

Revitalising Indigenous Languages in Homogenising Times

TERESA L. McCARTY

ABSTRACT *The world's linguistic and cultural diversity is endangered by the forces of globalisation, which work to homogenise and standardise even as they segregate and marginalise. Here, I focus on the struggle to conserve linguistic and cultural diversity among Indigenous groups in the United States. Native languages are in drastic decline. Yet even as more Native American children come to school speaking English, they are likely to be stigmatised as 'limited English proficient' and placed in remedial programmes. This situation has motivated bold new approaches to Indigenous schooling that emphasise immersion in the heritage language. This article presents data on these developments and their impacts on students' self-efficacy and school performance, analysing these data in light of critical theory and current knowledge in the field of bilingual education. Indigenous language reclamation efforts must not only confront a legacy of colonialism, but also mounting pressures for standardisation and English monolingualism. I conclude with an examination of these power relations as they are manifest in the struggle for Indigenous self-determination and linguistic human rights.*

Introduction

At the dawn of the twenty-first century, the world's linguistic and cultural diversity is under assault by the forces of globalisation—cultural, economic and political forces that work to standardise and homogenise, even as they stratify and marginalise. In the transnational flow of wealth, technology and information, the currency of 'world' languages is enormously inflated, while that of local languages is flattened and devalued. Pattanayak (2000) writes, 'By luring people to opt for globalisation without enabling them to communicate with the local and the proximate, globalisation is an agent of cultural destruction' (p. 47).

These pressures seriously threaten minority linguistic, cultural, and educational rights. In this article, I focus on the struggle for linguistic, cultural, and educational self-determination among Native people in the United States. Of 175 languages indigenous to what is now the USA, only 20 are being naturally acquired by children (Krauss, 1998). 'Our languages are in the penultimate moment of their existence in the world', Northern Cheyenne language activist Richard Littlebear (1996) warns:

Other American languages are perpetuated by the periodic influx of immigrants ... Our languages do not have the luxury of this influx ... They are vulnerable because they exist in the macrocosm of the English language and its awesome ability to displace and eliminate other languages. (p. xiv)

Littlebear is among a small but growing group of committed and informed language

Correspondence to: Teresa L. McCarty, Department of Language Reading and Culture, University of Arizona, PO Box 210069, Tucson, AZ, USA. Email: tmccarty@u.arizona.edu

educators working to reverse language loss. It is a race against time (Sims, 2001a), for, as Littlebear (1996) observes, Indigenous people have nowhere to turn but their own communities to replenish the pool of heritage language speakers. Increasingly, Native speakers are primarily the elderly. Krauss (1998, pp. 11–12) estimates that for 125 of 175 indigenous languages still spoken in the USA, the speakers represent the ‘grandparental generation and up’, including 55 languages (31%) spoken only by the very elderly. In a very real sense, Indigenous language loss is terminal (Warner, 1999, p. 72). ‘When an indigenous group stops speaking its language, the language disappears from the face of the earth’, writes linguist Leanne Hinton (2001, p. 3).

When even one language falls silent, the world loses an irredeemable repository of human knowledge. Nettle and Romaine (2000) observe that

Every language is a living museum, a monument to every culture it has been a vehicle to. It is a loss to every one of us if a fraction of that diversity disappears when there is something that can have been done to prevent it (p. 14).

More fundamentally, language loss and revitalisation are human rights issues. Through our mother tongue, we come to know, represent, name, and act upon the world. Humans do not naturally or easily relinquish this birthright. Rather, the loss of a language reflects the exercise of power by the dominant over the disenfranchised, and is concretely experienced ‘in the concomitant destruction of intimacy, family and community’ (Fishman, 1991, p. 4). Thus, efforts to revitalise Indigenous languages cannot be divorced from larger struggles for democracy, social justice, and self-determination (see May, 2001).

The causes of language shift in Native North American communities are as complex as the history of colonisation. Genocide, territorial usurpation, forced relocation, and transformations of Native economic, cultural and social systems brought on by contact with Whites, are all complicit in language attrition. These causes have been detailed elsewhere and I will not elaborate on them here (see, for example, Crawford, 1995a, 1996, 2000; McCarty, 1998, 2001, 2002; Watahomigie & McCarty, 1996). It is nonetheless important to highlight the singular role of compulsory English-only schooling in promoting language loss. For more than two centuries, schools were the only institutions both to demand exclusive use of English and prohibit use of the mother tongue (Kari & Spolsky, 1973, p. 32). ‘There is not an Indian pupil ... who is permitted to study any other language than our own,’ the US Commissioner of Indian Affairs wrote in 1887, articulating a federal policy that would remain in effect for much of the next century (cited in Crawford, 1992, p. 49). For many federal boarding school graduates, that policy left scars of shame and ambivalence about the Native language, leading them to socialise their children in English. The words of a young Hualapai man express the experience of many adults today:

I was not taught my language. My mom says my dad didn’t want us to learn, because when he was going through school he saw what difficulty *his* peers were having because they learned Hualapai first, and the schools were all taught in the English language. And so we were not taught, my brothers and I. (Watahomigie & McCarty, 1996, p. 101)

Paradoxically, schools and bilingual education programmes have become prime arenas for language reclamation, particularly where those schools are under at least a modicum of Indigenous community control (Dick & McCarty, 1996; Greymorning, 1997; Hinton & Hale, 2001; Holm & Holm, 1990, 1995; McCarty & Watahomigie, 1999; Watahomigie & McCarty, 1996; Wilson, 1998). In this article, I examine these efforts, focusing on recent developments in heritage language immersion in the USA. Language immersion, which provides all or most of children’s instruction in the target or heritage language, is

increasingly the pedagogy of choice among Indigenous communities seeking to produce a new generation of fluent Native language speakers.

My analysis is based on 25 years of work with Indigenous communities as an ethnographer, teacher and collaborator in local, state and national language education programmes. I situate this analysis within research on second language acquisition and bilingual education, and within a critical theoretical framework that acknowledges and works to transform coercive relations of power. Specifically, I address two questions: How effective have Indigenous language reclamation efforts been in promoting children's bi/multilingualism and their success in school? Here, I define success as equality of opportunity to achieve, through schooling, personal, Indigenous community, and larger societal educative goals. Second, what impacts have Indigenous language reclamation efforts had on reversing language shift?

My assumption throughout this analysis is that local languages are irreplaceable intellectual, social and cultural resources to their speakers and to humankind (Ruiz, 1984). I begin with an overview of the current state of knowledge on bilingual/bicultural education and second language acquisition, contextualising that knowledge base within the USA and Canada. I then present data on three well-documented Indigenous immersion programmes and a large-scale comparative research project currently under way. I conclude by considering the challenges faced by Indigenous communities in retaining their languages in the face of globalisation and the concomitant homogenising and polarising pressures it yields.

