Language Planning Challenges and Prospects in Native American Communities and Schools

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Executive Summary

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.

Heritage language loss and shift toward English are occurring at an escalating pace in Indigenous communities throughout North America. Of 210 Native languages

still spoken in the U.S. and Canada, only 34 (16 percent) are still being acquired as a first language by children. Unlike "world" languages, such as Spanish, Indigenous languages have no external pool of speakers to replace dwindling speech communities; the loss of an Indigenous language is terminal. Because language is the primary medium through which social, communal, and governance relationships are constructed, the loss of a heritage language negatively impacts those relationships as well. Thus, rights to language are fundamental to maintaining distinctive personal and tribal identities, and cannot be decoupled from larger struggles for Indigenous self-determination and cultural survival.

In the past, Native languages were viewed as oppositional to the interests of state-controlled schooling; the prohibition of speaking Native languages in schools for Native American students has been a major cause of language shift. Paradoxically, schools today have, in some cases, become allies in LPP efforts to revitalize Indigenous languages. In the bulk of this article, we illustrate these efforts through four "telling" cases. In each case, heritage-language immersion has been employed as a primary strategy to cultivate heritage-language proficiency among youth. The Pueblos of the Southwest and the Blackfeet of Montana illustrate community-based approaches to language revitalization; Native Hawaiian and Navajo immersion represent school-based approaches.

These programs have had salutary effects on both language revitalization and academic achievement. In particular, data from school-based heritage-language immersion indicates that children acquire the heritage language as a second language without "cost" to their English language development or academic achievement, as

measured by local and national (standardized) tests. Conversely, comparable students in English mainstream programs perform less well than immersion students in some subject areas, including English writing and mathematics, and tend to lose whatever heritage-language ability they had upon entering school. These programs highlight the benefits of "additive" or enrichment approaches to language education, and stand in contrast to "subtractive" programs aimed at eradicating or replacing non-English mother tongues.

In light of these findings, the following conclusions were drawn:

- Heritage-language immersion is a viable alternative to English-only instruction for Native students who are English-dominant but identified as limited English proficient.
- Time spent learning a heritage/community language is *not* time lost in developing English, while the absence of sustained heritage-language instruction contributes significantly to heritage-language loss.
- It takes approximately five to seven years to acquire age-appropriate proficiency in a heritage (second) language when consistent and comprehensive opportunities in the heritage (second) language are provided.
- Heritage-language immersion contributes to positive child-adult interaction and helps restore and strengthen Native languages, familial relationships, and cultural traditions within the community.
- Literacy skills first developed in a heritage language can be effectively transferred to English, even for students with limited proficiency in the heritage language upon entering school.

- Additive or enrichment language education programs represent the most promising approach to heritage- and second-language instruction.
- The aforementioned LPP efforts are fundamental to tribal sovereignty and local education choice.

These language programs face challenges in the present "policy moment." On the positive side, the programs profiled here, and numerous others throughout the U.S., have support from the 1990/1992 Native American Languages Act (NALA). However, the guarantees of NALA and the LPP efforts it supports are threatened by the growing movement for high-stakes, English standardized testing. This movement is represented most palpably in the No Child Left Behind Act of 2001 (NCLB). Research on the consequences of NCLB for Native American and other language minority learners suggests that NCLB is widening rather than closing the achievement gap.

In conclusion, the authors call for recognition and support of proven heritage-language instructional approaches as vehicles for education that is both academically sound and supportive of Native American languages and cultures.

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Introduction

> Pivotal to Native peoples' efforts to reclaim their culture are their current efforts at language and spiritual restoration and their dedication to establishing tribal educational systems that are responsive to traditional values.[1]

Native Americans face many social, economic, political, and educational challenges, the resolution of which is vital to their survival as culturally distinct, sovereign nations. As the epigraph above suggests, one critical challenge is ensuring that mother tongues are maintained as strong languages, used for everyday communication in Native homes and communities. An equally important challenge is ensuring that Native children receive an education that equips them with the skills and knowledge they will need to fulfill their roles and responsibilities as citizens, caretakers, and leaders in their communities and beyond.

These dual challenges—maintaining ancestral languages and providing culturally responsive and empowering education—lie at the heart of contemporary Indigenous language planning and policy (LPP) efforts today.[2] This policy brief examines these processes as they are being carried out in communities and schools. Here, LPP is viewed not solely as official government action or texts, but as complex modes of human interaction, negotiation, and production, mediated by relations of power.[3] This enables us to examine LPP as a local, grass roots, or "bottom-up" process as well as a "top-down" process emanating from official government acts. This approach to LPP analysis also illuminates cross-cutting themes of cultural negotiation, identity, and linguistic human rights.[5]

In the past, Native languages were viewed as oppositional to the interests of state-controlled schooling, and were reflected as such in pro-assimilation federal policies. "There is not an Indian pupil . . . who is permitted to study any other language than our own vernacular—the language of the greatest, most powerful, and enterprising nationalities beneath the sun," wrote Commissioner of Indian Affairs J.D.C. Atkins in 1887.[6] These policies persisted well into the second half of the 20th century. Paradoxically, schools today—especially when they are under Indigenous community control—have become allies in the struggle to revitalize Indigenous languages. This is a promising new development, but it is also fraught with challenges.

This policy brief begins with an overview of the current status of Native languages in the U.S., highlighting the dual processes of language shift and loss. Looking at four cases of Native language revitalization — two that emphasize community-based processes and two that are occurring in schools — this policy brief

addresses two key questions: *How effective have these LPP initiatives been in (re)cultivating speakers of Indigenous languages,* and *what are their effects on children's academic achievement?* The final sections of this brief summarize the findings from these cases and review current policy initiatives, as tribal struggles for educational and linguistic self-determination confront the movement for high-stakes testing, most visibly represented in the No Child Left Behind Act of 2001 (NCLB). The authors suggest that academically sound and linguistically and culturally responsive Indigenous-language programs are undermined by the constraints of NCLB.

