

# English Language Acquisition and Navajo Achievement in Magdalena, New Mexico



## *Promising Outcomes in Heritage Language Education*

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# Table of Contents

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Part 1: Introduction .....	1
Part 2: Program Case Study .....	2
Program Description .....	2
National and Historical Context.....	3
Program Implementation .....	5
Program Outcomes.....	7
Challenges.....	14
Part 3: Recommendations for Heritage Language Programs.....	17
Community Involvement .....	17
Materials Development.....	17
Professional Development .....	18
Online Resources .....	18
Part 4: Conclusion.....	19
Part 5: References .....	19



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*The English Language Acquisition and Native American Achievement Program at Magdalena will increase pride and awareness of Navajo culture within the school community to contribute to the capacity of students to become capable, freestanding, lifelong learners.*

*-Program Vision Statement*

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## **Part 1: Introduction**

This paper describes a heritage language<sup>1</sup> revitalization and English language acquisition program in a rural New Mexico school district that targeted speakers of the Alamo dialect of Navajo, a Native American language. Through this multi-faceted program, students of Navajo heritage, who represent approximately half of this public school district's student body, received English as a second language (ESL) instruction as well as instruction in Navajo language and culture as part of the regular school day. During this 4-year demonstration program, students exhibited increased involvement and pride in their school and improved reading, math, and science scores on standardized tests. Their parents also became more involved in school activities.

As we discuss in this paper, having access to heritage language and cultural instruction as part of the school curriculum can make a positive difference for minority students who have historically not had this opportunity. In the program described here, learning Navajo seemed to give students a sense of belonging, which may have contributed to their improved academic achievement. Moreover, this program demonstrated that students can increase their proficiency in English while simultaneously receiving instruction in their heritage language. Through an examination of the procedures and outcomes of the program, this paper provides support for the importance of heritage language programs for Native American students, with implications for speakers of other languages as well. It also provides guidance for heritage language education that can be used by groups who are seeking funding to introduce similar programs in their schools.

Part 1 of this paper provides an overview of the English Language Acquisition and Native American Achievement Program in Magdalena, New Mexico, and introduces the following sections of the paper. Part 2 reports a case study of the program, describing it within the historical context of Native American education in the United States and in light of research on

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<sup>1</sup> In this report, heritage languages are defined as languages other than English spoken in the home.

heritage language education, with a special focus on Native American languages. This section describes project activities and the stages of program implementation over 4 years and outlines the results that were observed. It also describes challenges faced by the program, with reference to similar challenges faced by other heritage language programs. Part 3 offers recommendations for groups who are considering implementing similar programs and provides a list of online resources about Native American language revitalization. Part 4 summarizes the results of the program and provides an update on how the program has fared since the 4-year federal grant ended. A complete list of references is provided in Part 5.

## **Part 2: Program Case Study**

### **Program Description**

Magdalena is a rural New Mexico town of 1,100 residents located on the edge of the Cibola National Forest, 100 miles southwest of Albuquerque. The Magdalena Municipal School District (MMSD) serves 450 preK–12 students on a single campus. Approximately 50% of its student body is Native American; most of these students live approximately 30 miles away on the Alamo Navajo Reservation. Another 35% of the students are Hispanic, with the remaining 15% comprised mostly of Caucasian students. The Alamo Navajo have historically been isolated from the main Navajo Nation, located 200 miles to the north, and have maintained a unique linguistic and cultural heritage. Their dialect is still spoken in many homes on the reservation. As a result, approximately 75% of the Navajo students in MMSD are classified as English language learners (ELLs). Historically, students from the Alamo Chapter of the Navajo Nation have not received formal training in their heritage language, although indigenous language programs are common in New Mexico, where 16 school districts offer Native American language instruction (New Mexico Public Education Department, 2006).

In July 2003, MMSD applied for and received a 4-year grant from the U.S. Department of Education's Office of English Language Acquisition (OELA) to develop a program with dual objectives: to improve students' oral and written proficiency in both Navajo and Standard English and to increase students' academic achievement. Fully implemented, the program offered Navajo language arts classes for Grades K–5 and Navajo language and culture classes for Grades 6–12. The program also provided support for the ESL classes in Grades K–12, which were strengthened through specific improvements to curriculum, materials, and instruction. In addition, the program offered professional development for all teachers and paraprofessionals on second language acquisition and on effective instructional strategies for English language learners. Over the course of the 4-year grant, a number of initiatives were developed to meet the program's goals:

- A partnership with the Navajo Nation's Office of Diné Language, Culture, and Community Services to adapt Navajo assessments and curricula to meet the specific needs of MMSD
- A partnership with the University of New Mexico to offer graduate credit to teachers who completed the full professional development course in second language acquisition and instructional strategies for English language learners
- Outreach activities for parents, elders, and other members of the Alamo Navajo community, many of which took place on the reservation rather than at the school



- Expansion of the staff peer coaching program at the elementary school and development of peer coaching at the secondary school to enable the program's ESL training to become self-sustaining

Ms. Keri James, MMSD, developed the grant proposal and served as the project coordinator. Dr. Betty Ansin Smallwood, Center for Applied Linguistics, provided professional development and technical assistance. Dr. Richard Valentine, Educational Enterprises, served as the program's external evaluator.

The program was highly successful based on a number of measures, both qualitative and quantitative. These are reported in detail under Program Outcomes starting on page 7.

### **National and Historical Context**

The Magdalena program is part of a larger Native-American-initiated movement starting in the late 20th century to develop and implement education practices that are culturally and linguistically relevant. This approach attempts to counter the cumulative negative effects experienced by Native American students in the U.S. education system over the past 150 years, beginning with federally mandated boarding schools in the mid-1800s. These schools, which Native American children were forced to attend (sometimes after being kidnapped), separated families for years at a time. Students were not allowed to utter a word of their families' languages for fear of physical and emotional abuse. Nationwide, many Native American elders, the grandparents of today's students, hold memories of being whipped, locked in a school jail, having their mouths washed out with soap or lye, and other corporal punishments merely for speaking their parents' language (Child, 1998).

These boarding schools were created under national policies aimed at assimilating Native Americans to mainstream America by eradicating their languages and cultures. They drew support from European settlers in the United States who believed that assimilation would benefit Native Americans (Spring, 2006). The 1868 Report of the Indian Peace Commission stated, "By educating the children of these tribes in the English language these differences [in culture between Whites and Indians] would have disappeared, and civilization would have followed at once" (Prucha, 2000, p. 106). An English-only policy was established in 1887 by J. D. C. Atkins, the Commissioner of Indian Affairs. He ordered his agents to strictly enforce the use of English in government and missionary schools serving Native American students and to forbid the use of any Native American language. He stated, "The instruction of Indians in the vernacular is not only of no use to them, but is detrimental to the cause of their education and civilization, and it will not be permitted in any Indian school" (Prucha, 2000, p. 174). However, the boarding school system did not yield the English-only results that had been anticipated; many Native Americans, including members of the Alamo Navajo Chapter, still speak their indigenous languages today—a real testimony to the strength of their cultures.

