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AUTHOR

McCarty, T. L.

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ABSTRACT

In the past 25 years, American Indian education has undergone tremendous changes in both content (curriculum and pedagogy) and context (institutional framework). Centered on the issue of control, changes at both levels have resulted from a dynamic interplay between federal language policy and local initiatives. The federal Bilingual Education Act (BEA) of 1968 (Title VII) supported nearly 70 Native American projects by 1978. The Rough Rock Demonstration School on the Navajo Reservation was the first Indian-controlled school to teach through and about the Native language and culture. Title VII grants supported Rough Rock and other Navajo schools in forming a center to produce Navajo instructional materials. The program brought university courses directly to Rough Rock, facilitating the certification of large numbers of Navajo teachers. For smaller indigenous groups, bilingual programs such as the Hualapai project at Peach Springs (Arizona) public school not only improved the education of Indian children, but also halted the process of language extinction and generated major structural transformations in Indian education. BEA funds also fostered the evolution of 16 multifunctional resource centers, which have grown into a national university-based network providing training and technical assistance to Indian bilingual programs. There is now a political power base in this cadre of Indian education professionals. It is influencing local-level curricular change, tribal language policies, and federal policies. Contains 38 references. (SV)



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FEDERAL LANGUAGE POLICY AND AMERICAN INDIAN EDUCATION

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T.L. McCarty

Department of Language, Reading and Culture College of Education University of Arizona Tucson, AZ 85721

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Federal Language Policy and American Indian Education

T. L. McCarty University of Arizona

Abstract

The past two-and-a-half decades have witnessed tremendous change in both the content and the context of American Indian education. Content refers to curriculum, pedagogy and the micro processes that occur within Indian classrooms, schools and communities. Context refers to the larger institutional framework in which those processes operate. Change at both levels has resulted from a dynamic interplay between federal language policy on the one hand, and initiatives generated at the level of Indian schools and communities on the other. Using data from several Indian bilingual programs in the U.S. Southwest, this paper examines that interplay and its implications for local control over Indian education.



Federal Language Policy and Native American Education¹

T.L. McCarty University of Arizona

In a seminal paper presented to the American Educational Research Association in 1975, educational linguists John Read, Bernard Spolsky and Alyse Neundorf observed that "bilingual education involves more than a new kind of curriculum organization. It may represent," they stated, "a whole new approach to education and reflect complex processes of social change to which it contributes in turn" (1975, p. 2).

Read, Spolsky and Neundorf were then engaged in the Navajo Reading Study -- the first comprehensive, long-term research on the impacts of bilingual education in Native American settings. That study began in 1969 with the seemingly straightforward aim of looking into the effects of "teaching Navajo children to read in their own language first" (Spolsky, 1975, p. 347). In the course of investigating this "new" approach to reading -- new at least to Native American children, for whom use of the native language had been prohibited and brutally punished in schools -- it became clear that the project's aims were neither simple nor straightforward. In fact, five years into the project and after a thorough review of existing American Indian bilingual programs, Spolsky reported that these programs' pedagogical and linguistic outcomes were hugely overshadowed by the larger social, political and economic transformations that the programs gave rise to -- transformations that at their root involved a fundamental question: Who controls Indian education (Spolsky, 1974; cf. McKinley et al., 1970)?



¹ Revised version of a paper presented at the 1992 Annual Meeting of the American Educational Research Association, San Francisco. Reproduce only with author's permission; comments are welcome.

The 23 years since the Navajo Reading Study began -- years that also correspond to the enactment and implementation of the federal Bilingual Education Act or BEA -- have witnessed tremendous change in both the *content* and the *context* of Indian education. By content I mean curriculum, pedagogy and the micro processes that occur within Indian classrooms, schools and communities. Context refers to the larger institutional framework in which those processes operate -- the macro-level social, political and economic forces impinging on them. These changes in content and context center on the issue of control alluded to by Spolsky et al., and represent a dynamic interplay between federal language policy on the one hand, and initiatives generated by micro-level processes within schools, local communities and tribes on the other.