The Current State of Native American Languages

> . . . [T]he loss of language is part of the loss of whole cultures and knowledge systems, including philosophical systems, medical knowledge, and important cultural practices and artistic skills. The world stands to lose an important part of the sum of human knowledge whenever a language stops being used.[6]

> . . . [E]mbedded in [the heritage] language are the lessons that guide our daily lives . . . We cannot leave behind the essence of our being.[7]

Language shift is occurring at an escalating pace in Indigenous communities worldwide. According to linguist Michael Krauss, nearly half of more than 6,500 languages currently spoken around the world are "moribund," meaning they are spoken only by adults and are not passed on to children.[8] The most significant losses are among Indigenous peoples in the Americas, Africa, and Asia. Case study after case study

documents the loss of the world's language resources.[9] In many cases, these are "smaller" languages spoken by a few thousand people or less. But even "larger" languages such as Quechua (called Quichua in Ecuador), spoken by eight to 12 million Indigenous people in six South American countries, are endangered, as the legacy of colonization and the modern forces of globalization take their toll. With regard to language planning efforts for Quechua, Hornberger and Coronel-Molina state that "its future cannot be left to chance; without deliberate intervention and planning to counteract the legacy of [language repression], Quechua could . . . go the way of the many languages already lost."[10]

Of 210 Native languages still spoken in the U.S. and Canada, only 34 (16 percent) are still being naturally acquired as a first language by children.[11] Krauss classifies Native North American languages as follows (see Table 1):

- Class A, the 34 languages still spoken by all generations;
- Class B, the 35 languages spoken only by the parental generation and up;
- Class C, the 84 languages spoken only by the grandparental generation and up; and
- Class D, the 57 languages spoken only by the very elderly, usually less than 10 people.

Table 1: Number and Classification of Native North American Languages

Class	No. of Languages	Spoken By
A	34	All generations, including young children
B	35	Parental generation and older
C	84	Grandparental generation and older
D	57	Very elderly, often less than 10 people
Summary:	***210***	***84% have no children acquiring the language as a mother tongue.***

Source: Krauss, M. (1998). "The Condition of Native North American Languages: The Need for Realistic Assessment and Action," *International Journal of the Sociology of Language,132*, pp. 9-25.

Indigenous languages are unique precisely because they are Indigenous. That is, unlike world languages such as French and Spanish, which have significant numbers of speakers around the world, the speakers of Indigenous languages reside primarily in tribal homelands. There is no external pool of speakers to replenish the present speech community. As the epigraphs that begin this section testify, the loss of these languages to humankind and to their speech communities is irredeemable. Language is the primary means through which parents and grandparents socialize their children and grandchildren, imparting what a community and a people believe their children ought to learn and become. When that bond is broken, intergenerational ties and community relationships also are ruptured. Hence, rights to language are fundamental to collective and personal identity, and efforts to resist language loss are part of larger struggles for personal and communal well-being, self-determination, and cultural survival.

Language Shift—Its Causes and Consequences

Language shift occurs when intergenerational language transmission proceeds in a negative direction, with fewer and fewer speakers each generation.[12] The term "shift" refers to a collective or communal process, and "loss" refers to the reduction of linguistic abilities at the individual level. These processes are reciprocal. The sociolinguist Joshua Fishman points out that language shift occurs gradually over many years, and that it arises both within and outside a community of speakers in the context of cultural, economic, and physical dislocations and social change.[13] Internal change occurs when speakers begin to shift their language loyalties, "abandoning" their language in favor of a higher-status language, typically because they believe the higher-status language is more socially useful and beneficial. Eventually, individuals come to believe that their heritage language has less utility, importance, and prestige than the language of wider communication, triggering language shift.

When individuals adopt another language, there are two possibilities: (1) bilingualism can occur, with both languages maintained simultaneously for distinct purposes, or (2) the newly adopted language can gradually replace or displace the heritage language. Often there is a transitional period of bilingualism that gives way to monolingualism in the language of wider communication. Mother tongue transmission and proficiency weaken with each successive generation until the language of wider communication becomes the primary language of children and the community.

For Native American communities, these processes have come about as a consequence of genocide, the armed invasion of Indigenous homelands, and economic, political, and social displacement. Colonial schooling has been a key instrument of

Native language eradication. A Hualapai elder, for example, remembers the government boarding school "where I found that they were trying to knock out the Hualapai part of me . . . . when we spoke our language, they used belts and hoses to really knock it out of us."[14] A Hualapai youth captures the personal and collective consequences of these practices: "I don't feel complete . . . . Coming to terms with my identity and seeing my deficiencies, I could tell kids today that if you don't know your language, you will feel [lost]."[15] Accounts such as these are abundant in the literature on Indigenous schooling.

This is the social-linguistic and social-historical context for contemporary Native American LPP initiatives. Although the pro-assimilation federal policies of the past have been replaced by ones supporting Indigenous self-determination, past policies and practices have contributed directly to language loss. These challenges notwithstanding, many tribes and Native communities are implementing bold, multifaceted programs to reclaim and strengthen their heritage languages. As Pueblo leader Regis Pecos points out:

> At such a critical time we must continue to plant those seeds that need to be nurtured in our respective communities throughout Indian country so that those who follow might be fortunate to inherit all that we have been blessed to inherit and which has defined who we have become . . . . As individuals and communities, we are challenged with what needs to be done to sustain everything that defines us as Indigenous people.[16]

The following sections examine the evolving arena of Native American LPP, with a focus on heritage-language immersion. Indigenous heritage-language immersion provides all or most instruction in the Indigenous language. This approach offers the

greatest promise for strengthening Indigenous languages. As linguist Leanne Hinton writes, "There is no doubt that [Indigenous-language immersion] is the best way to jump-start … a new generation of fluent speakers for an endangered language."[17] The cases profiled here show that this approach is also highly effective for enhancing education outcomes for Native youth.