Foundational Research on Bilingual Education and Second Language Acquisition

Research in the fields of education, linguistics, anthropology and cognitive psychology is unequivocal on one point: students who enter school with a primary language other than the national or dominant language perform significantly better on academic tasks when they receive consistent and cumulative academic support in the native/heritage language. In a Congressionally mandated study that followed over 2000 native Spanish-speaking elementary students for four years, Ramírez (1992) found that students who received 40% or more of their instruction in Spanish throughout their elementary school education performed significantly better on tests of English reading, oral English, and mathematics than students in English-only and early-exit bilingual programmes. A subsequent investigation by Ramírez of 12,000 students in the San Francisco Unified School District showed that students who received instructional support in their native language for five years before being transitioned to all-English classes outperformed students in all-English classrooms on the Comprehensive Test of Basic Skills [1]. Further, students in long-term or late-exit bilingual education realised a higher overall grade point average and had the highest attendance rates, 'always exceeding the district average' (Ramírez, 1998, p. 1). And in the most extensive longitudinal study of language minority student achievement to date (1982–1996), Thomas and Collier (1997) found that for 700,000 students representing 15 languages in five participating school systems, 'the most powerful predictor of academic success' (p. 39) was schooling for at least four to seven years in the native/heritage language. Here, 'academic success' was defined as 'English learners reaching ... full parity with native-English speakers in all school content subjects (not just English proficiency) after a period of at least 5–6 years' (Thomas & Collier, 1997, p. 7). What is especially important about the Thomas and Collier study is that these findings held true for children who entered school with no English background, children raised bilingually from birth, and 'children dominant in English who [were] losing their heritage language' (Thomas & Collier, 1997, p. 15). The latter characteristics closely parallel those of Native American learners today.

These studies support earlier research showing that it takes children four to seven years to reach grade-level norms on assessments of cognitively demanding academic tasks in the second language (Cummins, 1981, 1986). This time is necessary to develop cognitive academic language proficiency, the ability to use a second language for context-reduced and intellectually challenging tasks, including literacy (Cummins, 1986, 1989, 1996). As Cummins and others have noted, while second language learners are developing these proficiencies, native speakers—especially those from the privileged social classes—are not ‘standing still’. Time and exposure to comprehensible second language input in intellectually challenging and socially significant activity are necessary for second language learners to ‘close the gap’ (Cummins, 1981; Krashen, 1996; Thomas & Collier, 1997).

The US research is supported by studies of second language learning from around the world (see, for example, Cummins & Corson, 1997; Genesee, 1994; Grosjean, 1982; Hakuta, 1986; Skutnaab-Kangas & Cummins, 1988; Troike, 1978; Tucker, 1980). Of particular note is research on French immersion programmes in Canada, in which monolingual English-speaking children receive all instruction in French for the first several years of school, after which formal English instruction is introduced for a portion of the school day. With each successive year, other content area subjects are taught in English until a 50–50 French-English instructional approach is reached by grade 6. Long-term studies of Canadian immersion show, first, that children’s proficiency in French increased without detriment to their English abilities or acquisition of academic content (Genesee, 1987). Moreover, this research indicates that this process is cumulative: the ‘ability to function in context-reduced cognitively demanding tasks in the second language is a gradual learning process ... indicated by the fact that immersion students take up to six to seven years to demonstrate average levels of achievement in the second language relative to speakers of the language’ (Cummins & Swain, 1986, p. 56).

Participants in Canadian French immersion programmes have typically been the children of White, middle-class parents who desired an academic enrichment programme for their children. These are children whose mother tongue, far from being threatened, is the language of global power and prestige. As a group, these students have, historically, done well in school. This situation differs markedly from that of Native American learners, whose languages and identities have been the target of explicit school-based eradication campaigns, and whose parents and communities have been economically, politically and socially oppressed. Further, Indigenous students’ language backgrounds are more varied and complex: they may enter school speaking the Native language as a primary language, have a passive understanding of the heritage language, or have no heritage language proficiency at all. Their situation is also complicated by the varieties of English spoken within Indigenous communities, which are typically modified by the structures and use patterns of the heritage language (see, for example, Henze & Vanett, 1993; Leap, 1977; see also Cahill & Collard, this issue). Hence, even though more Indigenous students speak English as a first language, they are likely to be stigmatised as ‘limited English proficient’ and to be ‘foreordained for failure by being labeled *at risk*’ (Ricento & Wiley, 2002, p. 3).

In the next section, I examine the ways in which research on bilingual schooling among non-Indigenous learners applies to the unique characteristics of Indigenous language education. In particular, I consider the ways in which Indigenous bilingual/bicultural education programmes have transformed historically subtractive, deficit-oriented schooling into an additive, enrichment approach—a pedagogy ‘associated with superior school achievement around the world’ (Thomas & Collier, 1997, p. 16).

Foundational Research on Native American Bilingual/Bicultural Education

Although published studies are limited, the positive effects of well-implemented Native American bilingual education programmes are well documented. In the early 1970s, the Navajo community school at Rock Point, Arizona, began one of the first modern Indigenous literacy programmes [2]. Initial data from Rock Point demonstrated that monolingual Navajo-speaking children who learned to read first in Navajo not only outperformed comparable Navajo students in English-only programmes, but also surpassed their own previous annual growth rates and those of comparison-group students in Bureau of Indian Affairs schools (Rosier & Farella, 1976). In a 25-year retrospective analysis of the Rock Point programme, programme cofounders Agnes Holm and Wayne Holm (1990, pp. 182–184) describe the ‘four-fold empowerment’ engendered through bilingual education there: of the Navajo school board, who ‘came to acquire increasing credibility with parents, staff, and students’; of the Navajo staff, whose vision and competence were recognised by outside observers as well as community members; of parents, who for the first time played active roles in their children’s schooling; and of students, who ‘came to value their Navajo-ness and to see themselves as capable of succeeding because of, not despite that Navajo-ness’ (see also Holm & Holm, 1995).

Forty miles south-west of Rock Point is Rough Rock, the site of the first American Indian community-controlled school. I have been active at Rough Rock as a researcher, curriculum writer and consultant to the school’s bilingual/bicultural programme for more than 20 years (see, for example, McCarty, 1989, 1998, 2001, 2002). From 1988 to 1995, Rough Rock teachers and I conducted a long-term study of the development of Rough Rock students’ bilingualism and biliteracy using both qualitative and quantitative methods (Begay *et al.*, 1995; Dick and McCarty, 1996; McCarty, 1993, 2002; McCarty & Dick, 2003). Our focus was the K-6 Rough Rock English-Navajo Language Arts Programme (RREN LAP). In this study, we followed a cohort of students who had received consistent, uninterrupted bilingual instruction during their first four years of school, including initial literacy in Navajo, and compared these students’ performance on standardised and local assessments with that of Rough Rock students who had not participated in RREN LAP. Although both student cohorts scored below national norms on standardised tests, RREN LAP students consistently outperformed the comparison group on national and local measures of achievement (Begay *et al.*, 1995; McCarty, 1993). On local assessments of English listening comprehension, RREN LAP kindergarteners posted mean scores of 58% at the end of the 1989–90 school year. After four years in the programme, the same students’ mean scores rose to 91% (McCarty, 1993). On standardised reading sub-tests, these students’ scores initially declined, then rose steadily, in some cases approaching national norms. Further, there was strong evidence of teacher, student and parental empowerment, as Navajo teachers discarded basal readers and scripted skill-and-drill routines and organised instruction around cooperative learning centres and culturally relevant themes. Parents and elders were actively involved in these pedagogical changes, assisting in students’ field-based research projects, serving as language models and instructors, and providing cultural demonstrations in Navajo both inside and outside of school.