This paper explores that interplay and its implications for the question of education control. First, I examine the ways in which local Indian communities empowered themselves through bilingual education, thereby transforming the content of education for their students. I then look at how these changes, while modifying the context of Indian education by enhancing local control over schools, at the same time raise new and difficult questions about the structural constraints on change inherent in the federal bureaucracy, and in particular, the pattern of funding for Indian education programs.

Nowhere are these issues more salient than in Indian schools and communities in the Southwestern United States, where some 26 indigenous languages and over 40 tribal groups survive (Martin and McCarty 1990; cf. Benally and McCarty, 1990; Figs. 1 and 2). Issues concerning cultural and linguistic identity remain strong in these communities, and tribal governments as well as schools are actively involved in trying to maintain and develop their languages in their oral and written forms (see, e.g., Zepeda, 1990).



The discussion here focuses on bilingual education programs in this region, and integrates an analysis of federal language policy -- in particular the BEA in its several authorizations -- with comparative data from several well-documented Indian bilingual programs. These include the Navajo program at Rough Rock, where I have conducted ethnographic and applied research for the past 12 years, the Hualapai bilingual program at Peach Springs, and programs involved in region-wide BEA-sponsored teacher training (McCarty, 1989; McCarty et al., 1991; McCarty, in press; Watahomigie, 1988; Watahomigie and Yamamoto, 1987; Fig. 1). I begin with some historical background.

The Initiation of Native American BEA Programs

When President Lyndon B. Johnson approved the BEA in 1968 as a Title VII amendment to the Elementary and Secondary Education Act (ESEA), bilingual education was virtually unknown in schools serving American Indian students. With a few notable exceptions, these schools emphasized the exclusion of local cultural knowledge, and the inclusion of curricula explicitly designed to extinguish native languages and cultures (see, e.g., Reyhner and Eder, 1990). The statement of one Commissioner of Indian Affairs sums up the historic thrust of federal Indian education policy: the goal, he stated, was to remove "the stumbling blocks of hereditary customs and manners," and of these, "language is one of the most important..." (quoted in Medicine, 1982, p. 399; emphases added).

This repressive policy persisted well into the twentieth century, but by the late 1960s several schools, including Rough Rock, directly challenged that policy and began teaching in and through the native language (cf. McCarty, 1989; Holm and Holm, 1990). The BEA, though clearly a compensatory policy, propelled and expanded these efforts. In keeping with the Johnson administration's Great Society-War on Poverty aims, the BEA called for "new and imaginative"



instructional programs for "children who were both poor and 'educationally disadvantaged because of their inability to speak English'" (Crawford, 1989, p. 32; cf. Bennett, 1985). Despite these deficit-view assumptions -- assumptions I will return to in my conclusions -- the BEA provided the opportunity and some financial means to build on Indian students' lived experiences by bringing their language and local knowledge directly into the school curriculum.

In its first year of funding the BEA supported 76 local projects. Of these, only five served Native American students. Within a decade, that number grew to nearly 70, representing 10 per cent of all Title VII allocations in 1978 (Leap, 1983). Virtually all of these programs faced two immediate needs: the need for native language curricula (and hence, in many cases, writing of the language for the first time), and the need for native-speaking educational personnel. How those needs were addressed at the local level spurred some of the most significant developments in the history of Indian education. To explore those developments and their implications, we now turn to several cases.

Cases Studies in Indian Bilingual Education

Rough Rock sits at the base of Black Mesa in the heart of the Navajo Reservation. In 1966, this rural community of 1,200 captured national attention with the founding of the Rough Rock Demonstration School, the first school to elect an all-Indian governing board and the first *Indian* school to teach through and about the native language and culture (Johnson, 1968; Roessel, 1977; McCarty, 1989).