Neither did the boarding schools achieve the academic results anticipated, as documented in the 1969 government publication, *Summary of the Report on Indian Education*, which was spearheaded by Senator Robert F. Kennedy. The report states, "We have concluded that our national policies for educating American Indians are a failure of major proportions. They have not offered Indian children—either in years past or today—an educational opportunity anywhere near equal to that offered the great bulk of American children" (Prucha, 2000, p. 254). Indeed,

the disparities continue today. For example, National Assessment of Educational Progress (NAEP) scores from 2007 show that Native American students nationwide scored an average of 24 points lower than their White peers in fourth-grade reading, math, and science, and an average of 28 points lower in eighth-grade reading, math, and science.<sup>2</sup> In New Mexico, the trend is particularly pronounced; the Public Education Department reported in 2005 that Native American students scored lower than any other minority on standardized math, reading, and science tests (New Mexico Public Education Department, 2006).

In the early 20th century, analysis of the comparative failure of Native American students to achieve academically focused on so-called deficiencies in their home life and cultures, with their home languages regarded as obstacles to overcome on the road to improved educational attainment (Deyhle & Swisher, 1997). However, this deficiency perspective has since been refuted, and more recent research draws attention to the historic context of minority education. For example, in his explanation of the often poor performance of certain groups of students, Ogbu (1987) distinguishes *voluntary* from *involuntary* minorities. Involuntary minorities are people who did not choose to become part of the United States, but rather had this identity thrust upon them. He includes African American descendents of slaves and Native Americans in this group and explains that they typically do poorly in school due to histories of subordination and exploitation. Ogbu maintains that a long history of resistance to educational injustices has made it an important part of involuntary minorities' cultural identity to not conform to dominant societal norms. Littlebear (1992) cautions that educational institutions should recognize that Native Americans generally do not seek to become members of the dominant society but rather pursue their own kind of relationship with it.

It follows that minority students who perceive that their home language and culture are supported rather than supplanted in the school environment develop a sense of empowerment (Cummins, 1992). This approach, in which language forms the basis of a culturally relevant pedagogy, has been generally embraced as a highly effective method of fostering increased effort and academic success (Banks, 1993; Cummins, 1996). It has been particularly effective with Native American students. Deyhle and Swisher (1997) report on a number of studies showing that Native American heritage language programs result in positive social-educational outcomes. They conclude that a school structure that presents home languages and cultural practices as assets rather than deficiencies leads to meaningful classroom interactions for Native American students and to their increased academic success. However, as Demmert and Towner (2003) found in their comprehensive review of literature on culturally based programs for Native American students, little research has documented quantitative academic outcomes. While we agree with Lomawaima and McCarty (2002) about the indispensability of qualitative research, we also recognize the importance of quantitative data for demonstrating educational outcomes. Thus, this paper reports quantitative results from the Magdalena program while also presenting qualitative results.

Consistent with the current national movement to overcome historical inadequacies in Native American education, one of the objectives of the Magdalena program was to develop Navajo language and literacy. The program also reflected the New Mexico Indian Education Advisory Council's belief that Native American languages and cultures must become a central part of

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<sup>2</sup> These averages were calculated from data available at the NAEP Data Explorer (<http://nces.ed.gov/nationsreportcard/naepdata/>).

students' schools to prevent their marginalization and to overcome the tendency to neglect Native Americans' rich cultural resources (New Mexico Indian Education Advisory Council, 2006). Ultimately, the Magdalena program sought to improve students' overall academic achievement using a model that built upon knowledge, appreciation, and development of their home language and culture in addition to development of their English language proficiency.

### **Program Implementation**

The Magdalena program was developed over the course of 4 years, with several iterative stages of planning, implementation, and evaluation. A program of this magnitude, serving Grades K–12, requires a great deal of planning, evaluation, and replanning, which is described in this section. It is important to note that the implementation of the program in stages affected the results. That is, although the program began in 2003, some aspects were not implemented or completed until subsequent years, and therefore cannot be expected to have contributed immediately to student improvement.

### ***Community Involvement and Partnerships***

The first year of the program entailed a great deal of community involvement and planning. This may have been the most important initial aspect of the program, because community involvement is crucial to the success of a language program (Grenoble & Whaley, 2006). The Indian Nations at Risk Task Force (1991) particularly recommends that community and parental involvement be actively sought in developing education programs for Native American students. Ms. James, the project coordinator, made repeated trips to the Alamo Chapter to seek community input, rather than expecting parents to travel to the school, as had been the general practice in the past. As a result of her visits, parents completed a community needs assessment to express the kinds of linguistic and cultural services they desired for their children. Of the approximately 150 Navajo families with children in Magdalena schools, 50 returned surveys to the school. These parents unanimously agreed that their community had experienced a loss of language and culture, and they were very interested in having their children acquire fluency in Navajo. Overall, the findings indicated a strong desire that Navajo language and culture be included in the curriculum.

A number of important partnerships were established to expand the resources and capabilities of the program. To help identify program models, obtain materials, and recruit teachers, a partnership was established with the Office of Diné Language, Culture, and Community Services from the Navajo Nation. An important benefit of this relationship was the opportunity for the program team to observe Navajo language programs in other schools. Guidance was also sought from the Center for Applied Linguistics (CAL), a national nonprofit organization with expertise in ESL and heritage language programs, and a 4-year contractual relationship was established. A partnership formed with the University of New Mexico made it possible to award three graduate credits in first and second language acquisition to teachers who successfully completed a full professional development course (45 hours plus assignments) taught onsite by Dr. Smallwood of CAL.

### ***Year-by-Year Stages of Development and Implementation***

#### ***Year One (2003-2004)***

In the first year, Navajo language and culture courses (Diné<sup>3</sup> studies) were developed, approved by the school board, and implemented at the high school level (Grades 9–12). The district hired its first Navajo teacher to deliver these courses. In the same year, Ms. James built a core leadership team, selecting staff and paraprofessionals from the elementary, middle, and high schools and from three key subject areas (reading and language arts, ESL, and Navajo language and culture). The team participated in a professional development program led onsite by Dr. Smallwood, using *Enhancing English Language Learning in Elementary Classrooms* (Gronet, Jameson, Franco, & Derrick-Mescua, 2000) and *Enriching Content Classes for Secondary ESOL Students* (Jameson, 2003). These trainings introduced foundational principles of second language acquisition and connected them to practical classroom strategies designed to adapt instruction for English language learners in grade-level classrooms. In addition, Dr. Smallwood offered training to paraprofessionals using CAL's *Aspire Curriculum* (Jameson, 2002): a series of four workshops that are designed specifically for paraprofessionals and that emphasize strategies for working effectively with English language learners. This training targeted Navajo staff who serve primarily as paraprofessionals in MMSD and who work directly with Navajo students to provide language support.

#### ***Year Two (2004-2005)***

In the second year, the program was expanded to offer Navajo language and culture classes in the middle school (Grades 6–8) and daily Navajo language arts classes for Navajo students in the elementary school (Grades K–5). A second Navajo teacher was hired to develop the elementary school classes. Navajo students in Grades K–5 who qualified for ESL services also received daily ESL instruction from a different teacher. For the ESL program in the middle and high schools, a standards-based curriculum was developed in alignment with a state-approved ESL textbook series, *Shining Star* (published by Pearson in 2004). For professional development, the CAL program was offered to all MMSD elementary teachers. A second series of workshops was also offered to paraprofessionals.

