreement by the community on the direction to be taken by their school district in their efforts to improve classroom instruction, as well as in their efforts to guide their children's development as Native Americans.

Rivera, Hector and R. Tharp. (2006). "A Native American Community's Involvement to Guide their Children's Development in the School Setting." *Journal of Community Psychology* 34(4):435-451.

Romaine, S. (2006). "Planning for the Survival of Linguistic Diversity." DOI.

Romero Little, M. E. and T. L. McCarty (2006). Language Planning Challenges and Prospects in Native American Communities and Schools. Tempe, AZ: Education Studies Laboratory, Division of Educational Leadership and Policy Studies, College of Education, Arizona State University: 42.

This policy brief addresses the dual challenges facing Native American communities in their language planning and policy (LPP) efforts: maintaining heritage/community languages, and providing culturally responsive and empowering education. Using profiles of heritage-language immersion programs that have enabled Indigenous communities to reclaim their languages and incorporate local cultural knowledge in school curricula, it is clear that "additive" or enrichment approaches are beneficial to students in such communities. These cases are significant because they show heritage-language immersion to be superior to English-only instruction even for students who enter school with limited proficiency in the heritage language. However, heritage-language immersion conflicts with the language policy of the federal No Child Left Behind Act of 2001, which provides no provisions for instruction or assessment in tribal or other non-English languages. This brief profiles the benefits of several language programs and offers seven final conclusions regarding the benefits of "additive" approaches to language education.

Romero Little, M. E., & McCarty, T. L. (February 2006). *Language Planning Challenges and Prospects in Native American Communities and Schools*. Tempe, AZ: Education Studies Laboratory, Division of Educational Leadership and Policy Studies, College of Education, Arizona State University.

Romero, M.E. (1994). Identifying giftedness among Keresan Pueblo Indians: the Keres study. Retrieved: <http://jaie.asu.edu/v34/V34S1ide.htm>

This study was conducted at the Santa Fe Indian School and focused on Keresan-speaking students which included seven Pueblos (Acoma, Cochiti, Laguna, San Felipe, Santa Ana, Santo Domingo, and Zia). The study defines gifted from a Keresan perspective, using both students and an advisory board made up of Pueblo Indians. Interviews were conducted with community members of each Pueblo to provide insights into Pueblo views and culture that indicate the skills and attributes valued by the community. Recommendations regarding how these skills and attributes can be used to identify giftedness in Keres speaking communities has implications and promise for determining giftedness in other tribes and diverse student populations.

Roy, Loriene. (1998). "Four Directions: An Indigenous Educational Model." *Wicazo Sa Review* 13(2), 59-69

Rumberger, R. W. (2007). Statistical Brief- Lagging Behind: Linguistic Minorities' Educational Progress during Elementary School. UC Linguistic Minority Research Institute. (16), 2. Retrieved: <http://www.lmri.ucsb.edu/publications/newsletters/>

This brief discusses a California study of linguistic minorities from kindergarten, through fifth grade. The author illustrates that non-English speakers are less likely to succeed in greater numbers than their English-speaking peers in the areas of language development and arithmetic. Comparing these results to national studies on the NAEP, Spanish-speaking students in California did not reach the

same levels as other students either. The author makes the point that current efforts in California to educate the linguistic minority students may not be working. California has made major programmatic changes in the education system for serving these student populations.

Runner, I. H., & Marshall, K. (2003). "Miracle Survivors" Promoting Resilience in Indian Students. *The Tribal College Journal*, 14(4), 2.

Sainte-Marie, Buffy. (1999) "The Cradleboard Teaching Project: Using Curriculum and Cross-Cultural Partnering To Change Perceptions." *Winds of Change* v14 n2 p32-34 Spr 1999 ISSN: 0888-8612

Native Americans developed core curriculum units at the elementary, intermediate, and secondary levels in geography, history, music, social studies, and science presented from a Native American cultural perspective. Mainstream classes are paired with Native American classes and learn authentic information through cross-cultural exchange via e-mail, telephone, computer live chat, and video conferencing.

Samuda, R. J. (1998). "Cross-Cultural Assessment: Issues and Alternatives". Advances in Cross-Cultural Assessment: 19.

Biases within standardized testing in regards to minority populations is reviewed and evaluated. Using Cattell's Model of Fluid and Crystallized Intelligence as a basis for defining intelligence, Samuda proceeds to discuss two developed assessments for measuring student progress, the Kaufman Assessment Battery for Children (K-ABC) and the Learning Potential Assessment Device (LPAD) by Dr. Reuven Feuerstein.

Samuels, Christina A. (2006). "Native [Speakers](#)". Education Week 25(24), p32-32.

This article focuses on a bill to preserve native languages. One of President Bush's goals is to have foreign language acquisition in the forefront and NIEA President Ryan Wilson wants legislation to include native languages under this goal and is seeking support of Congress. According to him, the No Child Left Behind promotes English, but leaves native languages behind. He further states, "...immersion in Indian languages provides benefits for Indian children socially, which leads to improved educational outcomes." According to NIEA executive director, Lillian Sparks, "Our languages are part of our identity, our religion, and our culture. If we lose our languages, we lose a lot of what we are as Native people."

Sando, Joe S. (1978) "Issues Curriculum." 54 p.