Our analysis revealed several conditions underlying these outcomes. First and foremost was the presence of a stable core of bilingual educators with shared values and aspirations for their students. Second, teachers received long-term support from the building principal and from outside experts, including educators from the Hawai’i-based Kamehameha Early Education Programme (KEEP). Third, the project received consistent funding over several years, a rare occurrence in American Indian schools, which are the most poorly funded in the

USA. These conditions promoted a school culture that valued local expertise and encouraged teachers to reflect critically on their teaching, take risks in enacting instructional reform, and act as agents of positive change. As these conditions became normalised within the elementary school, Native teachers were able to create parallel conditions in their classrooms whereby students could act as critical agents and inquirers in Navajo and English (McCarty & Dick, 2003; see also Begay *et al.*, 1995; Lipka & McCarty, 1994).

Lipka *et al.* (1998) document similar processes of Native teacher, student, and community empowerment for the Yup'ik of southwestern Alaska, where Native teacher-leaders (the *Cuulistet*) worked in apprentice relationships with elders to bring Indigenous knowledge into science and mathematics instruction. Lipka *et al.* report, 'In hindsight, ... we chose methods that provided insight into the processes that can reverse cultural and linguistic loss' (1998, p. 219; see also Lipka & McCarty, 1994). And among the Hualapai of north-western Arizona, a national bilingual/bicultural demonstration project produced the first practical Hualapai orthography and grammar, an integrated K-8 Hualapai curriculum, and a cadre of certified Native teachers. Long-term studies of the Hualapai programme show significant student gains on standardised and local assessments, as well as improvements in student attendance and graduation rates (Watahomigie & McCarty, 1994, 1996; Watahomigie & Yamamoto, 1987).

In each of these cases, the benefits to students correspond directly to the development and use of curricula grounded in local languages and knowledges, and to the cultivation of a critical mass of Native educational practitioners. These processes can be described as 'bottom-up' language planning: emanating from within Indigenous communities, these initiatives created a means of empowerment for Native teachers, children and communities. Hornberger (1996) notes that such empowerment 'Importantly... is one that confirms indigenous identity, language, and culture, while simultaneously promoting development and modernization for the indigenous peoples' (p. 361).

As promising as these achievements are, they have not been sufficient to counter the forces of language displacement and loss. As McLaughlin observes, 'You pave roads, you create access to a wage economy, people's values change, and you get language shift' (cited in Crawford, 1995b, p. 190; see also Lee & McLaughlin, 2001). These realities have led many Native communities to institute full heritage language immersion as a tool for language recovery, cultural survival and academic enrichment. Applying lessons learned from 'super-immersion' models in Canada (Genesee, 1987; Warner, 2001), Māori immersion in New Zealand (May, 1999; see also Bishop, this issue), and from research such as that reported here, Indigenous language immersion programmes provide all or most instruction in the endangered language. 'There is no doubt that this is the best way to jump-start the production of a new generation of fluent speakers,' Hinton (2001, p. 8) states. As the following sections illustrate, Indigenous language immersion programmes are proving to be successful in enhancing Native students' academic achievement as well.

Hawaiian Immersion

Indigenous immersion in Hawai'i is arguably the most dramatic language revitalisation success story to date, certainly within the US context. From a long and rich tradition in which Hawaiian served as the language of government, religion, business, education, and the media, Hawaiian by the mid-twentieth century had become restricted to a few hundred inhabitants of one island enclave. The European invasion, which began with Captain James Cook's arrival in 1778, had decimated the Native population and disenfranchised survivors

from traditional lands. In 1898, following the illegal takeover of the Hawaiian monarchy by the US military, Hawai'i was annexed as a US territory. In 1959, it became the 50th state.

Bans on 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 Warner (2001, p. 135), 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 came a new group of second-language Hawaiian speakers who would become Hawaiian language educators', writes Warner (2001, p. 135).

In a 1978 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 (Warner, 2001). Encouraged by these developments and the example of the Te Kōhanga Reo or Māori pre-school immersion 'language nests' in New Zealand (see Bishop, this issue), a small group of parents and language educators began to establish a similar programme in Hawai'i (Warner, 2001, p. 136; Wilson, 1998, 1999).

The Hawaiian immersion pre-schools or *Aha Pūnana Leo* ('language nest gathering'; Wilson & Kamanā, 2001, p. 149), 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' (Wilson & Kamanā, 2001, p. 161). The family-run pre-schools, begun in 1983, enable children to interact with fluent speakers entirely in Hawaiian. 'The original concept of the Pūnana Leo,' programme co-founders William H. Wilson and Kauanoē Kamanā write, was not 'academic achievement for its 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' (2001, p. 151). Wilson and Kamanā (2001) describe a typical 'Pūnana 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. (pp. 151–152)

As Pūnana Leo students prepared to enter Hawai'i's English-dominant public schools, their parents pressed the state for Hawaiian immersion elementary and secondary schools. Parental boycotts and demonstrations led to the establishment of immersion 'schools-within-schools'—streams or tracks within existing school facilities. The exception is one full-immersion school serving children from birth through grade 12 (Warner, 2001). In these schools, children are educated entirely in Hawaiian until fifth grade, when English language arts is introduced, often in Hawaiian. 'English continues to be taught for one hour a day through high school,' Kamanā and Wilson (1996) state; 'intermediate and high school aged children are also taught a third language' (p. 154).

As of 2001, there were 11 full-day, 11-month immersion pre-schools, and the opportunity for an education in Hawaiian extended from pre-school to graduate school (see Table I). In 1999–2000, the total pre-K–12 enrolment in Hawaiian immersion schools was 1,760, and approximately 1,800 children had learned to speak Hawaiian through immersion schooling (Warner, 1999, 2001; Wilson, 1999). Wilson and Kamanā (2001) cite two other language

TABLE I. Hawaiian Immersion Programme, 1999

I.	Pre-K Immersion
	• 11 private, community-based <i>'Aha Pūnana Leo</i> pre-schools
II.	Hawaiian-medium Public Schools
	<i>Kūla Kaiapuni Hawai'i</i> (Hawaiian Environment Schools), with Hawaiian immersion and English-in-Hawaiian:
	• 10 elementary sites
	• 3 intermediate sites
	• 1 intermediate/high school site
	• 1 comprehensive pre-K-12 site
III.	Institutions of Higher Education
	• Language Centre for teacher preparation, outreach, and curriculum development
	• College of Hawaiian language
	• Hawaiian Studies departments

Source: Wilson, 1998, 1999; Wilson & Kamanā, 2001

revitalisation 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 language support. 'Families speak Hawaiian with their children in supermarkets and find that they are congratulated for doing so by individuals of all ethnic backgrounds,' Wilson and Kamanā (2001, p. 153) write.