#### ***Year Three (2005-2006)***

During the third year, all established student courses continued. In addition, the elementary ESL textbook series *Avenues* (published by Hampton-Brown in 2003) was selected and used in Grades K–5 along with other materials. For professional development, another CAL course was offered, this time to all secondary school teachers. At the elementary school level, professional development was extended with classroom-based observations, consultations, and peer coaching.

#### ***Year Four (2006-2007)***

The major tasks in the fourth year were capacity building and public dissemination of project findings. Dissemination activities included conference presentations, press releases to garner support for the program, and publication of a final report. For professional development, a team of secondary school teachers trained new secondary school staff on ESL methods and strategies. As the 4-year grant was coming to a close, a core team of dedicated teachers emerged to carry on project goals under the auspices of the district after the federal grant ended. Their first task was to develop an action plan.

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<sup>3</sup> Diné is what the Navajo people call themselves.

### ***Student Assessment***

In order to determine who was eligible for ESL services, during the first year of the grant MMSD used the Woodcock-Muñoz Language Survey to conduct a comprehensive English language proficiency assessment of its Navajo students. They found that 119 of the 156 Navajo students (76%) qualified for ESL services. These findings resulted in additional funding from the New Mexico Public Education Department, which in turn required home language surveys for all students. Students who indicated that Navajo was spoken in their home received both an English and a Navajo assessment. Based on the results of these assessments, nearly all of the Navajo students opted to enroll in ESL and Navajo classes at MMSD, although they were offered the federally required option to decline one or both services. In 2005-2006, the third year of the program, New Mexico changed its required assessment for all ESL students from Woodcock-Muñoz to the New Mexico English Language Proficiency Assessment (NMELPA).

During the second year of the program, MMSD Navajo staff created and implemented the MMSD Navajo Language and Culture Proficiency Assessment, which they adapted from assessments provided by the Office of Diné Language, Culture, and Community Services. In addition, all MMSD students take yearly state assessments to meet district, state, and federal accountability requirements. The state assessment instrument used to measure adequate yearly progress (AYP) in reading, math, and science is called the New Mexico Standards Based Assessment. It is an untimed, criterion-referenced<sup>4</sup> test aligned with the New Mexico content standards and is comprised of open-ended, short-answer, extended-response, and multiple-choice questions. Outcomes on these tests are discussed in the next section.

### ***Program Outcomes***

This section describes the changes observed in Navajo students since the inception of the program. These changes include growth in Navajo enrollment at MMSD; an increase in the number of Navajo students receiving college scholarships; and an increase in mean scores on standardized reading, math, and science tests among Navajo students. In addition, parental involvement at planning meetings more than tripled, and the number of Navajo staff and ESL-certified staff at MMSD increased greatly. We also found non-quantifiable indications of increased student pride, such as the election of Navajo students as homecoming king and queen.

#### ***Increase in Navajo Student and Parent Involvement***

During the first year of the program, Navajo student enrollment increased 23%, from 164 students to 202 students, compared to a 2% increase the preceding year. Navajo enrollment has continued to increase: 215 Navajo students were enrolled in MMSD in 2007-2008. This figure represents an increase in Navajo students of more than 30% since the inception of the program. Navajo students also increased their representation in the student body from 45% to 47% of total students (Figure 1). The Magdalena schools have been a choice for students from the Alamo Chapter since 1959, when dormitories were built to alleviate the distance of the journey from Alamo to Magdalena. (Before that time, Alamo students attended boarding schools in Albuquerque or Santa Fe.) In 1979, a Bureau of Indian Affairs school was opened on the

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<sup>4</sup> A criterion-referenced assessment “measures what a student understands, knows or can accomplish in relation to specific performance objectives. . . It does not compare students to other students” (North Central Regional Educational Laboratory, 2002). This is in contrast to a norm-referenced test, which compares students’ test results to those of a larger peer group.

reservation, but students still had the choice to attend school in Magdalena, even after the dormitories were closed in 1985. Thus, their decision to attend MMSD, located 30 miles away, is a strong indicator of positive experiences in the district.

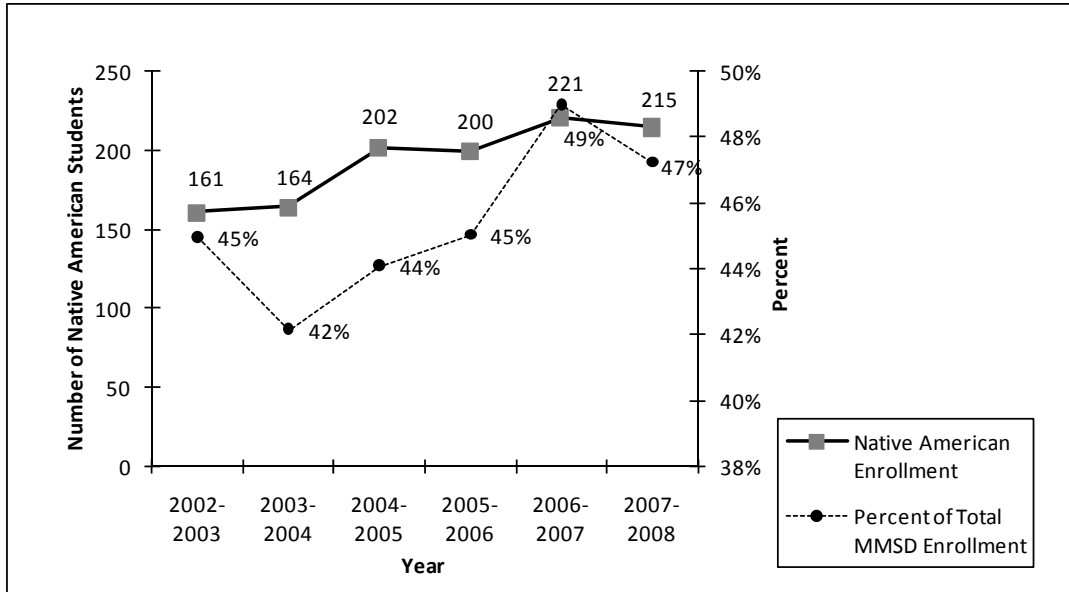


Figure 1. Native American preK–12 enrollment at MMSD (2002–2008).

In addition to increased enrollment, Navajo students demonstrated increased participation in extracurricular activities and academic events. From fall 2004 to spring 2007, there was a 35% increase in the number of Navajo students participating in varsity sports and a 47% increase in the number of Navajo students receiving awards at the annual school science fair. The number of Navajo students represented in the National Honor Society also increased 33% over that time period. These increased numbers brought the rate of Navajo student participation closer to their overall population rate in the district.