A program for teaching techniques of critical thinking on issues concerning American Indians was developed for students at Albuquerque Indian School. It was designed to include not only the students but also their families with learning activities that required consultation in search of answers or understanding. The first issue presented sought to help students define a strong Indian culture, identify the factors that create it, and analyze their own particular situations. Learning activities included class discussions, supplementary reading, and written reports. Another section is devoted to the philosophy of original Indian education as it discusses Carlisle Institute and the Americanization of the American Indian. Other units deal with aspects of Indian land holding, Indian water rights, and the long fight of the Taos Indians to regain ownership of Blue Lake. A section entitled "The New World" compares Native American attitudes toward the land with those held by European settlers. Citing Native Americans as the original conservationists, it points out that they inhabited this continent for thousands of years in harmony with nature; the Europeans, in contrast, took but 500 years to wreck the land, destroy the wildlife, deplete the resources and pollute the environment. Each of the units of this program features goals, content material, resource materials, and learning activities.

Sawyer, Stephen J. (2001). "Policies and Programs of the University of New Mexico on Native American Student Persistence." *The University of New Mexico*, 140 pages.

New Mexico has one of the highest concentrations of Native American residents of any state. Native Americans have the highest college dropout rate of any racial or ethnic group in the United States, with some sources estimating that Native American college dropout rates may be as high as 93 percent. What the University of New Mexico does to boost Native American retention and graduation rates is thus an important public policy issue in New Mexico. This study describes public policy statements and policies and programs intended to boost Native American retention and graduation rates at the University of New Mexico. This information is augmented by a discussion of the literature on Native American retention and persistence in higher education.

Schiller, Kathryn, & Chandra Muller. (2000). "External Examinations and Accountability, Educational Expectations, and High School Graduation." *American Journal of Education*, 108(2), 73-102.

Sena, Mary Louise Tafoya. (1996). "A search for perceptions and effects of aspects of the hidden curriculum: Minority educator cases." The University of New Mexico, 395 pages; AAT 9626436

This study presents the stories of ethnic minorities who are successful educators. It enables eight Native Americans and Hispanics born and raised in New Mexico to share, not only their schooling experiences, but many experiences which they believe affected their educational success. Although this study had as its primary focus the effects of the public, Catholic, and Bureau of Indian Affairs schools' hidden curriculum in New Mexico upon nonimmigrant minorities, it became apparent that the respondents also placed a great deal of importance upon two other factors: their families' roles in enabling academic success and their own impetus in learning to navigate the system which provided educational opportunities. This study uses the voices of the respondents to present perspectives which give value to their socio-historical situations and schooling experiences. These perspectives teach us about familial expectations with regard to schooling and the effects of schooling's "incidental" and overt teaching methods. It also teaches us about the choices respondents made regarding aspects of their home cultures by accommodating to the schools' culture in order to emerge as good students. Ultimately, it is a study of accommodation to a system which mirrors the dominant culture and of how such accommodation often requires the suspension of home cultures, temporarily if not permanently.

Secatero, S. L., & University of New Mexico. Division of Language Literacy and Sociocultural Studies. (2009). "Beneath our sacred minds, hands and hearts : stories of persistence and success among American Indian graduate and professional students." Unpublished Thesis (Ph D), University of New Mexico, Division of Language, Literacy and Sociocultural Studies, 2009.

Shepherd, J. P. (2002). *Building an American Indian community: The Hualapai Nation in the Twentieth Century*. Arizona State University, Tempe, AZ.

Shields, Carolyn M. (1997). "Learning about Assessment from Native American Schools: Advocacy and Empowerment." *Theory into Practice* 36(2), 102-109.

Shultz, H.S. (1998). *THESIS- Pueblo Voices: defining the role of Pueblo education*. Urbana, IL: University of Illinois at Urbana-Champaign.

This study was conducted to identify Pueblo community perspectives (as offered by parents, students, traditional elders, and contemporary educators) is on the role of Pueblo Education, as well as identify a mission for the Santa Fe Indian School. Utilizing qualitative methods the researcher categorizes the interviews of Pueblo people into several groups, encompassing themes on their experiences. The study focuses on six interviews with tribal members from several Pueblo communities, and sheds light on their individual experiences in school. In conclusion, the need for local, Indigenous language and practices in the education of students are expressed.

Sims, C. P. (2001). "Native Language Planning: A Pilot Process in the Acoma Pueblo Community". *The Green Book of Language Revitalization in Practice*, Academic Press: 63-73.

This essay begins with a background presentation of past historical influences that have helped shape and contributed to the current status of the Acoma language. Some of the key findings from data collected in the community and the events that have influenced community language planning are described. Past efforts to address Acoma language retention are discussed and provide insight into the choices and decisions that have guided efforts in the Acoma community thus far.

Sirous, J. E., M. T. Gordon, et al. (Dec 2001). Native American Access to Technology Program: Progress Report; A Report to the Bill & Melinda Gates Foundation, Public Access to Computing Project, Daniel J. Evans School of Public Affairs, University of Washington: 26.

This progress report on the Native American Access to Technology Program of the Bill & Melinda Gates Foundation examines the Program's activities in the Pueblos of New Mexico in the "Four Corners" area of the U.S. (NM, AZ, UT, CO), but focuses primarily on NAATP program activities throughout the Navajo Nation in New Mexico, Arizona, and Utah, and other tribes in Arizona and Utah. We visited some tribal sites where the NAATP had already installed computers, and others where the tribes were still waiting for the computers to arrive. In many of the 160 sites --- especially the rural ones --- connectivity to the Internet remains a major challenge, and it is therefore not possible at this time to assess the full impact of the NAATP. Once there has been connectivity for a minimum of six months, we expect to return to a sample of sites to make a further assessment of impacts. In preparation for this report, site visits and interviews with librarians, tribal grant writers, elders and patrons (including teens and children) were conducted at 15 tribal sites in New Mexico, 11 in Arizona, and 4 in Utah. In addition, we interviewed officials at state library offices, librarians in public libraries in towns bordering the reservations, and Gates NAATP staff. We also attended program review and "roll out" meetings at the Foundation where relevant issues were being considered.