Community-Based Language Planning and Revitalization

In *The Green Book of Language Revitalization in Practice*, linguists Hinton and Ken Hale offer many "reasons for optimism" about the future of Indigenous languages.[18] This section illustrates these reasons with two cases: the Pueblos of the southwestern United States and the Blackfeet of Montana. In both cases, the primary focus is on maintaining the Native language as an everyday language of communication among families and communities. These efforts require deliberate planning and decision-making by the primary stakeholders, Native people themselves.

The Pueblos of New Mexico

The New Mexican Pueblo peoples of the southwestern United States are comprised of 19 Indigenous nations with a total population of approximately 59,000. Also known as the Rio Grande Pueblos because of their location along the Rio Grande, these communities are considered the tribal people least changed by European encounters; "their languages, governments, social patterns, and cultural components remain uniquely Pueblo."[19]

There are three different Pueblo language families:

- Keres, which is spoken in five Pueblos.
- Zuni, which is a language spoken only by members of Zuni Pueblo.
- Tanoan, which has three languages: Tiwa, Tewa, and Towa.

The Pueblos range in size from roughly 100 in Picuris Pueblo to over 10,000 in Zuni Pueblo. Of the 19 Pueblos, 15 have very few children acquiring their heritage language as a first language.

In recognition of this critical linguistic situation, the majority of these Pueblo tribes have recently begun community-based language immersion initiatives. This requires a comprehensive understanding of past and current factors contributing to the language shift as well as judicious planning and implementation of strategies and methods to revitalize language use within families and communities. Fundamentally, for Pueblo societies, this involves "understanding that the core foundation of tribal languages has been primarily in oral tradition and their function as the common thread of socio-cultural, socio-religious, and socio-political systems of tribal life."[20] The language planning and policy (LPP) efforts of two Keres-speaking Pueblos, Cochiti and Acoma, illustrate this. Both have established language renewal initiatives that have served as models for other communities across the country.

Language Planning at Cochiti and Acoma Pueblos

Cochiti Pueblo is one of the smaller Keres-speaking communities. The Pueblo is located 35 miles south of Santa Fe, New Mexico, at the base of the Jemez Mountains to the west and adjacent to rich agricultural farmland along the Rio Grande to the east. Acoma Pueblo, also known as Sky City for its location high atop a 357-foot mesa, is a

substantially larger Keres-speaking community. Three thousand of the 5,000 enrolled tribal members reside on the Acoma reservation, located 60 miles west of Albuquerque. With the rest of the New Mexico Pueblos, Cochiti and Acoma retain a Native religious or ceremonial calendar which guides traditional activities, including the annual appointment of leadership. Their theocratic governments consist of a traditional and a secular body, each serving separate and distinct functions. The secular government is responsible for all external affairs such as educational, judicial, political, and economic matters. The secular leadership includes the appointed positions of governor, lieutenant governor, ancillary officers (also known as *fiscales*),[21] and a collective body of former officials who constitute the tribal council. The traditional body consists of the traditional leaders: the *cacique* (primary native religious leader), war chiefs, and their officials. It is responsible for the maintenance of each Pueblo's ceremonial calendar, and each year it appoints the secular leadership for the community. This unique theocratic organizational structure assures that the traditional and contemporary needs of the Pueblo community are met and protected.

Like Indigenous communities around the world, Cochiti and Acoma Pueblos have been impacted by a multitude of external influences which have collectively contributed to the shift from Keres to English. In the early 1970s, fewer Cochiti and Acoma children were speaking Keres as their first language and, by the 1990s, the last generation of native Keres speakers was in its mid-forties. Many young parents spoke only English and were raising their children in English-only households. Although Cochiti and Acoma were involved in bilingual education programs during the 1970s, these school-based programs were designed to transition children — a significant number of whom still

entered school having Keres as a first language — into English. After two decades, it was realized that these programs were not having the tribe's desired effect of maintaining the community's language. It was at this point that the tribal councils of Cochiti and Acoma became deeply concerned with the language shift and initiated language renewal efforts in their respective communities.

An initial first step in Cochiti and Acoma's language renewal efforts was a community-wide survey of sociolinguistic practices. Sociolinguists describe this process as "ideological clarification," a foundation for grass roots or "bottom-up" language planning.[22] The findings of the respective surveys revealed that language loss deepened with each succeeding generation. Intergenerational language transmission was declining rapidly as fluent Keres speakers accommodated English monolingual young adults and children. The amount of Keres spoken in each community was declining, further limiting opportunities and motivation for acquiring Keres. Cochiti and Acoma children reported hearing Keres spoken by their grandparents and occasionally by their parents at home and others in the community, although the language was rarely used with them directly.[23]

The findings of these sociolinguistic surveys were disheartening yet encouraging for each community. On the one hand, findings pointed to the possibility of the loss of the Keres language within the next several decades or sooner. As then-fluent speakers aged and retired from their traditional and secular leadership responsibilities, no one would be capable of carrying on governance functions, which are conducted solely in Keres. On the other hand, the findings revealed that there remained a considerable number of fluent speakers residing in each of these communities and, if revitalization

efforts were initiated promptly and carefully, language shift could be stemmed and even reversed.

Cochiti implemented its community-based efforts in 1996 and Acoma in 1997. Cochiti's and Acoma's first pilot efforts were directed at the revitalization of Keres among children through summer language immersion programs. In succeeding years, each tribe offered classes for tribal employees including song composition classes in which young men are mentored by male elders in the cultural protocol and process for composing traditional Keres songs, and traditional cooking classes for women. Traditional culinary arts is a specialized area of knowledge that is particularly important for ceremonial occasions. In these classes young women are paired with more knowledgeable and skilled older women to learn Keres.