An outgrowth of federal War on Poverty programs and in particular, the 1964 Equal Economic Opportunity Act, the demonstration at Rough Rock involved a unique contract between the Bureau of Indian Affairs, the Office of Economic Opportunity, a five-member Navajo board of trustees, and the Rough Rock community, who elected the local school board (Roessel, 1977; McCarty, 1989).



Rough Rock sparked the Indian community school movement. "Until the advent of the Rough Rock Demonstration School," Holm, and Holm (1990, p. 183) write, "no school had formally empowered parents or the community to have a significant say in the education of their children."²

Thus, when the school first received Title VII funds in 1970, it had already launched its own Navajo Curriculum Center and was deeply committed to what school founders called a "both/and" approach: exposing Navajo children to "important values and customs of *both* Navajo culture *and* the dominant society" (Roessel, 1977, p. 10). But the pre-Title VII ESEA legislation supporting the school limited this "both/and" approach by requiring that all materials be written in English. Title VII funds boosted the Curriculum Center's work and Navajo literacy by enabling the production of teaching materials *in* Navajo.

By 1974, when Congress reauthorized the BEA, considerable political support had been mustered for enrichment over compensatory models, and the BEA for the first time included language specifically calling for instruction in the native language and culture (Crawford, 1989, p. 37). In combination with several precedent-setting civil rights cases -- especially *Lau v. Nichols* and *Denteclarence v. Denver Board of Education* ³ -- this political environment nourished further developments in Indian bilingual education.



² Within a decade of its founding, a dozen other Indian schools, including nearby Rock Point (see Holm and Holm, 1990; 1992), had "gone contract," signing agreements with the Bureau of Indian Affairs to operate their own schools. In addition, under the leadership of several Rough Rock school founders, especially Robert and Ruth Roessel, the Navajo Nation initiated the first Indian-run community college, spurring the movement toward tribally-controlled colleges and eventually, the Native American Tribal College Act.

³The 1974 Lau decision -- probably the most significant Supreme Court ruling on language minority rights -- found that students whose first language is not English do not receive "equality of treatment" (the standard in the 1954 landmark Brown v. Board of Education case), solely on the basis of integrated school facilities, curricula and teachers (see, e.g., Crawford, 1989, p. 35-36). While Lau "stopped short of mandating bilingual education" (Crawford, 1989, p. 36), it did cause the U.S. Office of Civil Rights to announce "suitable remedies" for schools found in violation of Lau, which prescribed both bllingual and English-as-a-second-language instruction. Denetclarence, a lower court opinion, preceded Lau by one year and specifically addressed the language rights of Native American students, ordering Denver Public Schools with high enrollments of Navajo children to institute appropriate bilingual/bicultural and English-as-a-second-language services.

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But for Rough Rock and other federal Indian schools, two pieces of federal legislation were even more critical: the 1972 Indian Education Act, which supported specifically *Indian* bilingual-bicultural programs, and the 1975 Indian Education Assistance and Self-Determination Act, which channeled funds for those instructional services directly to Indian tribes and communities. The latter Act paved the way for other Indian communities like Rough Rock to "go contract" and run their own schools. Today there are over 60 such schools.

In this context, Title VII grants became one means by which Indian community-controlled schools achieved the initiatives of their governing boards, as well as those of federal policy-makers. Title VII, for example, supported Rough Rock and three other Navajo contract schools in forming the Native American Materials Development Center, a nationally-recognized project which produced and disseminated, in its eight years of funding, hundreds of high-quality Navajo materials. Title VII also brought university courses in Navajo literacy and bilingual education directly to Rough Rock, facilitating not only materials development, but the certification of Navajo teachers.

In the substance of the changes, Rough Rock represented one instance of a massive Navajo teacher education effort. That effort was informed by the directives of the growing numbers of Navajo contract school boards, and by a broad tribal initiative to "alter the composition of the teaching force on the reservation" (Iverson, 1981, p. 152; cf. Holm and Holm, 1990, p. 179).