The same time period also showed increased Navajo parent involvement in the school, as indicated by their participation in monthly Indian Education Advisory Council (IEAC) meetings.<sup>5</sup> In 2001-2002, only seven parents attended IEAC meetings. This number more than doubled to 16 in 2002-2003, as the idea of the program was introduced and parent feedback was solicited. The number of parents attending IEAC meetings has steadily increased since then, with a total of 25 attending in 2005-2006. This figure represents a 257% increase in parent involvement over the course of the grant (Figure 2).

<sup>5</sup> The Indian Education Advisory Council (IEAC) is a parent advisory council that meets monthly to share information about MMSD Indian education programs, give input on budgets based on annual needs assessments, and otherwise discuss how best to serve the needs of the district’s Native American students. All members of the IEAC are Native American and have a student enrolled in Magdalena schools. They are elected by other Navajo parents for 3-year terms. A parent advisory council is required of all school districts that receive Johnson O’Malley, Title VII, or Impact Aid funds.

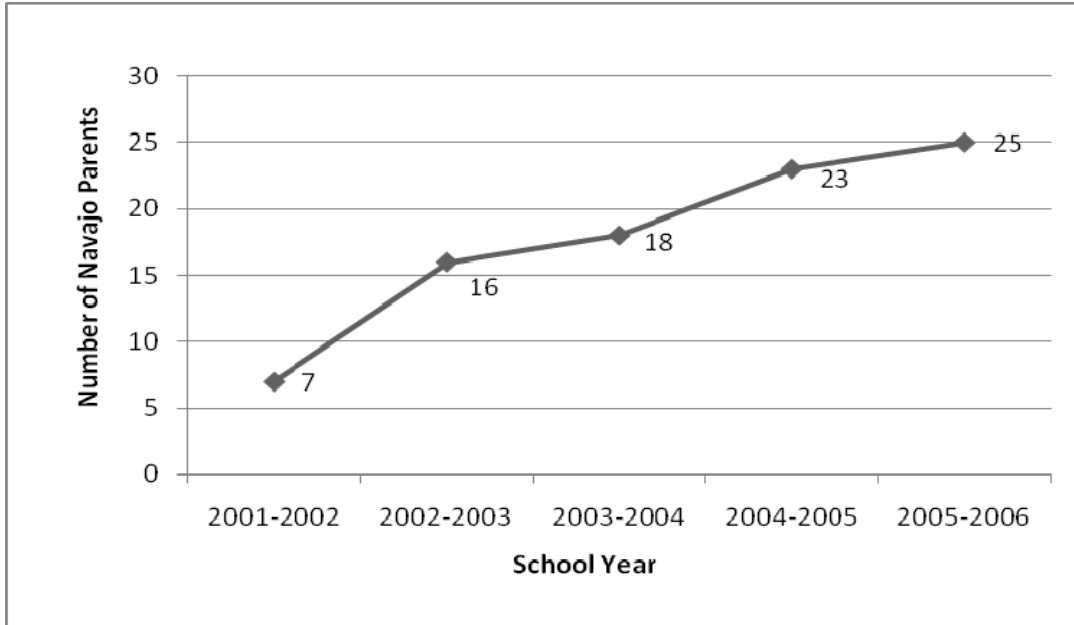


Figure 2. Navajo parent attendance at monthly Indian Education Advisory Council meetings (2001–2006).

While it is impossible to attribute these increases in Navajo student and parent involvement directly to the language program, it is likely that its presence in the school made for a more welcoming school environment.

#### ***Indications of an Increase in Navajo Cultural Pride***

The Navajo cultural presence at MMSD became much more visible after the inception of the program. Student work in Navajo gradually began to be displayed in classrooms, and Navajo artwork became integrated into class projects. In classrooms and at home sporting events, the pledge of allegiance was recited in Navajo and Spanish in addition to English. A section of the school library was developed specifically for Navajo and other Native American resources. In a concerted effort to involve the entire school, teachers were encouraged to integrate Navajo language and cultural activities into their classrooms. In addition, a School-on-Wheels trip was arranged for the entire middle school to visit the main Navajo Nation. In 2007, Navajo students were elected homecoming king and queen, and for the first time, an MMSD student won the Ms. Alamo-Navajo pageant. The 2008 Ms. Alamo-Navajo is also an MMSD student, and the school valedictorian is a Navajo student.

High school sports, especially basketball, represent another important aspect of school pride at MMSD. In this small community, sporting events are widely attended social activities, drawing a large and diverse segment of the population. There is particular excitement about both the boys' and girls' varsity basketball teams, which have qualified for the state championship games for a number of years. During the program, more Navajo students qualified for junior varsity and varsity sports teams, including basketball, due to an increase in their grade point average. We observed increased pride among Navajo families as they cheered on their children and siblings in high school sports games.

### **Increase in Navajo Staff**

In 2002-2003, there were only 7 Navajo staff members in MMSD, but this number had nearly doubled to 13 by 2005-2006 as a direct result of the program, which provided funding for the addition of Navajo classes and Navajo teachers (Figure 3). This increase is important not only for the transmission of Navajo cultural and linguistic knowledge, but also to provide Navajo students with role models from their community to reinforce their sense of belonging in school. The Navajo teachers' instructional style may also more closely match the learning style of Navajo students. In a study of Haida teachers in British Columbia, White (2001) found that their teaching style was more accommodating of their Haida students' home communication style than that of the non-Haida teachers.

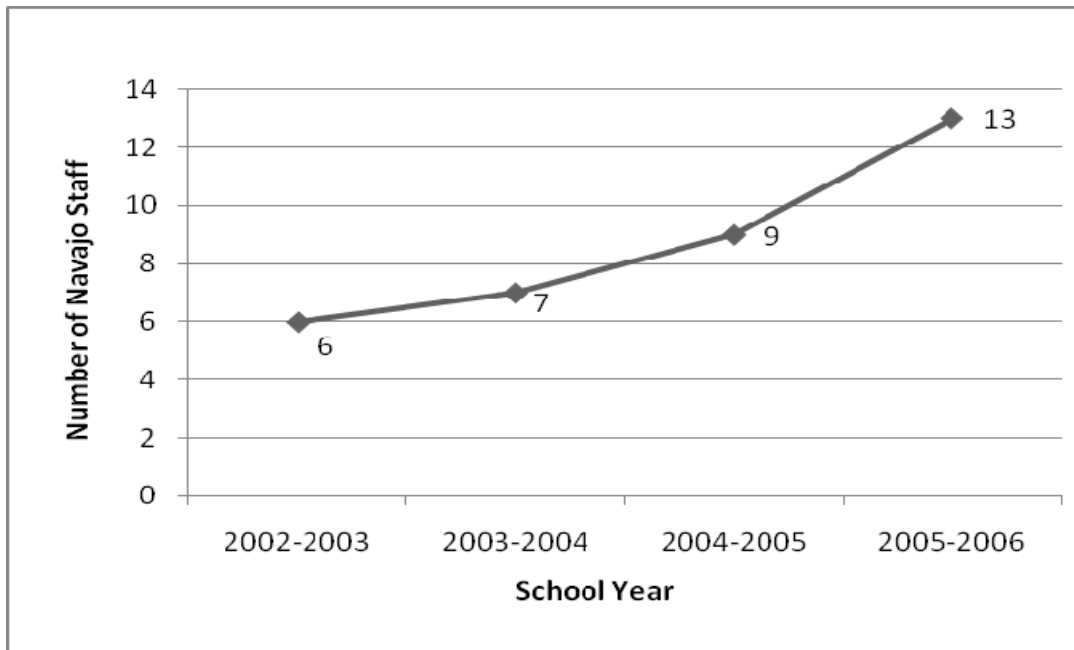


Figure 3. Number of Navajo staff members (2002–2006).