Skinner, Linda. (1999). "Teaching Through Traditions: Incorporating Languages and Culture into Curricula". In Next Steps: Research and Practice to Advance Indian Education, edited by Karen Gayton Swisher and John W. Tippeconnic III. Charleston, WV: Clearinghouse on Rural Education and Small Schools, 107-134.

This chapter discusses challenges to the perpetuation of American Indian languages and cultures, as well as successful strategies and practices for developing culturally relevant curriculum. A review of the history of U.S. assimilative educational policies towards American Indians leads into a discussion of the importance of language in maintaining cultural continuity and Native identity.

Sleeter, C. E. (2001). "Preparing Teachers for Culturally Diverse Schools: Research and the Overwhelming Presence of Whiteness." Journal of Teacher Education 52(2): 94-106.

This article reviews data-based research studies on preservice teacher preparation for multicultural schools, particularly schools that serve historically underserved communities. In this article, the author reviews 80 studies of effects of various preservice teacher education strategies, including recruiting and selecting students, cross-cultural immersion experiences, multicultural education coursework, and program restructuring. Although there is a large quantity of research, very little of it actually examines which strategies prepare strong teachers. Most of the research focuses on addressing the attitudes and lack of knowledge of White preservice students. This review argues that although this is a very important problem that does need to be addressed, it is not the same as figuring out how to populate the teaching profession with excellent multicultural and culturally responsive teachers.

Sleeter, C. E. (March/April 2001). Whiteness Preparing Teachers for Culturally Diverse Schools: Research and the Overwhelming Presence of Whiteness. Journal of Teacher Education, 52(2), 13.

Smith, D. H. (2000). Modern Tribal Development, Paths to Self-Sufficiency and Cultural Integrity in Indian Country (Vol. 4). Walnut Creek: AltaMira Press.

- Smith, D. H., & Ozman, J. (May 1994). Fort Belknap's Community Development Plan: A Teaching Case Study in Tribal Management: Malcolm Wiener Center for Social Policy, John F. Kennedy School of Government, Harvard University.
- Smith, Linda T. (1999). *Decolonizing Methodologies: Research and Indigenous People*. London: Zed Books.
- Snyder-Joy, Z. K. (1992). *American Indian education in the Southwest: Issues of Self-determination and Local Control*. Arizona State University, Tempe, AZ.
- Sparks, Scott. (2000). "Classroom and Curriculum Accommodations for Native American Student." 35 (5):259-263.
- Springer, P. (Summer 2007). "Congress Recognizes Native Languages' Value." *Tribal College Journal* 18(4): 42.
- The article reports on Congressional legislation which was passed in December of 2006. The U.S. Congress at that time passed legislation which authorized multi-year grants to establish tribal language nests for children as well as language restoration programs and Native American language instruction materials. U.S. Senator Byron Dorgan from North Dakota, who is chairman of the Senate Indian Affairs Committee, pushed for the bill because he felt it was a part of retaining Indian culture. A discussion of a Dakota language teaching class which is held by members of the Spirit Lake tribe of Dakota Indians in North Dakota is presented.
- St. Charles, J. & M. Costantino. (2000). *Reading and the Native American Learner-Research Report*. WA: Evergreen State College. Retrieved: http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/16/e4/2f.pdf
- This report touches on various aspects of American Indian Education, at a national level, and was developed by staff of Evergreen State College, in Olympia, WA. A brief history of American Indian Education is offered, along with theories on current challenges facing American Indian students. Using these theories as a foundation, discussion is offered on challenges being faced by teachers trying to understand their American Indian students' needs. At the end of the report, a history of relations between American Indian tribes and the U.S. Government, as well as the policies that were developed, are included. A number of recommendations are listed, such as educators being more conscious and understanding of their students' diversified ethnic and cultural backgrounds, as well as the cultural relevance of the educational content of their instruction.
- St. Germaine, R. D. (June 2000). *A Chance to Go full Circle: Building on Reforms To Create Effective Learning*. Paper presented at the American Indian and Alaska Native Education Research Agenda Conference.
- Stoll Dolton, S. (1998). "Pedagogy Matters: Standards for Effective Teaching Practice". Santa Cruz, CA: Center for Research on Education, Diversity & Excellence, University of California-Santa Cruz: 47.
- This paper presents five standards for pedagogy that are applicable across grade levels, student populations, and content areas. The five pedagogy standards are joint productive activity (JPA), language and literacy development (LD), meaning making (MM), complex thinking (CT), and instructional conversation (IC). These standards emerge from principles of practice that have proven successful with majority and minority at-risk students in a variety of teaching and learning settings over several decades. Indicators are introduced for each standard, revealing action components of the standards and their functions in teaching and learning. Illustrations and examples reflecting the standards and their indicators across a broad range of classroom settings are presented to support a claim of universality for such standards in K-12 majority and minority at-risk students' classrooms. The purpose is to urge standards-based reform to reflect its own recommendation that pedagogy occupy a central place in accomplishing all student learning.

Strom, Robert ; Hill, Jane (1979) "Determining a Parent Curriculum." *Journal of American Indian Education* v19 n1 p23-30 Oct 1979

The Parent as a Teacher Inventory can provide data for designing a parenting curriculum geared to a specific target group. Used to examine childrearing expectations held by Navajo and Hopi Indians, the Inventory reveals pervasive differences based on tribal affiliation, parent's sex, child's sex, and parent's educational experience.