The 1974 reauthorized BEA lent crucial support to all of this by adding training and professional development activities as part of a policy emphasis on local capacity building. Through summer and on-site coursework, Rough Rock did indeed transform its teaching staff: whereas only three certified teachers were Navajos when the school began in 1966, by the late 1970s Navajos composed the majority of the elementary school faculty. Holm and Holm (1990) report similar



outcomes for Rock Point; in a more recent analysis they cite a total of 6,000 Navajo certified teachers in reservation schools (Holm and Holm, 1992).

It can be argued that these developments in the Navajo context were helped by the fact that Navajo is a language with a large number of speakers -- over 160,000 in recent census counts (Benally and McCarty, 1990) -- and one with both a significant tribal political base and a long history as a written language. What has been the impact of bilingual education policy and programs for indigenous groups with fewer speakers and fewer written language traditions? In these situations, bilingual programs have not only improved the quality of education available to Indian children, but in so doing have helped halt a process of virtual language extinction and generated major structural transformations in Indian education as well.

Probably no bilingual program has been more influential in this regard than the Hualapai project headed by Lucille Watahomigie at the Peach Springs public school in northwestern Arizona (see Fig. 1). A Yuman language unrelated to Navajo, Hualapai has some 1,200 speakers in a total tribal population of 1,700 (Watahomigie, 1988; Martin and McCarty, 1990). Until the Hualapai Title VII Program began in 1975, Hualapai remained an unwritten language (Watahomigie and Yamamoto, 1987; Watahomigie, 1988). Watahomigie and her staff developed a practical orthography and grammar for the language, created an integrated K-8 bilingual/bicultural curriculum, and introduced an interactive technology component that involves students in writing and producing bilingual/bicultural documentaries on such topics as Hualapai ethnobotany and the natural history of the Colorado Plateau (Watahomigie, 1988). Recently refunded as one of twelve Title VII Academic Excellence programs to be adapted and replicated throughout the U.S., the Hualapai project is widely recognized as an exemplar in Indian bilingual/bicultural education (see, e.g., U.S. Dept. of Education, 1991, p. 54).



Central to these outcomes has been the certification of Hualapai teachers through on-site coursework similar to that at Rough Rock, and through a university-accredited summer institute. Founded by Watahomigie and several academic linguists in 1978, the institute began with 18 parents, all Yuman speakers interested in learning to "read and write my language" (Salas, 1982, p. 36). During that first summer, the group developed practical writing systems for their languages and generated a small but significant body of native language teaching materials.

What began in 1978 as a training opportunity for Yuman language speakers has since grown into the American Indian Language Development Institute (AILDI), a teacher education program housed at the University of Arizona which today attracts hundreds of Indian educators from throughout the U.S. and Canada. Despite this growth in numbers and in the diversity of tribal represention, the AILDI philosophy has remained consistent with that under which the program began:

"American Indian tribes have great knowledge of their language and culture which should be utilized and incorporated within the educational systems that their children attend. . .The community should have input and control of the curriculum taught to their children" (Weryackwe et al., 1982, p. 3).

Hence, participants in the AILDI have been largely Native American parents and school-based educators involved in bilingual education programs. For many, the institute has provided their first experience in a university setting; for most. it has offered a primary opportunity to work toward college degrees and bilingual endorsements.

The AILDI grew up during the heyday of BEA capacity-building initiatives -- a period that saw the creation of the National Clearinghouse for Bilingual Education, and the evolution of Training Assistance Centers into Bilingual Education Service Centers, and finally into 16 Multifunctional Resource Centers (MRCs). For Indian



education the most significant of these was the National Indian Bilingual Center (NIBC), an MRC based in Arizona charged with providing training and technical assistance to some 85 Indian bilingual programs in 13 states. Staffed with personnel who helped organize and teach in the AILDI, NIBC disseminated the institute concept to Indian Title VII sites throughout the country (Leap, 1983; Kalectaca, 1984; Hinton et al., 1982).