### **Professional Development**

Professional development for teachers and paraprofessionals was an important component of the Magdalena program. All MMSD staff received training on working with English language learners, concentrating on second language acquisition and literacy development with an emphasis on Native American cultures. A key resource in integrating these topics was *Reading and the Native American Learner: A Research Report* (St. Charles & Costantino, 2000). Eleven teachers earned graduate credit for participating in the full 45 hours of training and completing outside readings and assignments. In addition, five teachers were able to complete their ESL certification through the training, resulting in a net increase of more than 250% in the number of ESL-certified teachers in the district during the 4-year project period. Several teachers commented that having the course onsite in Magdalena was crucial to their ability to participate. Location of training is an important factor for teachers who live far from the nearest university, as noted in Watahomigie and McCarty (1994).



Informal classroom observations revealed that teachers were implementing strategies that had been introduced in the trainings. These strategies included identifying language and content objectives; modifying speech (i.e., using *teacher talk*) with repetition and nonverbal communication; using charts, diagrams, maps, and other visual tools; and making connections to students' background knowledge and culture. For example, a middle school math teacher integrated traditional Navajo artwork into a curriculum unit on geometry.

Another aspect of the training that teachers found useful was the introduction of cooperative learning strategies, in which students work interdependently toward a collective goal.<sup>6</sup> Hirst and Slavic (1990) advocate cooperative learning for Native American students because it tends to more closely approximate their learning styles, including shared leadership, group problem-solving, and structured participation.

### ***Academic Results***

One change observed during the Magdalena program was a dramatic increase in the number of students receiving the Chief Manuelito scholarship, the largest college scholarship available for Navajo students through the Navajo Nation: Recipients receive \$7,000 per academic year. Qualification for this scholarship is based entirely on academic criteria and requires students to have a grade point average of more than 3.0 and an ACT score of more than 21.<sup>7</sup> They must also have taken a year of Navajo language and a semester of Navajo government, the latter of which may be taken online (Office of Navajo Nation Scholarship and Financial Assistance, 2005).<sup>8</sup>

In 2002-2003, only 33% of MMSD graduating Navajo students received the scholarship. By 2005-2006, this rate had increased to 78%, representing a 136% increase (Figure 4). There were no changes to the criteria for qualification since 2003 (Office of Navajo Nation Scholarship and Financial Assistance, 2003), so the increase in Navajo recipients was not due to a lessening of standards. Winona Kay (personal communication, 2008), Senior Financial Aid Counselor at the Crownpoint Agency of the Navajo Nation, reports that there was a general increase in scholarship recipients throughout the Nation during this time period, which she attributes to increased access to Navajo language and government courses, both online and at students' home institutions. By providing the option for students to take Navajo courses at school, it is likely that MMSD contributed greatly to students' ability to qualify for the scholarship.

From 2005 to 2007, there was a widespread increase in mean scores on standardized reading, math, and science tests among Navajo third through ninth graders (Figures 5, 6, and 7).<sup>9</sup> The largest increases in reading were seen in the classes of 2010 (Grades 7-9) and 2014 (Grades 3-5), which improved by 49 and 46 points, respectively. Increases in math scores ranged from 23 points by the class of 2012 (Grades 5-7) to 51 points achieved by the class of 2010 (Grades 7-9). The class of 2010 also had the largest increase in science score, with an increase of 36 points.

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<sup>6</sup> A very helpful introduction to cooperative learning strategies for English language learners is the video *We Can Talk: Cooperative Learning for LEP Classrooms* (Kagan, 1995).

<sup>7</sup> The ACT is a test used by many colleges and universities for admissions purposes.

<sup>8</sup> Since the end of the OELA-sponsored program, MMSD has added a Navajo government course that students can take for the scholarship requirement. Both Navajo and non-Navajo students have enrolled in the course.

<sup>9</sup> This analysis makes use of a growth model, which tracks individual students' performance. This model is widely used by states to track student progress, especially the progress of specific designated groups (Marnie, 2006). Note that the tests for each grade level become increasingly difficult in order to reflect the increasing academic demands of the curriculum.

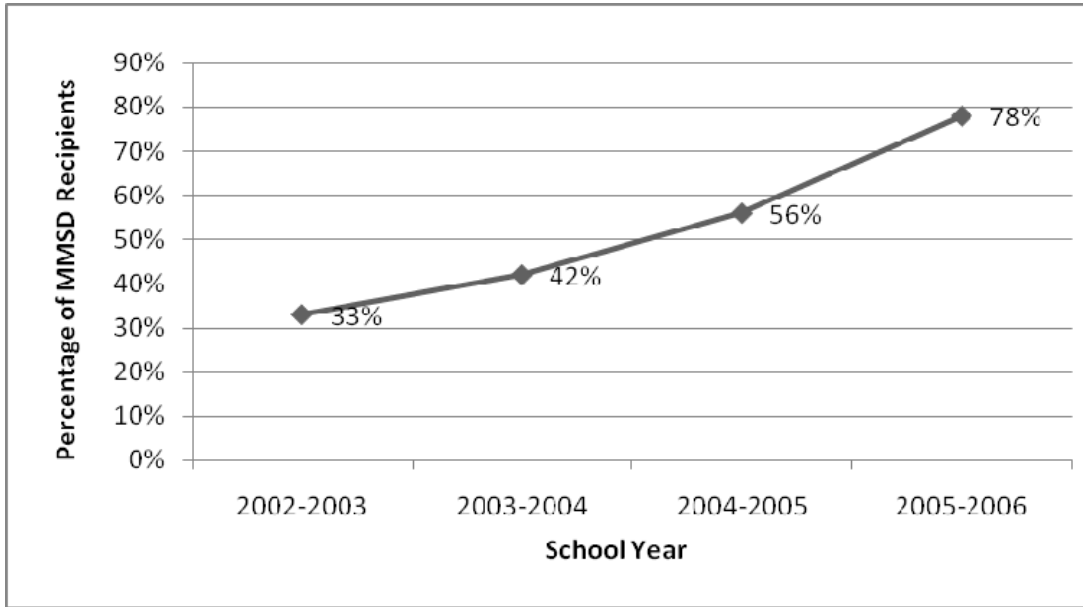


Figure 4. Percentage of graduating Navajo MMSD students receiving the Chief Manuelito Scholarship (2002–2006).