The teaching in these community-based programs focuses on daily interactive language learning activities solely in Keres; no English is used. As one might imagine, this type of language teaching involves intense training of fluent speakers in immersion and second language acquisition teaching methods. Prior to the start of the programs, instructors also must plan language lessons to re-engage people of different ages in the contexts of the home and community. It is hoped that these language activities will not only reinvigorate the Keres language, but, just as vital, strengthen the cultural traditions and activities critical for the life of the community as a whole. Since the launching of the Cochiti and Acoma community-based programs, including a high school program at Acoma and a "language nest" in Cochiti — the latter modeled after the Maori *Te Köhanga Reo* preschools in New Zealand — the renewal of Keres continues to proceed

with much success in restoring Keres language use among families and in the community.

Language Planning at *Pikuni,* the Blackfeet Tribe of Montana

Along with the Cochiti and Acoma community-based initiatives, Pikuni, the Blackfeet Tribe of Montana, offers a language immersion school called Nizipuhwahsin, ("Real Speak"). The school is recognized as a successful and effective model for Native language renewal and maintenance. It is operated by the Piegan Institute, located in the foothills of the Rocky Mountains in northwestern Montana, a community-based, non-profit organization founded in 1987 to renew its namesake language, Piegan. The Nizipuhwahsin school serves Blackfeet children in kindergarten through eighth grades.

A sociolinguistic survey conducted in the early 1990s revealed that of the nearly 16,000 Blackfeet tribal members, 200 were fluent speakers of Piegan. Today, according to Joycelyn Davis-DesRosier, parent and immersion teacher, the school serves approximately 60 students, with a waiting list of over 100.[24] Similar to the Cochiti and Acoma language renewal programs, deliberate planning took place about the types of language learning settings and activities that promote intergenerational language use in the homes and wider community. Of equal importance, these activities need to support the academic learning of Blackfeet children. The success of this approach is demonstrated by the fact that two decades ago, no child was speaking Piegan as a first language. Today, children attending the Piegan immersion school are not only performing well in mainstream schools (Nizipuhwahsin graduates attend local public high schools), they are being sought out by adults to converse in Piegan at important

Blackfeet social and ceremonial activities and events, including leading prayers for Native ceremonies.[25]

Issues of language revitalization concern many Native American families, communities, and schools. Community-based efforts represent one approach that has proven effective for certain tribal nations. Other efforts take place in tribal, community, charter, and public schools. The next section examines two cases that exemplify these school-based initiatives.

School-Based Language Planning and Revitalization

This section examines school-based Native-language immersion programs that have proven successful in cultivating young Native-language speakers and enhancing students' academic success. Adapted from highly-effective French-English immersion programs in Canada and Mäori language immersion in Aotearoa/New Zealand,[26] two well-documented Native American language immersion programs have been implemented in Hawai'i and the Navajo Nation. These programs have been effective in promoting children's bilingualism and academic achievement, and they serve as models for language education planning and policy for other Indigenous peoples.[27]

Hawaiian Immersion

Indigenous immersion in Hawai'i is arguably the most dramatic language revitalization success story to date. Hawaiian had a long and rich tradition in which it served as the language of government, religion, business, education, and the media. But by the mid-20th century, Hawaiian was spoken by only a few hundred inhabitants of one

island enclave. Beginning with Captain James Cook's arrival in 1778, the European invasion had decimated the Native population and dislocated survivors from traditional homelands. Following the illegal takeover of the Hawaiian monarchy by the U.S. military in 1898, Hawai'i was annexed as a U.S. territory and in 1959, it became the 50th state.

Prohibitions against Hawaiian-medium instruction and mandates that all government business be conducted in English further diminished the viability of Hawaiian as a mother tongue. According to Sam L. No'eau Warner, between 1900 and 1920, most Hawaiian children began speaking a local variety of English called Hawaiian Creole English. Not until the 1960s, in the context of broader civil rights reforms, did a resistance or "Hawaiian renaissance" movement take root. "From this renaissance," Warner writes, "came a new group of second-language Hawaiian speakers who would become Hawaiian language educators."[28]

At a 1978 state constitutional convention, Hawaiian and English were designated co-official languages. At the same time, the new constitution mandated the promotion of Hawaiian language, culture, and history. Encouraged by these developments and the example of the *Te Köhanga Reo* or Maori preschool immersion "language nests," a small group of parents and language educators began to establish a similar program in Hawai'i.[29]

The Hawaiian immersion preschools or *'Aha Pünana Leo* (language nest gathering) are designed to strengthen the Hawaiian *mauli*—culture, worldview, spirituality, morality, social relations, "and other central features of a person's life and the life of a people."[30] The family-run preschools, begun in 1983, enable children to interact

with fluent speakers entirely in Hawaiian. "The original concept of the Pünana Leo," program co-founders William Wilson and Kauanoe Kamanä write, was not "academic achievement for is own sake," but rather the re-creation of an environment "where Hawaiian language and culture were conveyed and developed in much the same way that they were in the home in earlier generations."[31] Wilson and Kamanä describe a typical Pünana Leo day:

> There is a first circle in the morning, where the children participate in … singing and chanting, hearing a story, exercising, learning to introduce themselves and their families…, discussing the day, or … some cultural activity. This is followed by free time, when children can interact with different materials to learn about textures, colors, sizes, and so on, and to use the appropriate language based on models provided by teachers and other children. Then come more structured lessons [on] pre-reading and pre-math skills, social studies, and the arts….Children then have outdoor play, lunch, and a nap, then story time, a snack, a second circle, and outdoor play until their parents come to pick them up again.[32]

One unique feature of the Hawaiian context is the presence of a single school district that serves the entire state. As Pünana Leo preschoolers prepared to enter Hawai'i's English-dominant public schools, their parents pressured the state for Hawaiian immersion elementary and secondary schools. Parental boycotts and demonstrations led to immersion streams being established within existing public schools. One school, Anuenue, provides full immersion to children from birth through grade 12. In other Hawaiian-medium schools, children are educated entirely in Hawaiian until fifth grade,

when English language arts is introduced. A third language is introduced to intermediate and high school students as well.