The upshot was a widespread university-based training network that paralleled, on a national level, the earlier teacher education initatives of the Navajo Nation, and in fact brought Navajo schools and communities directly into that network. The long-term consequences have been improvements in children's *English* proficiency (e.g., Crawford, 1989; Holm and Holm, 1990; 1992; McLaughlin, 1992; Begay et al., 1992; Watahomigie and Yamamoto, 1987; Watahomigie, 1988), but *through* the heritage language (Holm and Holm, 1990; 1992; Ayoungman, this symposium). In the process, languages as diverse as Navajo and Blackfoot have been revitalizated and maintained, and a growing body of Native language literature has been developed. Perhaps most important, a cadre of certified Native educators has emerged, many of whom have assumed teaching and administrative positions in their local schools. All of this has the potential to bring Indian students' experiences directly into the classroom, building on their linguistic and cultural resources instead of treating those as "deficits," and engaging students in using their experiences to learn.

These changes in the *content* of Indian education have transformed the *context* of that education process as well. There is now a constituency or political base in this cadre of Indian education professionals, the power of which is manifested not only in local-level curricular change, but in tribal language policies designating the native language as official in specific reservation communities



....

(see, e.g., Zepeda, 1990),⁴ and in federal policies such as the Native American Language Act. Drafted in the summer of 1988 by AILDI participants, the Native American Language Act calls for the preservation and protection of indigenous languages and cultures, and serves as a direct challenge to the various language restrictionist proposals currently before Congress (see, e.g., Hinton, 1991; Crawford, 1992, pp. 155-157). Given its emphasis on language and literacy development, this Act also holds promise for further improvements in Indian education.

The point is that these are transformations in macro-level historical and social-structural relations. Their roots are a fundamental rejection of past educational practices and the neo-colonial system supporting them, and the reclamation of indigenous language rights and language education (cf. Holm and Holm, 1990; Spolsky, 1974).

Yet a struggle continues for control over Indian education. That struggle, unique to Indian education, exerts a profound influence over the possibilities within Indian classrooms and schools. An update on the case of Rough Rock illustrates how this is so.

Since the "early days" of Rough Rock's experimental programs, bilingual education there has waxed and waned. For many years there was no bilingual program. This is not because the school board radically reversed its philosophy, nor is it because there are insufficient Native language teaching materials -- though there could and should be more. The reasons instead lie in the marginalized economy of Rough Rock and many Native American communities, and the attendant nature of funding for academic programs in Indian schools.



⁴ The Tohono O'odham and Pascua Yaqui Tribes of Arizona, the Southern and Northern Ute, and the Cheyenne now have in place such language policies. Some, like the Tohono O'odham, also have developed standards to ensure implementation of the policies and the meaningful incorporation of the Native language and culture in school curricula.

Like many reservation communities, Rough Rock has no local tax base. As a result, the school relies entirely on federal funds for support. In "good" years academic programs supported through these funds have flourished, though their disparate aims -- virtually written into the federal legislative and budgetary process -- have created discontinuities in instruction (McCarty, 1989). The 1980s, in general, were not good years for Indian bilingual education, as the Reagan Administration slashed Indian Education Act programs and budgets, did away with support services such as NIBC, and increasingly focused BEA policy on transitional and English-only instruction (see, e.g., Bennett, 1985; San Miguel, 1988).

At Rough Rock, the impacts of this were to blunt the bilingual education efforts of previous years -- without sufficient staff and coordination, bilingual materials sit on the shelf -- and to create tremendous overall instability in curriculum, staffing and instruction. Rough Rock students, not surprisingly, did not fare well in these circumstances. In an attempt to ameliorate this situation, the school board hired a curriculum coordinator from outside the community, who promptly installed a commercially developed, scripted-drill, English basic skills program -- funded by yet another federal grant.