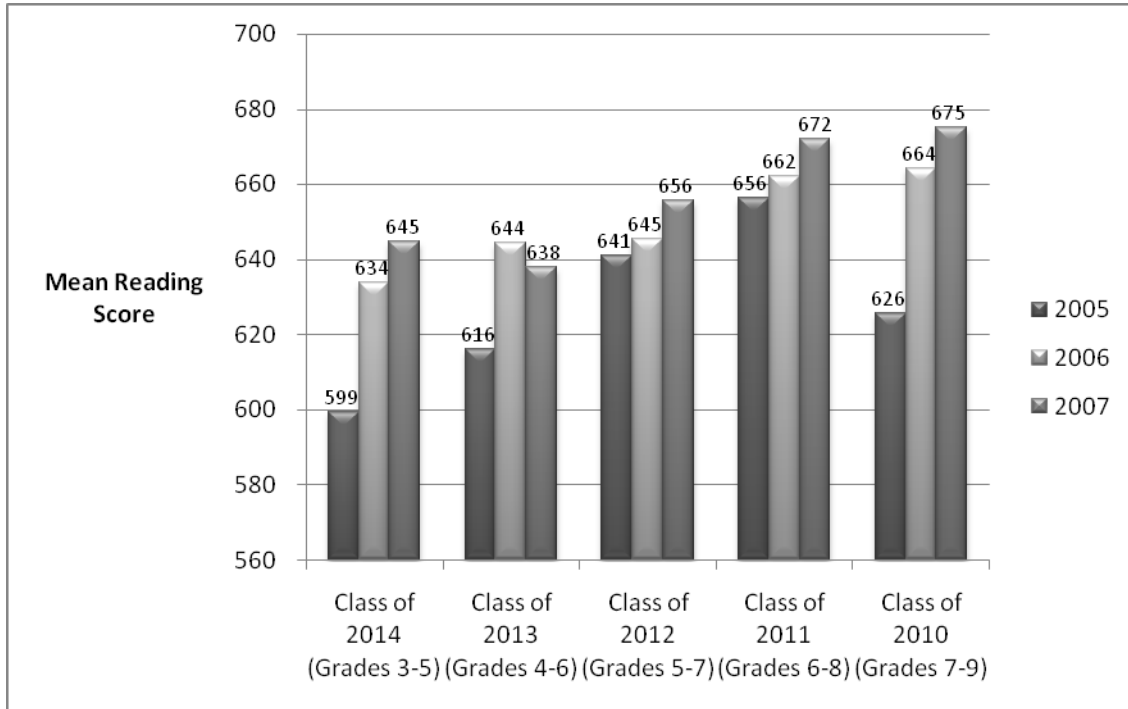


Figure 5. Mean standardized test scores in reading for MMSD Navajo students in the classes of 2014 through 2010 (2005–2007).

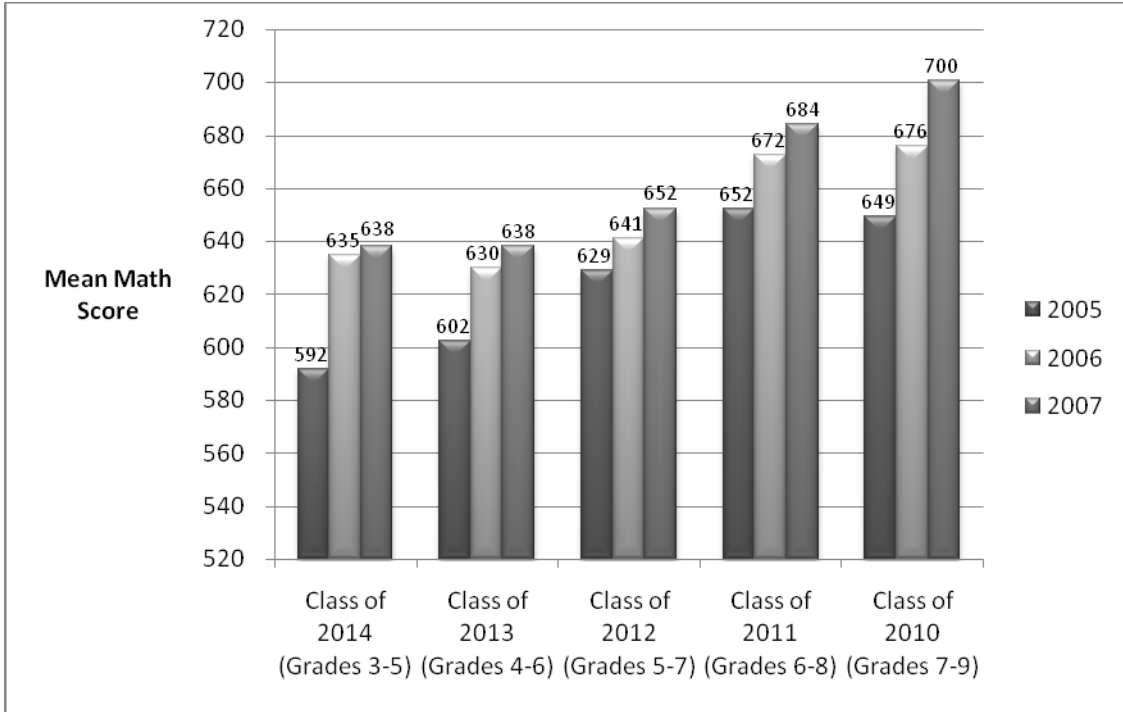


Figure 6. Mean standardized test scores in math for MMSD Navajo students in the classes of 2014 through 2010 (2005–2007).

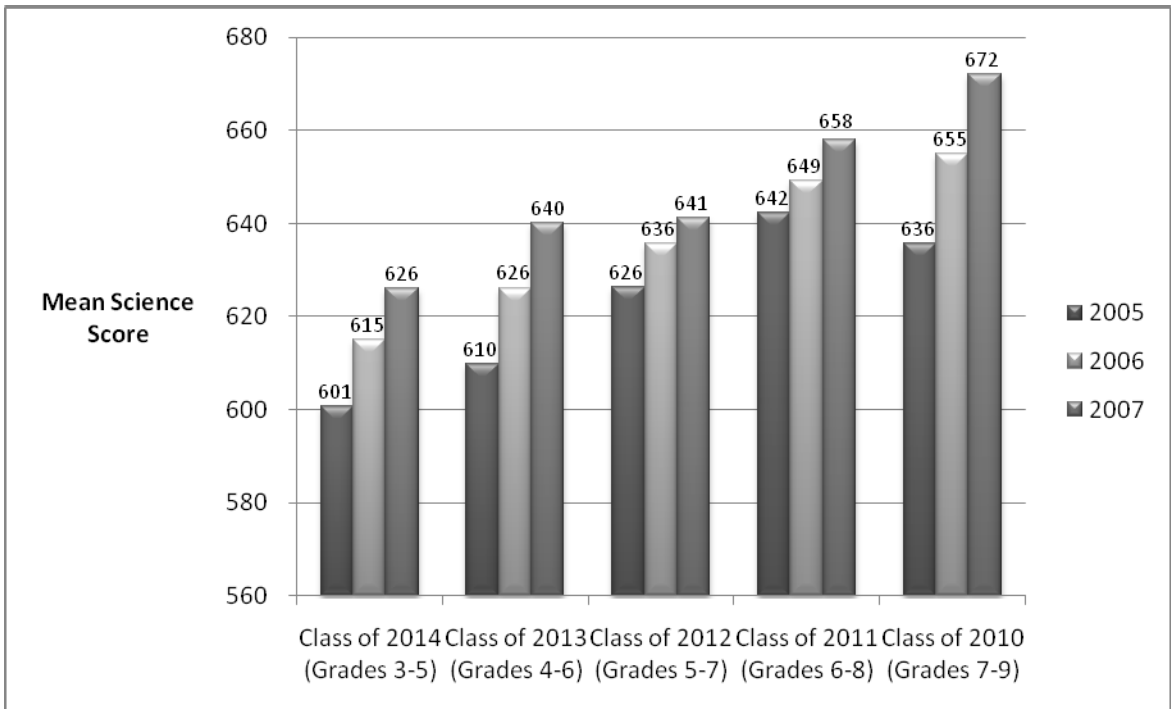


Figure 7. Mean standardized test scores in science for MMSD Navajo students in the classes of 2014 through 2010 (2005–2007).