Swanson, Christopher B. (2003). "Keeping Count and Losing Count: Calculating Graduation Rates for All Students under NCLB Accountability." (ED480915)

The No Child Left Behind Act (NCLB) of 2001 requires that public elementary and secondary school systems be held accountable for achieving high levels of educational proficiency for all students. While achievement testing is the central component of state accountability systems under NCLB, these systems must include graduation rates as an academic accountability indicator at the high school level. This study summarizes provisions in NCLB that pertain to high school graduation rates. It examines the changing role of high school graduation rates as accountability indicators, noting implications for racial and ethnic minority groups and their school systems. This study analyzes the differences that exist among the measurement of dropout, graduation, and completion rates; the way each is calculated may affect reported high school graduation statistics. Researchers calculated graduation rates using the Common Core of Data, U.S. Department of Education's census of local educational agencies and schools. Overall, graduation rates are likely to be much lower than the 85-90 percent that prevails in the conventional wisdom, with as few as two-thirds of high school students nationwide graduating with a regular diploma. Although a small number of states have graduation rates up to 80 percent, others have rates below 55 percent for average students. Graduation rates are close to 75 percent for white and Asian students but around 50 percent for average-performing Native American, Hispanic American, and African American students. Even in high-performing states, graduation rates are much lower for these minority students than for white and Asian students.

Swentzell, R. (2006). *Conflicting Landscape Values: Santa Clara Pueblo and Day School. Canyon Gardens: The Ancient Pueblo Landscapes of American Southwest*. V. B. Price and B. H. Morrow. Albuquerque, University of New Mexico Press: 125-132.

Case study of the Santa Clara Day School, designed and operated by the Bureau of Indian Affairs, and the Santa Clara Pueblo. Contrasts the landscape and architecture of the school and the pueblo, with particular attention to the effects of the built environment on human psychology. Describes traditional Pueblo belief systems about human-made environments, and the history of the Bureau of Indian Affairs' construction projects on Indian reservations from 1890 to the 1940s." -History Cooperative: Environmental History 2007

Swisher, Karen Gayton, and John W. Tippeconnic III. (1999). Next Steps: Research and Practice to Advance Indian Education. Charleston, WV: ERIC/CRESS.

This book has several chapters that address some critical issues in the education of American Indian and Alaska Native students, discussing the past and present foundations of Indian education; curriculum issues, thoughts, and practice; the college and university experience; and next steps.

Tate, D. S., & Schwartz, C. L. Increasing the Retention of American Indian Students in Professional Programs in Higher Education. *Journal of American Indian Education*, 33(1), 9.

Taylor, J. B. (April 1992). *Negotiating a Vision: Principles of Comprehensive Resource Planning and A Planning Process for the White Mountain Apache Tribe*: Malcolm Wiener Center; Harvard Project on American Indian Economic Development; John F. Kennedy School of Government Harvard University.

Thomas, W. P. and V. P. Collier (1995). "A National Study of School Effectiveness for Language: Minority Students' Long-Term Academic Achievement", George Mason University.

A summary on an ongoing study of Language-minority students and the development of data, three predictors of academic success, examples of education programs that work with these predictors as the focus, current approaches, and a theoretical model. Looking at development of the student from kindergarten through high school, approaches, such as the two-way development bilingual education, are touched on as solutions.

Tippeconnic, John W. III. (1999). "Tribal Control of American Indian Education: Observations Since the 1960s with Implications for the Future". In *Next Steps: Research and Practice to Advance Indian Education*, edited by Karen Gayton Swisher and John W. Tippeconnic III. Charleston, WV: Clearinghouse on Rural Education and Small Schools, 33-52.

Tippeconnic, John W. III. (2000). "Reflecting on the Past: Some Important Aspects of Indian Education To Consider as We Look toward the Future". *Journal of American Indian Education* 39(2), 39-48.

Discusses American Indian education in four critical areas: tribal control, focus and priority, language and culture, and research. These areas are complex and political due to treaty rights; sovereignty; and relationships between Indian tribes and federal, state, and local governments. Unity among Indians and making Indian education a priority at all levels are essential for continued progress.

"Tribes Find Teaching Is Last Hope For Saving Native Languages". *Diverse: Issues in Higher Education*, 8/24/2006, 23(14), p18-18.

This article is about native language revitalization among different native nations as discussed at an AILDI during their "Gathering Talk: Documenting, Describing and Revitalizing Our Languages" conference. A Tohono O'odham elder, Danny Lopez, says, "I hear more and more English on the reservation...A lot of children don't know our language anymore." The reason for decline in native language speakers is the assimilation to western society and most native adults do not speak the native language to their children. A Blackfeet tribal member, Marvin Weatherwax, says, "We can't lose our language,...without it, you lose pretty much your identity; you lose pretty much everything."

Tsianina Lomawaima, K., & Teresa L. McCarty. (2002). "When Tribal Sovereignty Challenges Democracy: American Indian Education and the Democratic Ideal." *American Educational Research Journal* 39(2), 279-305

U.S. Department of Education, "Educating Linguistically and Culturally Diverse Students. No Child Left Behind." (ED469393)

This pamphlet explains the U.S. Department of Education's mission to ensure equal access to education and promote educational excellence. The Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students (OELA) provides national leadership in promoting English language proficiency and high quality education for English language learners (ELLs). It administers grant programs that help every child learn English and academic content matter at high levels; provides leadership to promote appropriate state policy; collaborates with federal, state, and local programs to promote best practices; and monitors funded programs, offering technical assistance to ensure that these programs focus on outcomes and accountability.