What brought bilingual education back to Rough Rock -- and what promises to improve the school success and life opportunities of Rough Rock students -- is the legacy of its earlier teacher education efforts. A core group of Navajo elementary teachers, dissatisfied with basic skills, adapted the contextualized reading strategies of the Kamehameha Early Education Program in Hawaii, to meet the needs of Navajo learners (Vogt et al., 1987). These teachers, some of whom now hold administrative posicions at the school, are the same individuals who, just over a decade ago, earned their degrees through Rough Rock's bilingual education training programs. Their presence as members of the community, and their long-term investment in the community's children and in bilingual education,



have stabilized the elementary curriculum, reinstated bilingual and biliteracy education, and from the data available, significantly improved Rough Rock students' academic achievement (Begay et al., 1992). It is of note, however, that to further their work the teachers have recently sought and received a new Title VII grant. They are also under pressure from another district administrator brought in from the outside, to implement an administratively imposed, pre-packaged skills-based curriculum. The teachers are quietly resisting, but it remains to be seen how successful they will be.

Who Controls Indian Education?

The situation at Rough Rock illustrates the struggle in which many Indian schools and communities find themselves engaged. Peach Springs has been more successful in this struggle in part because of its different economic situation -- it is a public school with a tax base -- but largely because of the continuity and vision of its educational leadership.

Bilingual education programs have been at the center of this struggle, for they have widened a window of opportunity forged by the growing movement toward local control of Indian schools, and by research such as that generated by the Navajo Reading Study showing the clear benefits of initial literacy developed through the native language (Holm and Holm, 1990; 1992; Watahomigie and Yamamoto, 1987; McLaughlin, 1989; 1992; cf. Cummins, 1989; Molf and Diaz, 1987; Molf, 1992). Educators at Rough Rock, Peach Springs, and those involved in the AlLDI have tried to capitalize on that opportunity. In the process, they have strengthened threatened language resources, reformed curriculum and pedagogy to enhance student success, and promoted the greater integration of Indian schools with local communities.



These represent fundamental changes, as Bernard Spolsky predicted nearly two decades ago, not just of philosophy or of language and pedagogy *per se*, but of *teachers, power and control* (cf. Spolsky, 1974, p. 52). The limits on that control continue to be largely economic and political, and lie in the imposed reliance of financially marginalized Indian communities on fluctuating federal resources and policies.

In this context, truly empowering outcomes require more radical changes at the macro level, including a sober reassessment of the compensatory, scattergun approach of federal targeted intervention programs like the BEA, and minimally, a stable funding base with a great deal of openness in what is supported at the local level. Ultimately, this requires a more direct role in policy making by the Indian educators who have generated the transformations described here, so that policy is not imposed from the outside, but genuinely represents the interests of Indian educators and their students, communities and schools.



References Cited

- Begay, S., G. Dick, D. Estell, E. Lewis and T.L. McCarty (1992). Implementing pedagogical change in a Navajo community school. Presentation at the Annual Conference of the National Association for Bilingual Education, Albuquerque, N.M.
- Benally, A., and T.L. McCarty (1990). The Navajo language today. In K. Adams and D. Brink (Eds.), Perspectives on official English: The campaign for English as the official language of the USA (pp. 287-245); J. Fishman (Gen. Ed.), Contributions to the Sociology of Language 57. Berlin/N.Y.: Mouton de Gruyter.
- Bennett, W.J. (1985). Address to the Association for a Better New York, Sept. 26. Washington, D.C.: U.S. Department of Education.
- Crawford, J. (1989). *Bilingual education: History, politics, theory and practice*. Trenton, N.J.: Crane Publishing Co., Inc.
- _____(1992). Language loyalties: A source book on the Official English controversy. Chicago and London: University of Chicago Press.
- Cummins, J. (1989). *Empowering minority students*. Sacramento: California Association for Bilingual Education.
- Hinton, L. (1991). The Native American Language Act. *News from Native California* Feb./April, pp. 22-23.
- Hinton, L., M. Langdon, L. Munson, J. Flouillard, A. Yamamoto, L. Watahomigie and O. Zepeda (1982). A manual for the development of American Indian and Alaska Native language workshops. Report prepared under the auspices of National Endowment for the Humanities grant #ES-0013-79-50.
- Holm, W. (1973). Bilagaana Bizaad: E{S/F}L in a Navajo bilingual setting. In P. Turner (Ed.), *Bilingualism in the Southwest.* Tucson: University of Arizona Press.
- Holm, A., and W. Holm (1990). Rock Point -- A Navajo way to go to school: A validiction. Annals of the American Academy of Political and Social Science 508 (March), pp. 170-184.
- Holm, A., and W. Holm (1992). Navajo literacy -- retrospect and prospect. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- Iverson, P. (1981). The Navajo Nation. Westport, CT: Greenwood Press.
- Johnson, B. (1968). *Navaho education at Rough Rock*. Rough Rock, AZ.: Rough Rock Demonstration School.