In 2005, there were eleven full-day 11-month immersion preschools, and the opportunity for an education in Hawaiian extended from preschool to graduate school (see Table 2). The total pre-K–12 enrollment in Hawaiian immersion schools was approximately 2,000.[33] Wilson and Kamanä cite two other language revitalization accomplishments: the development of an interconnected group of young parents who are increasing their proficiency in Hawaiian, and the creation of a more general environment of support for the language, including the official use of Hawaiian in the state's public school system.[34]

Table 2: Pre-K–12 Hawaiian Language Immersion Programs

Level	Program Type	Number
Pre-K	Private, community-based *Aha Punana Leo* preschools	11
K-12	Elementary sites	9
	Charter school sites	5
	Intermediate sites	3
	Intermediate/high school sites	2
	High school sites	2
	K-11 site	1
	Comprehensive pre-K–12 site	1
	Total Hawaiian medium K-12 public schools	*23*
Pre-K–12 Summary	***Private, public, and public charter schools***	***34***

Source: Department of Education State of Hawai'i, Office of Curriculum, Instruction and Student Support/Instructional Services Branch, 2005.

Although Hawaiian immersion has emphasized language revitalization as opposed to academic achievement, these programs have nonetheless yielded significant academic benefits. Immersion students have garnered prestigious scholarships, enrolled in college courses while still in high school, and passed the state university's English composition assessments despite receiving the majority of their English, science, and mathematics instruction in Hawaiian. Student achievement on standardized tests has equaled, and in some cases, surpassed that of Native Hawaiian children enrolled in English-medium schools, even in English language arts.[35] Beyond this, Hawaiian immersion has achieved program founders' goals of strengthening Native Hawaiian mauli, self-determination, and ethnic pride. "I understand who I am as a Hawaiian, and where Hawaiians stood, and where they want to go," a graduate of Anuenue states.[36] In the process, the program has served as a model and a catalyst for other Indigenous language reclamation efforts, as the following section illuminates**.**

Navajo Immersion

Navajo is an Athabaskan language, one of the most widespread Indigenous language families in North America. Navajo is spoken in the Four Corners region of the U.S. Southwest, where the 25,000-square mile Navajo Nation stretches over parts of Arizona, New Mexico, and Utah. With a history of Indigenous literacy spanning back to the 19th century, Navajo claims the largest number of speakers — approximately 150,000 — of any Indigenous group in the U.S.

These characteristics notwithstanding, Navajo is no longer the primary language of a growing number of school-age children. In a 1991 survey of 682 Navajo

preschoolers, Paul Platero found that over half were considered by their teachers to be English monolinguals.[37] In 1993, Wayne Holm conducted a study of over 3,300 kindergartners in 110 Navajo schools and found, similarly, that only half spoke any Navajo and less than a third were considered reasonably fluent speakers of Navajo.[38] In contrast, in the early 1970s, Spolsky and Holm reported that 95 percent of Navajo six-year-olds spoke fluent Navajo upon entering school.[39]

Given these statistics, the Navajo Nation has initiated a major language immersion effort in Head Start preschools, and a number of K-12 schools have launched language immersion programs. One of the better-documented programs operates at a public school in Window Rock, Arizona, near the reservation border. The immersion program began in 1986 at Fort Defiance Elementary School. Less than one-tenth of the school's five-year-olds were considered to be "reasonably competent" speakers of Navajo; only a third possessed passive knowledge of Navajo.[40] At the same time, a relatively high number of these students were identified as "limited English proficient"—a designation that might have resulted in their placement in remedial English programs. In this context, district educators opted for a full-immersion program similar to the Hawaiian and Maori models.

According to Agnes and Wayne Holm, the original curriculum included:

- Developmental Navajo.
- Reading and writing first in Navajo, then English.
- Math in both languages, with other subjects as content for speaking or writing.[41]

The program placed a heavy emphasis on critical thinking, process writing, and cooperative learning. In the lower grades, all communication occurred in Navajo. In the second and third grades, the program included a half-day in Navajo and a half-day in English. Fourth graders received at least one hour each day of Navajo instruction. In addition, the program required adult caretakers or relatives to spend time conversing with the child each evening in Navajo. Regarding parental involvement, Holm and Holm state:

> Although the immersion program never constituted more than one-sixth of the total enrollment … there were almost always more people at the potluck meetings of the immersion program than there were at the schoolwide parent-teacher meetings. We began to realize … that we had reached a number of those parents who had been "bucking the tide" in trying to give their child(ren) some appreciation of what it meant to be Navajo in the late 20th century.[42]

Table 3 summarizes achievement trends reported at the end of the program's first seven years of operation. By the fourth grade, Navajo immersion students performed as well on local tests of English as comparable students in mainstream English classrooms. Immersion students performed better on local assessments of English writing, and were well ahead on standardized tests of mathematics. On standardized tests of English reading, immersion students were slightly behind, but closing the gap.[43]

Table 3: Achievement Trends after the First Seven Years of Navajo Immersion Programming at Fort Defiance Elementary School, Arizona

Assessment Type	Navajo Immersion (NI) Students	Mainstream English (ME) Students
Local English reading assessments	Same as ME students	Same as NI students
Local Navajo assessments	Better than ME students	Worse than NI students and worse than their own kindergarten performance
Local English writing assessments	Better than ME students	Worse than NI students
Standardized mathematics assessments	Substantially better than ME students	Worse than NI students
Standardized English reading tests	Slightly behind but catching up with ME students	Slightly ahead of NI students

Source: Holm, A., & Holm, W. (1995). Navajo Language Education: Retrospect and Prospects. *Bilingual Research Journal, 19*(1), pp.141-167.