Pūnana Leo children are invited to sing in ... public malls ... Hawaiian-speaking children are also invited to participate through Hawaiian in the inauguration of [state and community] officials ... Most importantly, the Pūnana Leo provides a reason for the establishment of official use of Hawaiian in the state's public school system. (Wilson & Kamanā, 2001, pp. 153–154)

Although the programme has emphasised language revitalisation as opposed to academic achievement, Hawaiian immersion schooling has 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 standardised tests has equalled and in some cases surpassed that of Native Hawaiian children enrolled in English-medium schools, even in English language arts (Kamanā & Wilson, 1996; Wilson & Kamanā, 2001). There is also evidence that Hawaiian immersion develops students' critical literacy and cultural pride. 'I understand who I am as a Hawaiian, and where Hawaiians stood, and where they want to go,' a graduate of pre-K–12 immersion schooling states (Infante, 1999, p. E3).

These results have not materialised without substantial struggle or setbacks. For years, the programme fought outdated state laws and regulations that, among other things, prevented Native speakers from obtaining state-required certification to teach in the pre-schools (Warner, 2001). There has also been conflict within the revitalisation movement itself over authority, representation and authenticity of language use norms (Warner, 1999, 2001; Wong, 1999). Finally, Hawaiian is still largely restricted to the domain of schooling, which, as Warner (2001, p. 141) notes, is not in itself sufficient to reverse language shift. Nevertheless, immersion schooling has succeeded in strengthening the Hawaiian *mauli*, awakening consciousness and self-determination within the Native Hawaiian community, and enhancing children's academic success. In the process, the programme has served as a model and a catalyst for Indigenous language reclamation efforts throughout the USA.

Navajo Immersion

Navajo belongs to the Athabaskan language family, one of the most widespread Indigenous language families in North America. Navajo itself is spoken primarily in the Four Corners region of the US 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 nineteenth century (and perhaps the finest Indigenous language dictionary in print) [3], Navajo claims the largest number of speakers—approximately 150,000—of any Indigenous language group north of Mexico (Hale, 2001; see also Crawford, 1995a).

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 pre-schoolers, Platero (1992, 2001) found that over half were considered by their teachers to be English monolinguals. In 1993, Holm conducted a study of over 3,300 kindergarteners 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 (Holm & Holm, 1995; Wayne Holm, personal communication, February 14, 2000). My own recent work at Rough Rock suggests that about 50% of Rough Rock elementary students speak Navajo, and that their numbers and Native language proficiencies are declining each year. Some Rough Rock teachers place the numbers of Navajo-proficient primary school students much lower, at 30%. The escalating nature of the language loss crisis is illustrated in the fact that, just 30 years ago, Spolsky found that 95% of Navajo six-year-olds spoke fluent Navajo on entering school (Spolsky, 1976, 2002; Spolsky & Holm, 1977).

Given these statistics, the Navajo Nation has initiated a major language immersion effort in Head Start pre-schools, and a number of K–12 schools have launched language immersion programmes. One of the better documented programmes operates at the public elementary school in Fort Defiance, Arizona, adjacent to the tribal headquarters in Window Rock and very near the reservation border. Fort Defiance is an ‘emerging reservation town’; cross-cut by two major highways, it is a small hub of commercial activity with a growing urbanising professional class—individuals who may have ties to the land and traditional pastoral-agricultural lifestyles, but who tend to interact primarily in English (Arviso & Holm, 2001). When the Fort Defiance immersion programme began in 1986, less than a tenth of the school’s five-year-olds were ‘reasonably competent’ Navajo speakers (Holm & Holm, 1995, p. 148). Only a third were judged to possess passive knowledge of Navajo (Arviso & Holm, 2001, p. 204). At the same time, ‘a relatively high proportion of the English monolinguals had to be considered “limited English proficient”’, Holm and Holm report (1995, p. 148). That is, students possessed conversational English proficiency, but were less proficient in more decontextualised uses of English (Arviso & Holm, 2001, p. 205; see Cummins, 1989, pp. 29–32, for a discussion of conversational and academic language proficiencies). In this context, neither conventional maintenance nor transitional bilingual programmes were appropriate. According to the programme cofounders, ‘something more like the Maori immersion programmes might be the only type of programme with some chance of success’ (Arviso & Holm, 2001, p. 205).

The initial curriculum was kept simple: developmental Navajo, reading and writing first in Navajo, then English, and maths in both languages, with other subjects included as content for speaking or writing (Holm & Holm, 1995, pp. 149–150). The programme placed a heavy emphasis on language and critical thinking, and on process writing and co-operative learning. In the lower grades, all communication occurred in Navajo. By the second and third grades, the programme 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, programme leaders

insisted that an adult caretaker or relative ‘spend some time talking with the child in Navajo each evening after school’ (Arviso & Holm, 2001, p. 210). In fact, the degree of parental involvement has been quite impressive:

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 programme 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. (Arviso & Holm, 2001, p. 211)

Table II summarises findings from the project’s first seven years. By the fourth grade, Navajo immersion students performed as well on local tests of English as comparable non-immersion students at the school. Immersion students performed better on local assessments of English writing, and were ‘way ahead’ on standardised tests of mathematics, discriminatory as these tests are (Holm & Holm, 1995, p. 150). On standardised tests of English reading, students were slightly behind, but closing the gap. In short, immersion students were well on their way to accomplishing what research indicates on bilingual education around the world: they were acquiring Navajo as a heritage language ‘without cost’, performing as well as or better than their non-immersion peers by the fifth grade (Holm & Holm, 1995, p. 150; Arviso & Holm, 2001, pp. 211–212).

TABLE II. Comparison of Fort Defiance Navajo Immersion (NI) and Monolingual English (ME) Student Performance

Assessment	NI Students	ME Students
Local evaluations of English	Same as ME students	Same as NI students
Local assessment of Navajo	Better than ME students	Worse than NI students and worse than their own kindergarten performance
Local assessments of English writing	Better than ME students	Worse than NI students
Standardised tests of mathematics	Substantially better than ME students	Worse than NI students
Standardised tests of English reading	Slightly behind but catching up with ME students	Slightly ahead of NI students

Source: Arviso & Holm, 2001, pp. 211–212; Holm & Holm, 1995, p. 150

An additional finding from the Fort Defiance study is worthy of special note. By fourth grade, not only did Navajo immersion students outperform comparable non-immersion students on assessments of Navajo, but non-immersion students actually performed *lower* on these assessments than they had in kindergarten (see Table II). There is much debate about what schools can and cannot do to reverse language shift (see, for example, Fishman, 1991; Krauss, 1998; McCarty, 1998). The Fort Defiance data demonstrate the powerful negative effect of the *absence* of bilingual/immersion schooling and, conversely, its positive effect on the maintenance of the heritage language as well as on students’ acquisition of English and mathematics.