- Kalectaca, M. (1984). American Indian bilingual education research for capacity building. Paper presented at the Second Annual Symposium on Evaluation and Interdisciplinary Research in Bilingual Education, Denver, CO.
- Leap, W. (1983). American Indian Language Development Institute. Mimeo. Tempe: National Indian Bilingual Center, Arizona State University.
- Martin, J., and T.L. McCarty (1990). The greater Southwest culture area: Diverse lifeways in a varied environment. In D.L. Boxberger (Ed.), *Native North Americans: An ethnohistorical approach*. Dubuque, IO.: Kendall/Hunt.
- McCarty, T.L. (1989). School as community: The Rough Rock demonstration. Harvard Educational Review 59 (140): 484-503.
- McCarty, T.L., F. Bia, R.H. Lynch, and G. Johnson (1983). A bibliography of Navajo and Native American teaching materials. Dine K'eeji Naaltsoos Bee Nida'nit'inigii (Revised Ed.). Rough Rock, AZ.: Navajo Curriculum Center.
- McCarty, T.L., S. Wallace, R.H. Lynch, and A. Benally (1991). Classroom inquiry and Navajo learning styles: A call for reassessment. *Anthropology and Education Quarterly* 22 (1): 42-59.
- McKinley, F., S. Bayne, and G. Nimnicht (1970). Who should control Indian education? Berkeley, CA.: Far West Laboratory for Educational Research and Development.
- McLaughlin, D. (1989). The sociolinguistics of Navajo literacy. *Anthropology and Education Quarterly* 20: 275-290.
- _____ (1992). When literacy empowers: Navajo language in print. Albuquerque: University of New Mexico Press.
- Medicine, B. (1982). Bilingual education an dpublic policy: The cases of the American Indian. In R.V. Padilla (Ed.), Ethnoperspectives in bilingual education research: Bilingual education and public policy in the United States (pp. 395-407). Ypsilanti: Eastern Michigan University.
- Moll, L. (1992). Bilingual classroom studies and community analysis. *Educational Researcher* 21 (2): 20-24.
- Moll, L. C., and S. Diaz (1987). Change as the goal of educational research.

 Anthropology and Education Quarterly 18 (4): 300-311.
- Read, J., B. Spolsky, and a. Neundorf (1975). Socioeconomic implications of bilingual education on the Navajo Reservation. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, D.C.