An additional finding from the Fort Defiance study is noteworthy. By the fourth grade, not only did Navajo immersion students outperform comparable non-immersion students on assessments of Navajo (a finding we would expect), but non-immersion students performed *lower* on these assessments than they had in kindergarten. They had, in effect, experienced "subtractive" bilingualism, losing much or all of the heritage-language abilities they possessed upon entering public school. Meanwhile, their immersion peers had the benefit of "additive," or enrichment, bilingual education,

exceeding or performing on par with their non-immersion peers while acquiring a second (heritage) language as well.

In 2000, the program was changed to combine multi-site immersion classrooms into one school, Tsé Ho Tso Primary-Intermediate School (which replaced the original program at Fort Defiance Elementary School). The current program emphasizes a standards-based curriculum and instruction aligned to quarterly assessment, with the gradual introduction of English, and separate Navajo and English classrooms in grades K-6.[44] Table 4 provides a breakdown of instructional time for Navajo and English.

Table 4: Percentage of Instructional Time in Navajo and English, Diné (Navajo) Immersion School, Window Rock Unified School District, Arizona, 2004

Grade	No. Classes	No. Students	Percent Navajo Instruction	Percent English Instruction
K	3	45	100 (7.5 hrs.)	0
1st	3	46	100 (7.5 hrs.)	0
2nd	3.5*	45	90 (6.75 hrs.)	10 (0.75 hrs.)
3rd	2.5*	32	80 (6 hrs.)	20 (1.5 hrs.)
4th	3	29	70 (5.5 hrs.)	30 (2.25 hrs.)
5th	2	27	60 (4.5 hrs.)	40 (3 hrs.)
6th	1	21	50 (3.75 hrs.)	50 (3.75 hrs.)
K-6 Summary	***18***	***245***	***50-100***	***0-50***

*Notes: For second grade's number of classes, this number includes one second-third grade combination class. For third grade's number of classes, this number includes one second-third grade combination.

Source: Johnson, F. & Wilson, J. (2004). Embracing Change for Student Learning: Diné Language Immersion School. Presentation at the 25th Annual American Indian Language Development Institute, University of Arizona, Tucson (June 26).

How are Tsé Ho Tso students performing academically? Table 5 shows achievement data for immersion and non-immersion third graders in 2004. (Third grade is a "benchmark" year for Arizona's Instrument to Measure Standards [AIMS] testing.) As indicated, the patterns are similar to those reported by Holm and Holm in 1995 (see Table 3). Although there is room for improvement for both groups, the data shows that Navajo immersion students are consistently accomplishing what a large body of research on second language acquisition predicts: They are acquiring Navajo as a heritage language without cost to their English language development. This additive approach to second language acquisition stands in contrast to subtractive approaches that replace mother tongues with English. In the most extensive study of language minority student achievement to date (involving 700,000 students and representing 15 languages and five school systems), additive approaches were shown to be "the most powerful predictor of academic success," even for "children dominant in English who are losing their heritage language."[45]

Table 5: Percentage of Third Grade Students in Navajo Immersion (NI) and Mainstream English (ME) Classrooms Meeting or Exceeding State Standards on the AIMS Test, 2004

Subject Area	NI Students	ME Students
Mathematics	68%	15%
English Reading	36%	37%
English Writing	55%	35%

Source: Johnson, F. & Wilson, J. (2004). Embracing Change for Student Learning: Diné Language Immersion School. Presentation at the 25th Annual American Indian Language Development Institute, University of Arizona, Tucson (June 26).

Case Study Summary

The Pueblo, Blackfeet, Native Hawaiian, and Navajo projects detailed in the previous sections illustrate both the challenges and the promise of LPP activities designed to revitalize endangered Indigenous languages. The challenges include teacher training (sometimes including, as in the Hawaiian case, learning the heritage language as a second language as part of teacher preparation), materials development (also called corpus planning), and securing the ideological and financial commitment of stakeholders and educational institutions. The programs profiled here also illustrate the promise of grass roots or bottom-up language revitalization initiatives, both in strengthening Indigenous languages and promoting children's academic success.

These school- and community-based initiatives serve as guides to current and future language education activities. The key findings from these cases are:[46]

1. *Alternative routes to English proficiency are effective.* Academically rigorous heritage-language immersion programs represent an effective alternative to English-only schooling, even for students with limited proficiency in the heritage language. Because these programs develop bilingualism (and often, bi-literacy) while enhancing students' academic achievement, they deserve serious attention by education practitioners and policymakers.
2. *Time spent learning the heritage language does not impede English language learning and in general, has salutary academic effects.* In line with long-term evaluations of Indigenous heritage-language programs worldwide, the cases here show that: (a) time spent learning a heritage/community language is *not* time lost in developing English; (b) students in heritage/community language

programs can perform *as well as or better than* their peers in non-immersion classes on academically rigorous tasks; (c) heritage-language programs enhance self-esteem and cultural pride; and (d) the *absence* of sustained heritage-language instruction has the dual negative effect of stripping students of a powerful learning resource—the community language—and contributing language shift.