OELA carries out Title III of the No Child Left Behind Act of 2001 by including various elements of school reform in programs designed to assist ELLs. These programs emphasize high academic standards, school accountability and flexibility, research based practices, professional development, family literacy, reading, and school-community-parent partnerships. Title III programs include the State Formula Grant Program, National Professional Development Program; Native American and Alaska Native Children in School Program; Outlying Areas Program; and Elementary School Foreign Language Incentive Program. Technical assistance is available through state education agencies and the

National Clearinghouse for English Language Acquisition and Language instruction Educational Programs.

U.S. Department of Education. (2005). "Jicarilla Public Library-Library System". Retrieved August 28, 2007, from <http://nces.ed.gov>

This summary offers data on the Jicarilla Public Library reported for 2005. Included is location and contact information, as well as an overview of their collections and number of visits during the year. Also shown is a graph illustrating visitation from 2002-2005. In 2005, the data shows that the library had 5,135 visits. The attendance number for Childrens Programs was at 200 for 2005.

U.S. Department of Education. (2006). "Search for Public Schools: Dulce Elementary". Retrieved August 28, 2007, from <http://nces.ed.gov>

This summary offers contact information for the school, school ID numbers, school characteristics, and enrollment characteristics, including enrollment by ethnicity, grade, and gender. Dulce Elementary School participated as a school-wide Title I Program. According to the data, there were 297 total students with 277 Native Americans participating in the Title I program.

U.S. Department of Education. (2006). "Search for Public Schools: Dulce Middle". Retrieved August 28, 2007, from <http://nces.ed.gov>

This summary offers contact information for Dulce NM Middle School school, school ID numbers, school characteristics, and enrollment characteristics, including enrollment by ethnicity, grade, and gender. This school participated as a school-wide Title I Program. According to the data, there are 153 total students with 143 who are Native American.

U.S. Department of Education. (2006). "Search for Public Schools: Dulce High". Retrieved August 28, 2007, from <http://nces.ed.gov>

Contact information and school/enrollment characteristics are listed, among with a breakdown of student enrollment by ethnicity, by grade and gender. Also listed is information on the type of school it is. This school does not participate in Title I. According to the data, there are 222 total students with 202 who are Native American.

U.S. Department of Education. (2007). "Office of English Language Acquisitions". Retrieved August 28, 2007, from <http://www.ed.gov/offices/oela>

An overview of the OELA, Title III, and No Child Left Behind; included are guidelines under which this office operates, terms and definitions. Also listed are program objectives and activities, some of which were still in development at publication time. The information in this report focuses on public schools, but also addresses some concerns with private.

U.S. Department of Education. (2007). Public hearing. Washington, DC: Office of the Deputy Secretary.

Second in a series of three hearings on education assessment held on July 18, 2007, a panel of education specialists was assembled to address four questions: 1. "What are the critical elements that states should examine to ensure that their ELP standards promote effective instruction to raise LEP students' level of English proficiency?" 2. "What are the critical elements that states should examine to ensure that their ELP assessments provide a valid and reliable assessment of English language proficiency?" 3. "What are the critical elements that states should examine to ensure that their ELP standards are aligned with their ELP assessments?" 4. "What are the strategies that states can use to ensure that their ELP standards are aligned with the achievement of challenging state academic content standards and student academic achievement standards?"

U.S. Department of Education. (2007). Public meeting- "A framework for developing high-quality English language proficiency standards and assessments". Washington, DC: Office of the Deputy Secretary.

Final hearing in a series of three that was held in Washington D.C. on July 26, 2007, in the development of a framework for high-quality standards and assessments for ELP (English Language Proficiency). Along with Department of Education personnel, another panel of education professionals with "experience in the research and implementation of English language learner standards and assessments as well as instructional and accountability issues" was gathered to discuss the four developed questions discussed in the July 18, 2007 public hearing. Although no recommendations were made to directly solve the ELL (English Language Learner) standards and assessment problems, ideas were offered through a comment period, in which attendees were allowed to bring specific problems from their areas to light. Flexible and more diversified assessments to more accurately evaluate ELL students from different backgrounds was a common request among attendees.

Various. (1979) Economic Development in American Indian Reservations. *Vol. 1* (pp. 157). Albuquerque, NM: Native American Studies, University of New Mexico.

Various. (1988) Public Policy Impacts on American Indian Economic Development. *Vol. 4* (pp. 179). Albuquerque, NM: Native American Studies, University of New Mexico.

Viadero, D. (2007). "No easy answers about NCLB's effect on 'poverty gap'". Education Week. Retrieved November 19, 2007, from <http://www.edweek.org>

This article looks at the relationship between the No Child Left Behind Act and the poverty gap in this country. Addressing three areas ("ineffective tutoring, teacher quality, and fairness in retentions"), the author discusses both pros and cons of the legislation.

Wallace, Stephen ; And Others (1982) "Our Community -- Today and Yesterday. Book One. Teacher's Guide (*Nihil Hahoodzodoo -- Dijiidi doo Adaadaa. Naaltsoos T'aala'i Gone Yits'iligii*). Fourth Grade Navajo Bilingual-Bicultural Social Studies Curriculum." Rough Rock Demonstration School, AZ. Navajo Curriculum Center 91 p. ISBN-0-936008-06-07.