While we cannot attribute these results directly to the program because there are other educational and home factors inherent in students' experiences, it is possible that the program influenced the growth in students' scores.

We are unable to report standardized test data for Grades K–2 and Grades 10–12, because standardized tests in math, science, and reading are not consistently required by the state for these years. We are also unable to comment on the students' English language progress due to the change of the English language proficiency assessment measure used, from Woodcock-Muñoz to the New Mexico English Language Proficiency Assessment (NMELPA) during the third year of the program. The change in tests does not allow for valid comparisons over the course of the program. However, Navajo students' statewide reading scores did improve, as reported above. MMSD will continue to track the NMELPA results to determine the students' growth in English language proficiency. Finally, the standardized Navajo language assessment scores provided insufficient data to draw conclusions about students' progress in Navajo. However, Navajo teachers continue to monitor students' ongoing progress in their classes.

## **Challenges**

Despite the successes outlined above, the Magdalena program faces a number of challenges common to many Native American linguistic and cultural programs. Among them are the centrality of standardized testing in today's educational environment, the difficulty of retaining teachers and developing materials for a less commonly taught language, and attitudes about the value of the Navajo program within the larger school program. This section discusses these challenges in light of current research on teaching indigenous languages.

### ***Meeting Adequate Yearly Progress***

MMSD Navajo students are showing improvement on their standardized reading, math, and science tests. However, as a subgroup, they are still not meeting adequate yearly progress (AYP) goals as mandated by the federal No Child Left Behind Act of 2001. For example, examining the percentage of Navajo students in Grades 5–8 who met the Proficient level in 2007 reveals that less than 15% of students met AYP in the three tested subjects, and none met AYP in Grades 6 and 8 (Table 1). In Grade 9, however, 36% of Navajo students achieved proficiency in reading and 41% met proficiency in math. That AYP goals continue to elude most of MMSD's Navajo students is a significant challenge for the program in terms of receiving continued support from school administrators, who are under tremendous pressure to produce scores at the Proficient level.

However, more encouraging is an examination of the percentage of Navajo students who met the Nearing Proficient level in 2007 (Table 1). At least 30% of Navajo students in each grade achieved Nearing Proficient across the three tests; in math, this included 94% of Navajo students in Grade 9. This achievement seems to be consistent with the steady increase in mean scores across Navajo classes that was discussed in the previous section (Figures 5, 6, and 7).

Table 1.  
*Percentage of Navajo Students in Grades 5–9 Who Achieved Proficient and Nearing Proficient Levels on Standardized Tests in Reading, Math, and Science in 2007.<sup>a</sup>*

Grade	n	Reading		Math		Science	
		Percent proficient	Percent nearing proficient	Percent proficient	Percent nearing proficient	Percent proficient	Percent nearing proficient
5	13	13%	62%	13%	62%	0%	54%
6	11	0%	55%	0%	45%	0%	73%
7	26	13%	62%	13%	31%	9%	42%
8	10	0%	40%	0%	30%	0%	40%
9	19	36%	58%	41% <sup>b</sup>	94% <sup>b</sup>	6%	89%

<sup>a</sup> Achieving scores at the Proficient level is equivalent to meeting adequate yearly progress.

<sup>b</sup> Only 18 students in Grade 9 took the math test.

The New Mexico Indian Education Advisory Council (2006, p. 3) maintains that one barrier to Native American students achieving established educational goals is

Unrealistic expectations that Native people must resolve educational problems in a few years. . . . Native people have endured over five hundred years of oppression and must not be expected to suddenly demonstrate successful schools.

It therefore makes sense to celebrate individual students' achievements and cohort improvement rather than comparing student progress to a national norm.

At the same time, it is imperative that Navajo students, like all students in the district, be held to the highest possible standards. Weinstein (2002) argues that low expectations for students often lead to failure, and as Ferguson (1998) notes, there is a strong culture in this nation of expecting Native American students (as well as other minority students) to be low performers. We believe, however, that defining success solely by standardized test results is highly problematic.

The challenges inherent in standardized testing have been widely discussed and debated in the academic literature. While some argue that collecting disaggregated data and creating accountability standards force schools to meet the needs of Native American students (e.g., Fox, 2001), we believe that the current practice of judging a school's success on the results of a single series of standardized tests does a disservice to these students and the schools that serve them. Several researchers have pointed out that large-scale standardized tests do not take into account the diverse linguistic and cultural backgrounds of Native American students, putting them at a disadvantage (Bordeaux, 1995; Demmert, 2005; Fox, 2001). Furthermore, the potential for bias increases when the tests are normed to a mainstream population (Fox, 2001; Tippeconnic & Faircloth, 2002).

In sum, we advocate that educators expand their vision of ways to measure success for Native American students rather than lowering standards or just accepting poor results. For example, performance-based assessments should be incorporated into student evaluation. These assessments allow the inclusion of local cultural and linguistic values reflected in curriculum and instruction (Bordeaux, 1995). Measurements of success can also include performance-based indicators such as grade point averages and academic awards received.

### ***Developing Materials and Retaining Teachers***

A challenge common to many Native American language programs is the overwhelming need to develop teaching materials (e.g., Dauenhauer & Dauenhauer, 1998; Morgan, 2005; Slaughter, 1997). Indeed, this is a challenge for most of the languages described by Gambhir (2001) as “truly less commonly taught.” Although the Navajo language is taught extensively in the main Navajo Nation, the materials used there were deemed inappropriate in most cases for the Magdalena program, as they assumed background knowledge in written Navajo that the Magdalena students did not have. The materials also reflected a different dialect from the one spoken by the Alamo Navajo attending MMSD. Although a lack of available materials poses many initial difficulties, for those who are teaching endangered languages in formal educational settings, developing materials and curriculum from the ground up can be the best way to achieve the goals of the local community (Malone, 2003).

A second challenge has been the recruitment and retention of qualified Navajo staff. Initially, teachers were hired from the main Navajo Nation, which is 200 miles away, but these teachers were reluctant to live so far from home for more than a couple of years. Despite the provision of teacher training and professional development, local teacher recruitment has proved challenging. This problem is all too common to Native American language programs, as many struggle to find teachers who are fluent in the language and also certified to teach (e.g., Kaponi, 1994; Slaughter, 1997; White, 2001). The Magdalena program has begun to address this problem by helping students find education scholarships that require them to return to their community to teach for a number of years.