3. *Acquiring a heritage language as a second language takes several years.* Research on Indigenous-language immersion supports other research that shows that it takes five to seven years to develop age-appropriate academic proficiency in a second language. Thus, the policy implication is that heritage-language immersion should be built into school curricula for at least this period of time.
4. *Heritage language immersion programs strengthen relationships between children, adults, and the community.* Indigenous heritage-language immersion programs offer unique opportunities for bringing parents and elders directly into community- and school-based learning, fostering positive child-adult interaction inside and outside of school. This is important not only for nurturing the Indigenous/heritage language, but for helping children be successful in school. Equally important, heritage-language immersion contributes to retention of family intimacy and the repatriation of language and culture on a community-wide basis—both crucial aspects of individual and communal identity.

5. *The transfer of literacy abilities is complex.* Research on Indigenous-language immersion demonstrates that children's bi-literacy development is more complex than the simple transfer of mother-tongue abilities to English. English-dominant (but limited English proficient) Navajo and Hawaiian students learned to read first in the heritage language, transferring those abilities to English. These findings do *not* support the reverse practice—English immersion or submersion for students with a primary language other than English, an approach promoted by current state English-only laws. Rather, the findings reported in this policy brief indicate that the validation of students' natal culture, use of the heritage language for high-level intellectual tasks, and development of multiple literacies for distinct purposes are all essential components for ensuring language minority students' academic success.
6. *Additive bilingualism enhances achievement and equity.* As indicated in the introduction to this policy brief, Indigenous students have historically been forced to make either-or choices: *Either* you speak English and become a success, *or* you speak the heritage language and become a failure. Well-designed and implemented heritage-language programs such as those profiled here show these either-or assumptions to be both fallacious and deleterious to Native American students' academic success. These findings reinforce international research on the benefits of additive bilingualism for ensuring equity of educational outcomes and opportunities for language minority students.

7. *The success of LPP efforts in these cases and others is integrally tied to tribal sovereignty.* The success of LPP efforts also is tied to the right to self-education and to cultural and linguistic expression according to local languages and norms. Fundamental to this is the right of a people to speak and teach their mother tongue to their children.

Analysis of the Present Policy Moment[47]

In 1990, Congress passed the Native American Languages Act (NALA), reversing more than two centuries of Indian education policy and vowing to "preserve, protect, and promote the rights and freedom of Native Americans to use, practice, and develop Native American languages."[48] NALA further makes it federal policy to "use the Native American languages as a medium of instruction in all schools funded by the Secretary of the Interior."[49] Some have argued that NALA is a purely symbolic gesture, akin to "locking the barn door after the horse is stolen."[50] There is some validity to this claim, especially in light of the legislation's meager funding (authorized two years after the bill's initial passage): approximately $1 million per year. If distributed evenly among more than 550 federally recognized tribes, this would amount to approximately $1,800 per tribe per year — hardly adequate to address the magnitude of tribal LPP needs.

The analysis offered here, however, suggests a more complex interpretation. NALA represents both a resource for and an expression of Indigenous linguistic and education rights. The product of Indigenous vision and design (the bill was crafted and propelled through Congress by Indigenous linguists and educators), NALA is a formal articulation of grass roots LPP goals. Although NALA funding has been limited, it has

raised consciousness about language endangerment and supported some of the boldest LPP initiatives to date, including the community- and school-based programs described in this policy brief.

Less than a decade after NALA's passage, Congress passed P.L. 107-110, the No Child Left Behind Act of 2001 (NCLB). In combination with state constitutional amendments that ban bilingual education, such as Arizona's Proposition 203 and California's Proposition 227, NCLB further restricts schools' ability to implement NALA guarantees. The net effect is to limit the school-based educational choices available to Native students, their parents, and teachers.

Recent research and a national survey have documented the unintended negative consequences of NCLB for the students, communities, and schools it most directly affects. A recent U.S. Civil Rights Commission report found that NCLB has done little to close the achievement gap. The report notes that the policy's prescriptive nature, its high stakes for minority students and schools, and its failure to close the gap in financial resources between the richest and poorest districts are actually widening the gap between children of color and their more affluent White peers.[51] Further, the Commission expressed concern that "the emphasis on testing built into NCLB will result in 'teaching to the test' at the expense of developing reasoning and critical thinking skills."[52] Similar problems have been noted by Amrein and Berliner, Crawford, and Wiley and Wright.[53] Even those researchers who have praised NCLB because it requires districts to disaggregate achievement data by "race"/ethnicity, social class, ability, and English proficiency — thereby motivating school districts to focus greater attention on students so classified — note that teachers often respond to the pressures of high-stakes

accountability by implementing such detrimental practices as increasing special education placements, preemptively retaining students in grade, and limiting time spent on "low-stakes" subjects such as science and social studies.[54]

In 2005, the National Indian Education Association (NIEA) conducted 11 regional hearings on NCLB throughout the U.S. The purpose of these hearings, which included testimony by 120 witnesses, was to:

> … gather information on the impact of [NCLB] on American Indian, Alaska Native, and Native Hawaiian students. Specifically, NIEA hopes to garner recommendations about how to strengthen the existing law for Native students, as well as information about what is working within NCLB and how to support programs [that] have successfully met the mandates.[55]

In its report on the outcomes of these hearings, NIEA's leadership noted that while there is general agreement that schools should be accountable to Native communities and their children—a "welcome change," according to NIEA President David Beaulieu—there is widespread concern that the law:

- compromises tribal sovereignty and the rights of tribes, Indigenous communities, and parents to determine the education of their children;
- negatively impacts the ability of tribes and their schools to provide culturally-based education and to "connect education to the lives of students";
- has resulted in hyper-attention to standardized testing at the expense of pedagogically sound instruction; and,
- is inadequately funded for tribes and school districts to meet NCLB mandates and benchmarks.[56]

Further, the report notes that "these [legislative] changes … have not included the Native voice."[57]

In our own ongoing research, funded by the U.S. Department of Education Institute of Education Sciences, we have found that NCLB is having a chilling effect on the ability of tribal communities to provide linguistically, culturally, and academically rich curricula for Native students, even in nonpublic, federal, and community- and tribally-controlled schools. In formal interviews with teachers at one reservation school, for example, a teacher noted that, "The school can spend *some* time teaching [the Native language], but we can't be bogged down—we have so many requirements to meet." Another teacher put it more bluntly: "We don't have time to teach [the Native language]; we've been told to teach to the standards."[58] Teachers describe NCLB-prescribed reading programs as "not *real* teaching, but the kids are on task." In another large urban public school district in the study, tribal elders — key personnel in the provision of bilingual education services for Native youth — have been furloughed in accordance with NCLB mandates that paraprofessionals possess an associate's degree or equivalent, thereby eliminating Native language and culture classes in affected schools.