If Navajo—still the most vital Indigenous language in the USA—is a ‘test case’ for Indigenous language revitalisation (Slate, 1993), then the Fort Defiance programme is a model for school-based possibilities in reversing language shift. Like the Hawaiian experi-

ence, however, data from Fort Defiance clearly show that school-based efforts must be joined by family- and community-based initiatives as well. These data also suggest the ways in which such efforts can be nurtured by schools and their personnel. In the next section, I describe a very different approach—one initiated and undertaken outside schools entirely.

Keres Immersion

The Pueblos of the US Southwest are among the most ancient and enduring Indigenous communities in North America. Altogether, there are 20 Pueblo tribes, including the Hopis of northern Arizona, with the remaining 19 located along the Rio Grande and Rio Puerco in northern New Mexico. Four language families are represented among the New Mexico Pueblos. In this section, I focus on the Keres-speaking Pueblos of Acoma and Cochiti, both of which are actively involved in language reclamation.

Located 64 miles west of Albuquerque, Acoma Pueblo has a tribal enrolment of 5,000, approximately 3,000 of whom live on the quarter-million acre Acoma reservation (Sims, 2001b). While retaining a traditional matrilineal clan system and a governing system of secular officials appointed annually by religious leaders, Acoma participates vigorously in the wider economy, including tourism, marketing the famed pottery of its artisans, and operating a large tribal casino.

The 58,000-acre Pueblo of Cochiti is located further north, about 30 miles south-west of Santa Fe at the base of the Jemez Mountains along the Rio Grande. There are approximately 600 tribal members, with a median age of 27 (Benjamin *et al.*, 1996). Cochiti, too, retains a traditional religious calendar and a theocratic government that requires fluency in the Native language (Pecos & Blum-Martínez, 2001, p. 75). In both Pueblo communities, however, Native language loss is a growing concern (Romero, 2001; Sims, 2001b).

Cochiti and Acoma share with other New Mexico Pueblos a history of often brutal Spanish colonisation (see, for example, Spicer, 1962, pp. 152–186). The nineteenth century acquisition by the USA of the New Mexico Territory, and the forced incorporation of Pueblo communities into the expanding nation-state ‘introduced an even more rapid pace of new foreign influence,... especially in the socioeconomic and education domains’ (Sims, 2001b, p. 65; see also Minge, 1976, pp. 52–100). Like other Native peoples, the Pueblos were subject to forced assimilation carried out in mission and federal boarding schools. Pueblo communities were also impacted by their proximity to a major east–west railroad and interstate highway (both of which cross Acoma lands), and by the more recent enrolment of their children in nearby public schools. At Cochiti, the construction of a large federal dam destroyed ceremonial sites and family farmlands, precipitating widespread familial and communal displacement and Native language loss (Benjamin *et al.*, 1996, p. 121).

Since the 1990s, both Cochiti and Acoma have been actively involved in community-based language planning. According to Acoma tribal member and language educator Christine Sims (2001b, p. 67), a year-long language planning process revealed that ‘there were no children of pre-school or elementary school-age speaking Acoma as a first language’. Mary Eunice Romero, former director of the Cochiti language immersion programme, states that a similar survey at Cochiti showed that two-thirds of the population were not fluent Keres speakers (Romero, 2001). At the same time, both surveys showed a strong interest by adults and young people in revitalising the language (Pecos & Blum-Martínez, 2001; Romero, 2001; Sims, 2001b).

Both tribes began holding community-wide awareness meetings and language forums. ‘We had to convince the community, number one, that we were experiencing major language shift, and two, that there is something we can do about it’, Romero (2001) reports. In 1996,

Cochiti Pueblo launched an immersion programme and in 1997 Acoma held its first summer immersion camp. To model natural dialogue, both programmes paired teams of fluent speakers with small groups of students. At Cochiti, pairing fluent with partially fluent speakers/teachers enabled young people and adult teacher-apprentices to learn Keres together.

Romero (2001) notes that a programme axiom is to ‘never, never use English’. Instead, language teachers utilise strategies derived from research on second language acquisition, emphasising communication-based instruction and the use of realia, demonstrations, gestures, and other contextual cues. The focus in both programmes is on strengthening oral skills rather than literacy. Pecos and Blum-Martínez (2001) explain, ‘There is widespread support for keeping [the Native language] in its oral form ... The oral tradition ... has been an important element in maintaining [community] values [and the] leaders know that writing the language could bring about unwanted changes in secular and religious traditions’ (p. 76). Recently, Cochiti extended its efforts to year-round instruction in the public elementary school, where students receive daily Keres immersion in grades one to five. The tribe retains fiscal and operational control over the programme.

Preliminary programme data are encouraging. On national assessments of English language arts, students who participated in immersion classes performed significantly better than those in English-only classes (Sims, 2001a). More important to community members are the facts that children have gained conversational ability in Keres and that there is growing evidence of Native language use community-wide. Of Cochiti Pueblo, Pecos and Blum-Martínez (2001) report:

Across the community and within individual families, one can see closer, more intimate relationships ... as fluent speakers take the time to share their knowledge. In short, the children’s success is the community’s success, and many people are now aware of the need to speak Keres publicly and consistently. (p. 81)

The Cochiti and Acoma programmes have been recognised as exemplars of community-based language planning. ‘It is at the community level that people ... must defend their rights to their own languages and cultures,’ Wong-Fillmore (1996, p. 439) insists. ‘Revitalizing the language is up to us,’ Romero (2001, oral presentation) observes; ‘the true planners and implementers have to be local people’.

New Developments: the Native Language Shift and Retention Project

The Hawaiian, Navajo and Keres cases highlight the importance of understanding the socio-historical circumstances that have shaped the current status of Indigenous languages, as well as the local dynamics that promote language revitalisation. Documenting these processes and their impacts on Native students’ school achievement is the goal of a national research project under way at the University of Arizona [4]. Funded by the US Department of Education Office of Educational Research and Improvement (recently renamed the Institute of Education Sciences), the Native Language Shift/Retention Project is a comparative study of language shift and retention at six representative American Indian school-community sites. Drawing upon anthropological theories of minority student achievement, research on bilingualism, and principles of action research, the project staff are working with research collaborators at each site—Native and non-native educators and community members—to develop in-depth case studies of language education efforts and language proficiencies, ideologies and use patterns among youth and adults, and the relationship of these factors to students’ academic success.

The project responds directly to former US President Clinton's 1998 Executive Order, which calls for a comprehensive national research agenda in American Indian education to evaluate the role of Native languages and cultures in the development of educational strategies (*Federal Register*, 63, August 11, 1998, p. 42682). Subsequent to that Order, regional forums identified research priorities; language ability and the quality of educational programmes were key factors named as contributing to student learning. The forums noted that to date, there have been no comparative or multivariate studies of the role of heritage language speaking in Native American student achievement (Boesel, 1999).

Through this project we seek to address this gap in knowledge and to create a national database on the dynamics and implications of language loss and recovery. Equally important, we intend to use this knowledge to assist Native communities in maintaining their languages and advancing Indigenous self-determination.