Intended to accompany book 1 of the Rough Rock (Arizona) fourth grade Navajo social studies program, this guide is intended to help the teacher assist students through a series of learning experiences designed to develop important inquiry and social studies skills and to increase students' abilities to make generalizations about their community and the world at large. The guide combines the elements of highly structured, "cookbook" activities with "guided" activities in which only the suggestion for an activity is provided. Each lesson is built around the ideas presented in a chapter of the student textbook and reinforces the chapter's concepts and generalizations. Each lesson includes the following information: purpose, concepts, main idea, skills to be developed, objectives to be achieved, materials needed, suggested time, and teaching strategies and activities. The guide has a "built-in" evaluation system which determines the students' mastery of concepts and skills by their ability to successfully complete the instructional objectives listed for each lesson. The guide includes a section on the acquisition of and the organization and communication of facts and information, the development and presentation of thought-provoking questions, the development of tentative answers, the testing of questions, the remaining steps of inquiry, and social skills.

Wallace, Stephen and others (1983) "Navajo Changes--A History of the Navajo People = *Dinetahgi La-hgo Ahoodzaa--Dine Bahane*. Fifth-Eighth Grade Navajo Bilingual Bicultural Social Studies Curriculum." 111 p. ISBN: ISBN-0-936008-22-9

The Navajo bilingual-bicultural social studies curriculum for grades 5-8 contains six chapters of Navajo history. The chapters trace Navajo history beginning with legends of the first Navajos and life in Dinetah and continuing through early contact with the Spaniards, conflict and defeat at the hands of

the United States government, and the establishment of the reservation, to the changes taking place today. The bilingual chapters are presented with the Navajo text above and the English below, and are illustrated with black and white maps, drawings, and photographs. Following each chapter is a Navajo-English vocabulary list.

Wallace, *Stephen* and others (1983) "Navajo Leadership and Government: A History. Teacher's Guide. Navajo Bilingual-Bicultural Social Studies Curriculum." Rough Rock Demonstration School, AZ. Navajo Curriculum Center. 41 p. ISBN: ISBN-0-936008-24-5

A teacher's guide from the Navajo Curriculum Center, intended for use with the student textbook, "Navajo Leadership and Government," is divided into five chapters/lessons corresponding to those in the textbook, i.e.; "The First Leaders," "New Neighbors--New Government," "Fort Sumner and Return," "A Time of Change," and Modern Leaders--Modern Tribal Government." Each chapter contains sections on purpose, concepts developed in the lesson, main ideas, skills to be developed, materials needed, suggested time to allow, and activities and teaching strategies. A reference list gives materials that would be useful with each chapter.

Wallerstein, N. and et. al. (Sept 2003). "Jemez Pueblo: Built and Social-Cultural Environments and Health Within a Rural American Indian Community in the Southwest." *American Journal of Public Health* 93(9): 2.

Much has been written about built and social-economic environments and their effects on urban health. A growing literature also proposes that community capacity and social capital play a role in reducing health risks. Another promising area of study is how cultural identity informs symbolic meanings of place and land, which affect health determinants. Rural populations, although they have received less study, present an opportunity for research because their social and cultural identities are largely based on land and place. In this brief, we present preliminary results of one such study in a tribal community, raising questions about the intersections of built and sociocultural environments and health.

Ward, A. and W. L. Shueng (Feb 1996). "Equity, Education and Design in New Zealand: The Whare Wananga Project." *Journal of Architectural Education* 49(3): 20.

This article outlines the social, economic, and political aspects of educational mythology in the New Zealand context, with specific reference to issues of dominant and subordinate cultural values. It ties to these the particular program requirements for Whare Wananga as it evolved, together with an illustrated description of the finished design. Finally, we develop a cultural-political critique of architectural theory in multicultural settings based on our experiences of the examples given, bearing in mind that issues of cultural politics are not confined to New Zealand. The example here has significant implications for the cultural politics of architectural education worldwide. Specifically, we compare the model of the cultural politics of design that evolved from this project with those implicit in the currently fashionable deconstructive theories of design--especially those promoted by Peter Eisenman.

Warner, L. S. (2000). "Response to Dr. Richard D. St. Germaine's "A Chance to Go Full Circle: Building on Reforms to Create Effective Learning." Paper presented at the American Indian and Alaska Native Education Research Agenda Conference.

Weryackwe, Suzanne, Ed. and others (1982) "American Indian Language Development Institute - 1982: Curriculum Guide. Volume II." Arizona State Univ., Tempe. Center for Indian Education. 248 p.

A product of the 1982 American Indian Language Development Institute, sponsored by the Center of Indian Education and the Bilingual Education Service Center at Arizona State University, the curriculum guide reflects valuable language and cultural information of six tribal language groups (Hualapai, Havasupai, Papago, Pima, Ute, and Shoshone). Developed by respective tribal members attending the summer institute, the curriculum reflects bilingual-bicultural teaching approaches to be used with K-

12 students. Designed for educators, students, community resources and schools, the guide is presented in six tribal sections. Each section introduces the tribe and language, describes the tribe's bilingual program, outlines the school's philosophy and educational goals, presents orthographical information on the tribal language (alphabet, symbols, pronunciation), and offers the language and cultural unit plan with bilingual curriculum lesson plans. Topics of units include tribal customs, poetry, childrearing, traditional games, linguistics, songs/music, foods, kinship ties, storytelling, dances, arts and crafts, and clothing. (ERB)

Wesson, Allen. (1993). "The New Mexico Accountability Report 1992-1993." (ED378215)

Each year the New Mexico State Department of Education and the state's 88 school districts publish report cards that provide information on the operation and performance of the schools and characteristics of its students. This report is the state-level report card, providing narrative and statistical information on an array of educational indicators. Student enrollment has increased to 315,278 students in 1992-93, an increase of 4.3% over that of 1990-91. Percentages of Hispanic American and Native American students have increased, as the Anglo American population has declined. While many school districts scored well above national averages on standardized tests, in most areas statewide performance was slightly below national averages. Student indicators reported include enrollment trends, ethnicity, graduates, and dropouts. Student achievement indicators include results of the New Mexico Portfolio Writing Assessment, the New Mexico Achievement Assessment, the ACT Assessment, the New Mexico High School Competency Examination, and the Reading Assessment (grades 1 and 2). Financial indicators define revenue and expenditures. Eighteen tables and 11 figures present data on the schools and students.