It has long been known that English standardized tests disadvantage Native American and other English language learners.[59] Equally well known is the fact that reservation schools are among the most under-resourced in the nation, with per capita student expenditures approximately one-third of that expended on middle-class students in mainstream schools.[60] The "bottom line" for schools in Indian Country is federal funding. In most reservation schools, federal funds make up the bulk of school budgets. The threat of the withdrawal of federal funds, which NCLB ties directly to student

performance on English standardized tests, hovers directly over the livelihood and future of Indigenous schools. For schools targeted by the law, the result is often the forced narrowing of the curriculum, hyper-attention to tests, and, as indicated above, the abandonment of proven Native language programs.

It remains to be seen how communities and schools such as those described here will address these challenges. In some cases, such as the Pueblos of New Mexico, school-based language and culture programs are being supplemented or replaced by Native-language programs initially developed and operated by tribes. In addition to its recently passed Indian Education Act — groundbreaking legislation designed to address the educational needs of its Native American students (including the maintenance of their languages) — New Mexico has developed memorandums-of-agreement (MOAs) with tribes. These state and tribal MOAs serve as government-to-government covenants designed to ensure equitable and quality education for Native American learners, including instruction in the Native language where this is desired by the tribe. The MOAs also address critical issues such as Native language teacher certification, language assessment, and culturally-appropriate language curricula in the school context.

Elsewhere, including the public school programs in Hawai'i and Window Rock, Arizona, school leaders have thus far managed to retain heritage-language programs, pointing to these programs' salutary educational effects. In Alaska, a statewide initiative has created a parallel set of "cultural standards" and guidelines intended to extend and complement education standards adopted by the state. These cultural standards "are predicated on the belief that a firm grounding in the heritage language and culture … is a

fundamental prerequisite for the development of culturally-healthy students and communities."[61]

Other Native communities have looked to charter schools as a means of retaining control over their schools and ensuring that the curriculum is infused with local linguistic and cultural content. Nearly one-tenth of all American Indian and Alaska Native students (50,000) are enrolled in charter schools.[62] Although the charter school movement has been controversial,[63] Native-operated charter schools represent one option for mediating the pressures of high-stakes, English-standardized testing and for exerting local/tribal education control.

Conclusions and Future Directions

In this policy brief, we have examined community- and school-based Native language planning and policy initiatives and their effects on language revitalization and students' academic achievement. In line with a larger data base on second language acquisition, we have argued that additive or enrichment programs such as those profiled here both strengthen threatened Indigenous languages and promote Native students' school success. What is particularly significant about these cases is that 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. Further, by their very nature these programs involve Native parents, elders, leaders, and communities directly in the formal educative process. These outcomes reflect well-articulated and widespread tribal LPP and education goals premised on tribal sovereignty as it is understood and exercised by Native peoples.

Despite these encouraging outcomes, the survival of these initiatives is being tested by recent federal and state policies that restrict curriculum options, pressuring schools labeled as "underperforming" to abandon proven Native language approaches in the quest to raise test scores. These consequences have been documented in a national survey by the NIEA and in our own federally-funded research, discussed in the previous section. We have briefly explored a few promising alternatives to this, including state-tribal MOAs, parallel standards for heritage language and culture instruction, and Native charter schools. Ultimately, each tribal community must decide on education options in accord with the local context, needs, and vision for its children. The case studies and LPP strategies analyzed here are only a few of the hopeful, self-determinant alternatives to the standardizing practices that characterize federal education policies such as NCLB. These initiatives suggest new educational and LPP directions, illuminating what families, communities, and their schools can do to ensure that their children are the beneficiaries of an education that is academically rich, empowering, and supportive of local languages and cultures.

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[59] For analyses of biases and negative effects of standardized tests on Native American and other language minority learners, see:

Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy.* San Diego: College-Hill Press.

Deyhle, D. (1986). Success and failure: A micro-ethnographic comparison of Navajo and Anglo students' perceptions of testing. *Curriculum Inquiry, 16,* 365-389.

Gipps, C. (1999). Socio-cultural aspects of assessment. In A. Iran-Nejad & P.D. Pearson (Eds.), *Review of Research in Education, 24,* 355-392. Washington, DC: American Educational Research Association.

Valdés, G., & Figueroa, R. (1994). *Bilingualism and testing: A special case of bias.* Norwood, NJ: Ablex.

[60] For data on the underfunding of American Indian schools, see

U.S. Commission on Civil Rights (2003). *A quiet crisis: Federal funding and unmet needs in Indian Country.* Washington, DC: U.S. Commission on Civil Rights.

[61] Assembly of Alaska Native Educators (1998). *Alaska standards for culturally-responsive schools*. Anchorage: Alaska Native Knowledge Network.

[62] Tirado, M. Left behind: Are public schools failing Indian kids? *American Indian Report,* September, 12-15.

[63] For a helpful treatment of the charter school controversy, see:

Good, T.L & Braden, J.S. with Drury, D.W. (2000). *Charting a new course: Fact and Fiction about charter schools*. Alexandria, VA: National School Boards Association.