### ***Garnering Broad Support for the Program***

Despite strong support from the Alamo Navajo community for the teaching of Navajo language and culture, this element of the Magdalena program was not valued within the school as much as the ESL classes. For example, students were often pulled from their Navajo classes to work on remedial English and math.

Navajo classes might be perceived differently if evidence could be provided that students are making clear academic progress in Navajo language and literacy skills. But Navajo assessment data from standardized tests in Navajo are thus far insufficient to provide evidence of progress. However, standardized tests are neither the only nor the best way to assess student progress, especially considering the differences in culture and dialect between the main Navajo Nation, where the Navajo standardized test was devised, and the Alamo Chapter. School districts are therefore encouraged to track a variety of both quantitative and qualitative measures in Native American language and culture classes in order to assess their outcomes.

An added challenge for the program was that certified Navajo language teachers were often used as aides in other classes. Unfortunately, Native American language teachers often struggle to

gain equal recognition and status for their language classes in public schools (Suina, 2004; White 2001). Also, in the current educational culture of assessment and accountability, school and district administrators are under incredible pressure to produce results in a limited number of subjects—those that are tested for AYP. The Navajo language is not one of those subjects.

Nonetheless, it is essential that language teachers be given the same status as other classroom teachers. McLaughlin (1995) points out that even if a language program is strong, students recognize the relative power of English speakers within the wider school system and thus the relative power of English. It is therefore important that they see their community role models and speakers of their language in positions of authority.

### **Part 3: Recommendations for Heritage Language Programs**

This section offers recommendations for other schools and communities considering implementing heritage language revitalization programs. Because these recommendations are drawn from the experiences of the Magdalena program, they apply most directly to other Native American programs. However, they may have broader application to other heritage language programs in the United States. This section concludes with a list of online resources for further information.

#### **Community Involvement**

Community involvement is perhaps the most important element of a successful heritage language revitalization program. Littlebear (1990) encourages Native American community members to get involved in their local schools at all levels, from administration to teaching to school boards to individual parental involvement, arguing that this is the best way to ensure that the curriculum will meet their students' needs. However, due to a long history of distrust, gaining Native American community support for a program within the public school system may be difficult.

MMSD administrators spent a great amount of time building a strong foundation of trust with the Alamo Navajo community. Initial efforts yielded little parental response, but after several years of persistent administrator visits to the reservation, larger numbers of parents chose to participate in meetings. The key to the administrators' success was open communication and cultural sensitivity and awareness. They were willing to share information about school matters and gather and act on input from community members. In other words, they made meetings responsive to those in attendance. They also made meetings fun and engaging. To promote parent attendance, MMSD administrators

- Disseminated multiple meeting reminders through mass mailings, local radio announcements, flyers, and reminder letters sent home with students
- Provided food and door prizes at meetings
- Organized a local student presentation at each meeting (e.g., student science fair presentations, plays and skits in Navajo, school club reports of recent activities)

#### **Materials Development**

Most heritage language revitalization programs need to develop their own materials. Even non-endangered language programs may find that the materials available to them are either aimed at

foreign language learners or are designed for native speakers at a level too advanced for their students. Dialect differences may further confound the problem. The good news is that when programs develop their own materials, they can avoid the English biases often found in existing foreign language texts (Howard, Sugarman, & Christian, 2003).

The Magdalena program is fortunate in that many Navajo resources already exist. During planning stages of the program, MMSD administrators traveled to several Navajo schools and met with Navajo language, culture, and government teachers. They inquired about materials, assessments, and curriculum; asked about companies that produce the materials; and found resources through the Diné College, a local Navajo college. Although not all languages are taught in multiple locations, heritage language revitalization programs are encouraged to search for whatever resources may be available to them. In some cases, this may mean adapting teaching and assessment materials from another language or dialect to meet the needs of the program, or teaming up with another program to produce materials together.

### **Professional Development**

Many researchers agree that teacher training is vitally important to the successful implementation of a heritage language revitalization program (e.g., Dauenhauer & Dauenhauer, 1998; Hinton, 2001; Reyhner & Tennant, 1995). Being able to speak a language is not tantamount to being able to teach it, and classroom language teaching is very different from the context in which children learn their first language. Especially in programs where contact is only a few hours per week, direct grammatical instruction is necessary, which is a difficult aspect of teaching that often requires pedagogical and linguistic training (Hale, 2001). Professional development may have the added benefit of increasing the status of heritage language teachers within the school system.

### **Online Resources**

We recommend the following online resources for further information about Native American language revitalization:

- *Alliance for the Advancement of Heritage Languages*. This Web site offers a bibliography of resources on indigenous languages: <http://www.cal.org/heritage/research/bib/indigenous.html>
- *American Indian Education*. This Web site provides links to resources about the history and current state of education for Native American students: <http://jan.ucc.nau.edu/~jar/AIE/index.html>
- *American Indian Resources*. This Web site, maintained by Will Karkavelas of Osaka University, includes links to sites about Native American languages, literature, education, culture, and history: <http://www.lang.osaka-u.ac.jp/~krkvls/naindex.html>
- *CREDE Resources on Native American Education*. This bibliography, compiled by the Center for Research on Education, Diversity & Excellence, includes book chapters, journal articles, and multimedia: [http://crede.berkeley.edu/products/profdev/na\\_bib.html#](http://crede.berkeley.edu/products/profdev/na_bib.html#)



- *Teaching Indigenous Languages*. This Web site offers resources on maintaining and revitalizing indigenous languages, with links to articles about revitalization efforts, rationale and needs for revitalization, and teaching methods: <http://jan.ucc.nau.edu/~jar/TIL.html>

## **Part 4: Conclusion**

This paper describes the value of the Magdalena program for MMSD Navajo students. Because the program demonstrates respect for the Alamo Navajo community, an increased number of parents and students have become involved in the school, both academically and at the extracurricular level. In a dramatic departure from our country's past efforts to assimilate Native American students, MMSD has demonstrated that valuing students' heritage language and culture need not interfere with academic success. Indeed, in the case of these students, academic achievement has increased, as evidenced by improved reading, math, and science scores.

We are pleased to report that the Navajo language and culture classes have continued at MMSD although the initial 4-year federal grant has ended. Navajo students may take Navajo and ESL courses from Grades K–12. MMSD has even expanded the program, now offering a Navajo government course at the high school level, which some non-Navajo students also choose to take. Despite the many challenges it faces, this now ongoing district program demonstrates the importance and academic relevance of including heritage language and culture programs in the public school setting. Finally, we are pleased that this comprehensive analysis of multiple and diverse measures of success allows us to conclude that Magdalena's English Language Acquisition and Native American Achievement Program has indeed "increased the pride and awareness of Navajo culture within the school community" and has "contribute[d] to the capacity of students to become capable, freestanding, lifelong learners" (Program Vision Statement).

## **Part 5: References**

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