Maintaining Linguistic and Cultural Distinctiveness

I began this article with questions concerning the efficacy of Indigenous language reclamation in promoting children's bi/multilingualism and academic success, and in reversing language shift. While research on these questions remains limited, the cases presented here, and early data from the Native Language Shift/Retention Project, suggest that immersion schooling *can* serve the dual roles of promoting students' school success and revitalising endangered Indigenous languages. Indeed, these roles appear to be mutually constitutive. And, given the gravity of the current state of language loss, anything less than full immersion is likely to be too little, too late.

Indigenous language revitalisation confronts not only a colonial legacy of linguistic genocide, and cultural displacement, but mounting pressures for standardisation. Those pressures are manifest in externally imposed 'accountability' regimes—high-stakes testing, reductionist reading programmes, and English-only policies such as those recently passed in California and Arizona [5]. These pressures come at a time when the USA is experiencing an unprecedented demographic shift stemming from the 'new immigration'—those who have emigrated to the USA since national origin quotas were abolished in 1965. Unlike earlier waves of immigration, which originated in Europe and were largely White, recent immigrants come primarily from Latin America, Southeast Asia and the Caribbean (Qin-Hilliard *et al.*, 2001). People of colour now comprise 28% of the nation's population, with the numbers expected to grow to 38% in 2024, and 47% in 2050 (Banks, 2001, p. ix).

In the context of these demographic transformations and the larger forces of globalisation, we are witnessing increasing intolerance for linguistic and cultural diversity. Nowhere is this more evident than in US schools. In school districts across the country, working-class students, students of colour, and English language learners are simultaneously being de-skilled in one-size-fits-all, phonics-based reading programmes, and constructed as deficient for their low performance on English standardised tests (Gutiérrez, 2001). There is nothing neutral about these processes. Masquerading as an instrument of equality—as reflected, for example, in the current US policy of 'leaving no child behind' [6]—the pressures for standardisation are, in fact, creating a new polarisation between those with and without access to opportunity and resources.

Can Indigenous cultural and linguistic distinctiveness be maintained in the face of these homogenising yet stratifying forces? I believe the answer is a qualified but optimistic 'yes'. Achieving this will require sustained community-based consciousness-raising, much like that described for the immersion programmes examined here, and committed efforts by those

who, like the Navajo parents at Fort Defiance, are determined to ‘buck the tide’ of linguistic and cultural repression (Arviso & Holm, 2001, p. 211).

Happily, there is evidence that these instances of community-based resistance are not isolated cases. In the summer of 1988, Native American educators from throughout the USA came together to draft the resolution that would become the 1990/1992 Native American Languages Act, the only federal legislation that explicitly vows to protect and promote Indigenous languages. Although meagrely funded, this legislation has spurred some of the boldest efforts in heritage language recovery to date, as well as having solidified a national network of Indigenous language activists (for examples, see Hinton & Hale, 2001; McCarty *et al.*, 1999).

Language—humankind’s indispensable meaning-making tool—*can* be an instrument of cultural and linguistic oppression. But this ‘tool of tools’ (Gutiérrez, 2001, p. 567) can also be a vehicle for advancing human rights and minority-community empowerment. The programmes discussed here illustrate the ways in which Indigenous communities have been able to protect and promote their distinctive diversity in homogenising times. Their efforts point the way out of the either-or dichotomies of reductionist, English-only pedagogies, toward a vision of democracy in which individuals and communities create and recreate themselves through multiple languages and discourses. Rooted in principles of social justice, this vision holds the promise of creating a more critically democratic, linguistically and culturally rich society for us all.

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NOTES

- [1] The presentation of these data should not be taken as an endorsement of the validity of standardised tests for evaluating student achievement, and in particular, for such evaluations across cultural contexts. Rather, I want to point out that on these tests, discriminatory and flawed as they are, students in bilingual education programmes outperformed comparable students in English-only programmes.
- [2] The first documented Indigenous literacy efforts by Indigenous speakers (as opposed to those of missionaries and government officials), was Sequoia’s Cherokee syllabary, published in 1821 and reprinted in Holmes & Smith (1976).
- [3] Young & Morgan’s (1987) *The Navajo Language: A Grammar and Colloquial Dictionary* remains a standard-bearer in the field.
- [4] I serve as co-Principal Investigator on the project with my colleague in the Department of Linguistics, Dr. Ofelia Zepeda. Dr. Mary Eunice Romero of Cochiti Pueblo is Research Assistant Professor and Coordinator for the project.
- [5] Euphemistically (and deceptively) called ‘English for the Children’, both the California and the Arizona voter initiatives, financed by California software millionaire Ron Unz, require public schools to replace multi-year bilingual education programmes with one-year English immersion for English language learners. In both states, passage of the proposition was followed by the adoption of an English-only school accountability programme (Gutiérrez *et al.*, 2002).
- [6] Part of the rhetoric of the 2000 US Presidential campaign, ‘Leaving No Child Behind’ subsequently became codified in the 2001 No Child Left Behind Act, which calls for ‘scientifically-based’ (phonics) reading programmes, heightened state surveillance over curricula and instruction, high-stakes testing, and public labelling and state disciplining of ‘under-achieving schools’.

REFERENCES

- ARVISO, M. & HOLM, W. (2001) Tséhoosooídi Ólta’gi Diné bizaad bihoo’aah: A Navajo immersion programme at Fort Defiance, Arizona, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).