Westby, C. E. and R. Roman (1995). "Finding the Balance: Learning to Live in Two Worlds." Topics in Language Disorders: 20.

This summary offers discussion on approaches and studies of Southwestern American Indian learning styles. Two studies are mentioned: one covering a group of Pueblo students in third and fourth grades; the second focused on Northern Ute students from grades, first through sixth. "Students from culturally and linguistically diverse environments must learn to live successfully in two cultural worlds - the cultural world of their homes and the cultural world of the school. Educators are in the position to facilitate students' abilities to live in these two worlds. To do so, they must understand the learning styles and discourse patterns of the students they teach. In this article, the principles of culturally compatible education are described, the characteristics of Native American and mainstream narrative discourse are compared, and the rationale for teaching the structure, content, and style of mainstream narrative is presented. A program designed to facilitate Native American elementary school children's abilities to comprehend and produce mainstream narratives is described.

Wheaton, Cathy. (2000). "An Aboriginal Pedagogical Model: Recovering an Aboriginal Pedagogy from the Woodland Cree," In *Voice of the Drum: Indigenous Education and Culture*, Neil Roger (Ed.) Brandon, Manitoba, Canada: Kingfisher Publications.

White, F. (Winter & Spring 2006). Rethinking Native American Language Revitalization. *American Indian Quarterly*, 30(1&2), 91-109.

White, Frederick. (2006). "Rethinking Native American Language Revitalization." *American Indian Quarterly* 30(1&2): 91-109.

The author describes why second language acquisition or second language learning (SLA/L) characteristics do not apply to native language acquisition. Of the many aspects, he selected two to support his research: socio-psychological variables and environmental factors. Using these two aspects, he further breaks it down into ten areas, in which he compares SLA/L with native communities. He also applies the acculturation model to two native tribes, the Haida of British Columbia and the Tewa of New Mexico. He concludes the Haida were willing to acquire English as their first language, but the

Tewa resisted and were finally forced to acquire the Spanish language. He concludes that more research is needed and suggests a separate category called, Ancestral Language Acquisition/Learning.

Wiggins, G. P. (1993). *Assessing student performance: exploring the purpose and limits of testing*. San Francisco, CA: Jossey-Bass Publishers.

Willard, William., Mary Kay Downing. (1991). "American Indian Studies and Inter-Cultural Education." *Wicazo Sa Review* 7(2), 1-8.

Wilson, P. (Dec 1991). "Trauma of Sioux Indian High School Students." *Anthropology & Education Quarterly* 22(4): 17.

This study, conducted among Sioux Indian high school students in Canada, uses an ethnographic methodology to examine the factors that impact their academic performance. The article outlines the nature of the students' experiences during the transition from reserve elementary school to public high school. It describes how Indian students respond to a school environment that operates without consideration of Indian culture. Factors affecting their performance before and after the transition are addressed.

Wilson, R. (June 8, 2007). "House Appropriations Subcommittee Recommends Near Doubling of Native Language Program Funding". Link: http://savenativelanguages.org/images/Press_Release_6.8.07.doc

New funds targeted at Native American language nests, language survival schools, and language restoration programs. The House Labor, HHS, Education and Related Agencies Subcommittee of the House Appropriations Committee met Thursday, June 7, 2007, to mark up the FY 2008 Labor, HHS appropriations bill. Included in the mark-up was an increase in funding for Native American Programs in HHS, from \$44 million to \$47 million, with the extra \$3 million targeted at implementation of language immersion and restoration programs authorized by the recently passed Esther Martinez Native American Languages Preservation Act of 2006. Currently less than 10 percent of the ANA budget is spent on language programs, with only 1 percent spent on immersion programs. The new funds would increase total funding for ANA language programs from the current level of approximately \$4 million to a new level of approximately \$7 million.

Wilson, William. (1998). "I Ka 'Olelo Hawai'i Ke Ola, 'Life is found in the Hawaiian Language'." *International Journal of the Sociology of Language*, 132:123-137.

Wilson raises issues of accountability and responsibility in relation to Indigenous origin, identity, language and academia. He begins with a description of the complexities of Indigenous language and cultural knowledge inclusion in Western school systems. He calls on those who have been educated in Western institutions to change the paradigm in their thinking after realizing an awareness of Indigenous education. He argues that as tribal members and academia incur more responsibility for native language revitalization and use, all sides face the challenge of Indigenous authenticity and the possibly of global impact. He expounds on the history of Hawai'i and the Hawaiian language a symbolic place in representing Hawaii to the people of Hawai'i and the world. He then describes the Punana Leo school system as based in Hawaiian knowledge and language systems, and discusses how the people involved with Punana Leo revolutionized education and set the stage for Hawaiian medium instruction. He concludes that a "new approach to collaborative documentation creates models that can be used for all Indigenous peoples in contemporary documentation as a way to engage in contributing to educational philosophy without compromising ones political and cultural position."

Wise, Lu Celia, Ed. (1979) "Indian Education Curriculum Guidelines." Oklahoma State Dept. of Education, Oklahoma City. 99 p.