- Reyhner, J., and J. Eder (1990). A History of Indian Education. Billings: Eastern Montana College.
- Roessel, R. (1977). *Navajo* education in action: The Rough Rock Demonstration School. Chinle, AZ.: Navajo Curriculum Center.
- Salas, D. (1982). American Indian Language Development Institute -- 1982 evaluation report. Tempe: Arizona State Unviersity, Center for Indian Education, Bilingual Education Service Center.
- San Miguel, Jr., G. Bilingual education policy development: The Reagan years, 1980-1987. *NABE Journal*, Winter 1988, pp. 97-109.
- Spolsky, B. (1975). Linguistics in practice: The Navajo Reading Study. *Theory into Practice* 14 (5): 347-351.
- _____(1974). American Indian bilingual education. Navajo Reading Study Report No. 24. Albuquerque: University of New Mexico, College of Education.
- U.S. Department of Education (1991). *Indian Nations at risk: An educational strategy for action*. Final report of the Indian Nations at Risk Task Force. Washington, D.C.: U.S. Department of Education.
- Vogt, L.A., C. Jordan, and R.G. Tharp (1987). Explaining school failure, producing school success: Two cases. *Anthropology and Education Quarterly* 18 (4):276-286.
- Watahomigie, L., and A.Y. Yamamoto (1987). Linguistics in action: the Hualapai bilingual/bicultural education program. In D.D. Stull and J. J. Schensul (Eds.), Collaborative research and social change: Applied anthropology in action (pp. 77-98). Boulder and London: Westview Press.
- Watahomigie, L. (1988). Hualapai Bilingual Academic Excellence Program:
 Blending Tradition and Technology Model Replication Training Manual.
 Peach Springs, AZ.: Hualapai Bilingual Academic Excellence Program,
 Peach Springs School District #8.
- Weryakwe, S., L. Watahomigie and A. Gibson (1982). American Indian Language Development Institute -- 1982 curriculum guide. Tempe: Arizona State University, Center for Indian Education Bilingual Education Service Center.
- Zepeda, O. (1990). American Indian language policy. In K. Adams and D. Brink (Eds.), Perspectives on official English: The campaign for English as the official language of the USA (pp. 247-256); J. Fishman (Gen. Ed.), Contributions to the Sociology of Language 57. Berlin/N.Y.: Mouton de Gruyter.



Figure 1.



Figure 2. Indigenous Southwestern U.S. Language Groups and Primary Location of Speakers, 1992

Language Group

Location of Speakers

Southern Athapaskan

Navajo Western Apache Mescalero Apache Jicarilla Apache Navajo Reservation (AZ, NM, & UT) San Carlos & Ft. Apache Reservations (AZ) Mescalero Reservation (NM) Jicarilla Reservation (NM)

Hokan

River Yuman

Mohave Quechan Maricopa* Halchidhoma* Cocopah Ft. Mohave & Colorado River Reservations (AZ)

Ft. Yuma Reservation (AZ)

Gila River and Salt River Reservations (AZ)

Salt River Reservation (AZ) Cocopah Reservation (AZ)

Upland Yuman

Hualapai* Havasupai* Yavapai* Hualapai Reservation (AZ) Havasupai Reservation (AZ)

Ft. McDowell, Prescott, Camp Verde & Payson

Tonto-Apache Reservations (AZ)

Keresan

Keres (7 dialects)

Western: Acoma & Laguna Rio Grande Keresans*

Acoma & Laguna Pueblos (NM)

Zia, Santa Ana, San Felipe, Santo Domingo, Cochiti

(NM)

Tanoan

Northern Tiwa Southern Tiwa Southern Tano (Tewa)* Northern Tano (Tewa)* Taos, Picuris (NM) Sandia, Isleta, Tigua (NM) Hopi Reservation (AZ)

Santa Clara, San Juan, San Ildefonso, Nambe,

Tesuque, Pajoaque (NM)

Jemez (NM)

Uto-Aztecan

Towa

Shoshonean

Southern Paiute

, Yaqui (Yoeme)

Kaibab Paiute Reservation (AZ), Chemehuevi Reservation (CA), & Colorado River Reservation (AZ)

Hopi Reservation (AZ)

Hopi Southern Uto-Aztecan

Upper Piman (Pima & Tohono O'odham)*

Pimas: Salt & Gila River Reservations (AZ); Tohono O'odham: San Xavier, Ak Chin, Gila Bend and Main Tohono O'odham Reservations (AZ)

Tohono O'odham Reservations (AZ)

Guadalupe, Tucson & Pascua Yaqui Reservation

(AZ)

Zunian

Zuni

* Dialect difference. T.L. McCarty, 1992.

Zuni Reservation (NM)