- BANKS, J. A. (2001) Series foreword, in: G. VALDÉS, *Learning and Not Learning English in School: Latino students in American schools* (New York and London, Teachers College Press).
- BEGAY, S., DICK, G. S., ESTELL, D. W., ESTELL, J., MCCARTY, T. L. & SELLS, A. (1995) Change from the inside out: a story of transformation in a Navajo community school. *Bilingual Research Journal*, 19 (1), 121–139.
- BENJAMIN, R., PECOS, R. & ROMERO, M. W. (1996) Language revitalization efforts in the Pueblo de Cochiti: becoming “literate” in an oral society, in: N. H. HORNBERGER (Ed.) *Indigenous Literacies in the Americas: language planning from the bottom up* (Berlin and New York, Mouton de Gruyter).
- BOESEL, D. (1999) *Strategy for the Development of a Research Agenda in Indian Education* (Washington DC, National Library of Education).
- CRAWFORD, J. (1992) *Language Loyalties: a source book on the Official English controversy* (Chicago, IL and London, University of Chicago Press).
- CRAWFORD, J. (1995a) Endangered Native American languages: what is to be done, and why? *Bilingual Research Journal*, 19 (1), pp. 17–38.
- CRAWFORD, J. (1995b) *Bilingual Education: history, politics, theory and practice* (3rd edn) (Los Angeles, CA, Bilingual Education Associates).
- CRAWFORD, J. (1996) Seven hypotheses on language loss: causes and cures, in: G. CANTONI (Ed.) *Stabilizing Indigenous Languages* (Flagstaff, AZ, Northern Arizona University Center for Excellence in Education).
- CRAWFORD, J. (2000) *At War with Diversity: US language policy in an age of anxiety* (Clevedon, UK, Multilingual Matters Ltd).
- CUMMINS, J. (1981) *Bilingualism and Minority Language Children* (Toronto, Ontario Institute for Studies in Education).
- CUMMINS, J. (1986) Empowering minority students: a framework for intervention, *Harvard Educational Review*, 56, pp. 18–36.
- CUMMINS, J. (1989) *Empowering Minority Students* (Sacramento, CA, California Association for Bilingual Education).
- CUMMINS, J. (1996) *Negotiating Identities: education for empowerment in a diverse society* (Los Angeles, CA, Association for Bilingual Education).
- CUMMINS, J. & CORSON, D. (Eds) (1997) *Encyclopedia of Language and Education, Vol. 5: Bilingual Education* (Dordrecht, Netherlands, Kluwer Academic Publishers).
- CUMMINS, J. & SWAIN, M. (1986) *Bilingualism in Education: aspects of theory, research and practice* (London and New York, Longman).
- DICK, G. S. & MCCARTY, T. L. (1996) Reclaiming Navajo: language renewal in an American Indian community school, in: N. H. HORNBERGER (Ed.) *Indigenous Literacies in the Americas: language planning from the bottom up* (Berlin and New York, Mouton de Gruyter).
- FISHMAN, J. A. (1991) *Reversing Language Shift: theoretical and empirical foundations of assistance to threatened languages* (Clevedon, UK, Multilingual Matters Ltd).
- GENESE, F. (1987). *Learning through Two Languages: studies of immersion and bilingual education* (New York, Newbury House Publishers, Inc.).
- GENESE, F. (Ed.) (1994) *Educating Second Language Children: the whole child, the whole curriculum, the whole community* (Cambridge, UK, Cambridge University Press).
- GREYMORNING, S. (1997) Going beyond words: the Arapaho immersion programme, in: J. REYHNER (Ed.) *Teaching Indigenous Languages* (Flagstaff, AZ, Northern Arizona University Center for Excellence in Education).
- GROSJEAN, F. (1982) *Life with Two Languages: an introduction to bilingualism* (Cambridge, MA and London, Harvard University Press).
- GUTIÉRREZ, K. D. (2001) What’s new in the English language arts: challenging policies and practices, *¿y qué? Language Arts*, 78 (6), pp. 564–569.
- GUTIÉRREZ, K. D., ASATO, J., MOLL, L. C., OSON, K., NORNG, E. L., RUIZ, R. GARCÍA, E. & MCCARTY, T. L. (2002) ‘Sounding American’: the consequences of new reforms on English language learners, *Reading Research Quarterly* 37(3), pp. 328–343.
- HAKUTA, K. (1986) *Mirror of Language: the debate on bilingualism* (New York, Basic Books).
- HALE, K. (2001) The Navajo language: I., in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- HENZE, R. C. & VANETT, L. (1993) To walk in two worlds—or more? Challenging a common metaphor of Native education, *Anthropology & Education Quarterly*, 24 (2), pp. 116–134.
- HINTON, L. (2001) Language revitalization: an overview, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- HINTON, L. & HALE, K. (Eds) (2001) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- HOLM, A. & HOLM, W. (1990) Rock Point, a Navajo way to go to school: a valediction, *Annals, AASSP*, 508, pp. 170–184.

- HOLM, A. & HOLM, W. (1995) Navajo language education: retrospect and prospects, *Bilingual Research Journal*, 19 (1), pp. 141–167.
- HOLMES, R. B. & SMITH, B. S. (1976) *Beginning Cherokee* (Notman, OK, University of Oklahoma Press).
- HORNBERGER, N. H. (1996) Language planning from the bottom up, in: N. H. HORNBERGER (Ed.) *Indigenous Literacies in the Americas: language planning from the bottom up* (Berlin and New York, Mouton de Gruyter).
- INFANTE, E. J. (1999) Living the language: growing up in immersion school taught its own lessons, *The Honolulu Advertiser*, May 30, E1, E3.
- KAMANĀ, K. & WILSON, W. H. (1996) Hawaiian language programs, in: G. CANTONI (Ed.) *Stabilizing Indigenous Languages* (Flagstaff, AZ, Northern Arizona University Center for Excellence in Education).
- KARI, J. & SPOLSKY, B. (1973) *Trends in the Study of Athapaskan Language Maintenance and Bilingualism. Navajo Reading Study progress report no. 21* (Albuquerque, NM, University of New Mexico).
- KRASHEN, S. D. (1996) *Under Attack: the case against bilingual education* (Culver City, CA, Language Education Associates).
- 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. 9–21.
- LEAP, W. L. (Ed.) (1977) *Studies in Southwestern Indian English* (San Antonio, TX, Trinity University Press).
- LEE, T. & McLAUGHLIN, D. (2001) Reversing Navajo language shift, revisited, in: J. A. FISHMAN (Ed.) *Can Threatened Languages Be Saved? Reversing language shift, revisited: A 21st century perspective* (Clevedon, UK, Multilingual Matters Ltd).
- LIPKA, J. & McCARTY, T. L. (1994) Changing the culture of schooling: Navajo and Yup'ik cases, *Anthropology & Education Quarterly*, 25 (3), pp. 266–284.
- LIPKA, J. WITH MOHATT, G. AND THE CIULISTET GROUP (1998) *Transforming the Culture of Schooling: Yup'ik examples* (Mahwah, NJ, Lawrence Erlbaum Associates).
- LITTLEBEAR, R. E. (1996) Preface, in: G. CANTONI (Ed.) *Stabilizing Indigenous Languages* (Flagstaff, AZ, Northern Arizona University Center for Excellence in Education).
- MAY, S. (1999) Language and education rights for Indigenous peoples, in: S. MAY (Ed.) *Indigenous Community-based Education* (Clevedon, UK, Multilingual Matters Ltd).
- MAY, S. (2001) *Language and Minority Rights: ethnicity, nationalism and the politics of language* (London, Longman).
- MCCARTY, T. L. (1989) School as community: the Rough Rock demonstration, *Harvard Educational Review*, 59 (4), pp. 484–503.
- MCCARTY, T. L. (1993) Language, literacy, and the image of the child in American Indian classrooms, *Language Arts*, 70 (3), pp. 182–192.
- MCCARTY, T. L. (1998) Schooling, resistance, and American Indian languages, *International Journal of the Sociology of Language*, 132, pp. 27–41.
- MCCARTY, T. L. (2001) Between possibility and constraint: indigenous language education, planning, and policy in the United States, in: J.W. TOLLEFSON (Ed.) *Language Policies in Education: critical issues* (Mahwah, NJ, Lawrence Erlbaum Associates).
- MCCARTY, T. L. (2002) *A Place to be Navajo: Rough Rock and the struggle for self-determination in Indigenous schooling* (Mahwah, NJ, Lawrence Erlbaum Associates).
- MCCARTY, T. L. & DICK, G. S. (2003) Telling the people's stories: literacy practices and processes in a Navajo community school, in: A. WILLIS, G. E. GARCÍA, R. BARRERA & V. J. HARRIS (Eds) *Multicultural Issues in Literacy Research and Practice* (Mahwah, NJ, Lawrence Erlbaum Associates).
- MCCARTY, T. L. & WATAHOMIGIE, L. J. (1999) Indigenous education and grassroots language planning in the USA, *Practicing Anthropology*, 21 (2), pp. 5–11.
- MCCARTY, T. L., WATAHOMIGIE, L. J. & YAMAMOTO, A. Y. (1999) Reversing Language Shift in Indigenous America: collaborations and views from the field. Special Issue, *Practicing Anthropology*, 21 (2), pp. 2–47.
- MINGE, W. A. (1976) *Ácoma: pueblo in the sky* (Albuquerque, NM, University of New Mexico Press).
- NETTLE, D. & ROMAINE, S. (2000) *Vanishing Voices: the extinction of the world's languages* (New York, Oxford University Press).
- PATTANAYAK, D. P. (2000) Linguistic pluralism: a point of departure, in: R. PHILLIPSON (Ed.) *Rights to Language: equity, power, and education* (Mahwah, NJ, Lawrence Erlbaum Associates).
- PECOS, R. & BLUM-MARTÍNEZ, R. (2001) The key to cultural survival: language planning and revitalization in the Pueblo de Cochiti, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- PLATERO, P. R. (1992) Navajo Head Start language study. Manuscript on file, Navajo Division of Education, Navajo Nation, Window Rock, AZ.
- PLATERO, P. R. (2001) Navajo Head Start language study, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).