Designed in Oklahoma as a teaching aid for teachers in Indian education, this booklet is organized according to the subject areas of the curriculum. It provides a ready resource on Indian culture and should thus be of value to teachers who work with both Indian and non-Indian students. Guidelines

for curriculum development in multicultural education are outlined. Oklahoma's museums and cultural centers presenting American Indian material, useful as resource material, are briefly described. Models for each subject area include an introduction, objectives, procedures, instructional materials to be used, evaluation techniques, and (where applicable) background information. There are model lessons for various grade levels in art, home economics, language arts, mathematics, music, physical education, reading, science, and social studies. A seven-page bibliography is appended, with sections on catalogs and pamphlets, teacher resource materials, films, maps, records, tape recordings, transparencies and view master reels, and a book section with listings, indicating appropriate grade level, for specific tribes (Apache, Arapaho, Cherokee, Cheyenne, Choctaw, Comanche, Creek, Delaware, Kiowa, Miami, Ottawa, Pawnee, Sac, Seminole, Shawnee) and general works.

Wright, III, D.E., Hirlinger, M.W., & England, R. E. (1998). "The Politics Of Second Generation Discrimination In American Indian Education: Incidence, Explanation, And Mitigating Strategies." Westport, CT. Chapter 3,

A theoretical model of second generation discrimination is the focal point for this source. The premise proposed is that an emphasis on continued education development and more equal access for American Indian students, American Indian nations will become better educated American citizens with increased opportunities for employment. Politics is identified as a major obstacle to this development. Only by assuring equal opportunity for American Indians in areas of public office, school administration, and board membership will their students be assured a balanced, fair education.

Wright, W.E. (2005). "Evolution of federal policy and implications of No Child Left Behind for Language Minority Students". Tempe, AZ: Arizona State University. Retrieved from <http://epsl.asu.edu/epru/documents/EPsL-0501-101-LPRU.pdf>

No Child Left Behind is the focus of this brief, mainly from the perspective of Hispanic, non-English speaking people, though some references are made to Native American legislation. Wright offers a history of federal legislation focused on this country's approach to its Hispanic, non-English speakers' education. He then goes on to discuss more recent federal legislations under Presidents Bush and Clinton, and offers perspectives on mainstream educational obstacles for limited English proficient (LEP) students, such as the reduction in support for bilingual education and the continued enforcement of NCLB. No recommendations are offered, only a perspective of what could develop if education legislation continues to address LEP problems without further adaptation and discussion.

Yazzie, Tarajean (1999) "Culturally Appropriate Curriculum: A Research-Based Rationale." 25 p.

Educational researchers and practitioners have long advocated adopting a culturally appropriate curriculum to strengthen the education of Native youth. Such an approach uses materials that link traditional or cultural knowledge originating in Native home life and community to the curriculum of the school. Deeply imbedded cultural values drive curriculum development and implementation and help determine which subject matter and skills will receive the most classroom attention. This chapter examines theoretical and practical research studies that support and inform the development of culturally appropriate curriculum for American Indian children in K-12 classrooms. These studies fall into the following areas: (1) historical roots, including the Meriam Report of 1928; (2) theoretical frameworks (modes of linguistic interaction, supportive learning environments, communication and interaction styles of students and teachers); (3) curriculum development (approaches to overcome culture conflict, parent and community involvement, inquiry-based curriculum, role of Native language in concept development, local community issues, appropriate communication with elders); (4) curriculum practice and implementation (characteristics and behaviors of effective teachers,

Yazzie, Tarajean. (2000). "Holding a Mirror to 'Eyes Wide Shut': The Role of Native Cultures and Language in the Education of American Indian Students". Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.

Zehr, M. A. (2007). "Educators hope classroom initiatives help overcome impact of turnover". Rapid City, SD.

This article discusses Native American students who move to and from various schools, throughout their K-12 educational years, and how it can be disruptive in their educational development. May have implications for our study since many NM reservations have public, BIE, grant and contract, and private schools, within their boundaries. Students movement among these various school programs need to be tracked and studied in correlation to academic achievement and progress.

Zepeda, Ofelia. (1995). "The Continuum of Literacy in American Indian Communities". The Bilingual Research Journal, 19, No. 1, pp. 5-15.

This article is based on research conducted among a group of Tohono O'odham students in 1991. In the article Dr. Ofelia Zepeda states, "Oral tradition constitutes one aspect of a 'literacy continuum' grounded in familial and community relationships... 'School literacy' often constitutes an opposite end of that continuum." Zepeda presents the data as a "suggest(ion) [to] the strong connections within children's lived experiences (p.6)." The students in the study are documented as developing attitudes and habits about the writing process that were reflected in their writing samples. These habits are traced back to their teachers – as their primary role models in the study. The students' writing reveals many of the traits of "storytelling" and the "gathering of insights from their own experience, their community, home and family to write what they feel makes a good story (p. 10)." Zepeda proposes that these storytelling traits were not taught but nurtured and focused through effective teaching and productive writing workshops. She also adds, "The freedom that occurs in oral tellings is skillfully employed in the written texts of the young writers described here. This is the skill that demonstrates the movement from oral to written, making that seamless continuum (p.13)." Zepeda closes with implications and exhortations for educators to "be aware of the cultural and linguistic resources these writers employ (p. 13)."

Zinth, Kyle. (2006). "American Indian, Alaska Native and Native Hawaiian Education in the States". Link: <http://www.ecs.org/clearinghouse/67/86/6786.pdf>

State policies pertaining to the education of American Indian, Alaska Native and Native Hawaiian students vary considerably in their scope and type among the states. This report examines policies found in state statutes. Additionally, states that have tribal colleges – independent colleges that are operated by the tribes – within their borders are identified, as are the tribal colleges. Overall, 20 states have policies pertaining to American Indian, Alaska Native or Native Hawaiian education, and the 36 tribal colleges can be found in 14 states.