- QIN-HILLIARD, D. B., FEINAUER, E. & QUIROZ, B. (2001) Introduction, *Harvard Educational Review*, 71 (3), pp. v–ix.
- RAMÍREZ, J. D. (1992) Executive summary, *Bilingual Research Journal*, 16 (1 & 2), pp. 1–62.
- RAMÍREZ, J. D. (1998) *SFUSD Language Academy: 1998 annual evaluation* (Long Beach, CA, California State University Long Beach, Center for Language Minority Education and Research).
- RICENTO, T. & WILEY, T. G. (2002) Editors' Introduction: language, identity, and education and the challenges of multiculturalism and globalisation, *Journal of Language, Identity, and Education*, 1 (1), pp. 1–5.
- ROMERO, M. E. (2001) Indigenous language immersion: the Cochiti experience. Presentation at the 22nd Annual American Indian Language Development Institute, Tucson, Arizona, 9 June.
- ROSIER, P. & FARELLA, M. (1976) Bilingual education at Rock Point: some early results, *TESOL Quarterly*, 10, pp. 379–388.
- RUIZ, R. (1984) Orientations in language planning, *NABE Journal*, 8, pp. 15–34.
- SIMS, C. (2001a) Indigenous language immersion. Presentation at the 22nd Annual American Indian Language Development Institute, Tucson, Arizona, 9 June.
- SIMS, C. (2001b) Native language planning: a pilot process in the Acoma Pueblo community, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- SKUTNABB-KANGAS, T. & CUMMINS, J. (1988) *Minority Education: from shame to struggle* (Clevedon, UK, and Philadelphia, PA, Multilingual Matters Ltd).
- SLATE, C. (1993) Finding a place for Navajo, *Tribal College*, 4, pp. 10–14.
- SPICER, E. H. (1962) *Cycles of Conquest: the impact of Spain, Mexico, and the United States on the Indians of the Southwest, 1533–1960* (Tucson, AZ, University of Arizona Press).
- SPOLSKY, B. (1976) Linguistics in practice: the Navajo Reading Study, *Theory into Practice*, 24, pp. 347–352.
- SPOLSKY, B. (2002) Prospects for the survival of the Navajo language: a reconsideration, *Anthropology & Education Quarterly*, 33 (2), pp. 139–162.
- SPOLSKY, B. & HOLM, W. (1977) Bilingualism in the six-year-old child, in: W. F. MACKEY & T. ANDERSSON (Eds) *Bilingualism in Early Childhood* (Rowley, MA, Newbury House Publishers, Inc.).
- THOMAS, W. P. & COLLIER, V. (1997) *School Effectiveness for Language Minority Students* (Washington DC, National Clearinghouse for Bilingual Education).
- TROIKE, R. C. (1978) *Research Evidence for the Effectiveness of Bilingual Education* (Rosslyn, VA, National Clearinghouse for Bilingual Education).
- TUCKER, G. R. (1980) Implications for US bilingual education: evidence from Canadian research. *Focus*, 2, pp. 1–4.
- WARNER, S. L. N. (1999) *Kuleana*: The right, responsibility, and authority of indigenous peoples to speak and make decisions for themselves in language and culture revitalization, *Anthropology & Education Quarterly*, 30 (1), pp. 68–93.
- WARNER, S. L. N. (2001) The movement to revitalize Hawaiian language and culture, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- WATAHOMIGIE, L. J. & MCCARTY, T. L. (1994) Bilingual/bicultural education at Peach Springs: a Hualapai way of schooling, *Peabody Journal of Education*, 69 (2), pp. 26–42.
- WATAHOMIGIE, L. J. & MCCARTY, T. L. (1996) Literacy for what? Hualapai literacy and language maintenance, in: N. H. HORNBERGER (Ed.) *Indigenous Literacies in the Americas: language planning from the bottom up* (Berlin and New York, Mouton de Gruyter).
- WATAHOMIGIE, L. J. & YAMAMOTO, A. Y. (1987) Linguistics in action: the Hualapai bilingual/bicultural education programme, in: D. D. STULL & J. J. SCHENSUL (Eds) *Collaborative Research and Social Change: applied anthropology in action* (Boulder, CO, Westview Press).
- WILSON, W. H. (1998) *I ka 'ōlelo Hawai'i ke ola*, 'Life is found in the Hawaiian language', *International Journal of the Sociology of Language*, 132, pp. 123–137.
- WILSON, W. H. (1999) The sociopolitical context of establishing Hawaiian-medium education, in: S. MAY (Ed.) *Indigenous Community-based Education* (Clevedon, UK, Multilingual Matters Ltd).
- WILSON, W. H. & KAMANĀ, K. (2001) 'Mai loko mai o ka 'i'ni: Proceeding from a dream.' The 'Aha Pūnana Leo connection in Hawaiian language revitalization, in: L. HINTON & K. HALE (Eds) *The Green Book of Language Revitalization in Practice* (San Diego, CA, Academic Press).
- WONG, L. (1999) Authenticity and the revitalization of Hawaiian, *Anthropology & Education Quarterly*, 30 (1), pp. 94–115.
- WONG-FILLMORE, L. (1996) What happens when languages are lost? An essay on language assimilation and cultural identity, in: D. I. SLOBIN, J. GERHARDT, A. KYRATZIS, & J. GUO (Eds) *Social Interaction, Social Context, and Language: essays in honor of Susan Ervin-Tripp* (Mahwah, NJ, Lawrence Erlbaum Associates).
- YOUNG, R. W. & MORGAN, W., SR. (1987) *The Navajo Language: a grammar and colloquial dictionary* (Albuquerque, NM, University of New Mexico Press).

