

UCLA

American Indian Culture and Research Journal

Title

The American Indian Linguistic Minority: Social and Cultural Outcomes of Monolingual Education

Permalink

<https://escholarship.org/uc/item/6v42n5nd>

Journal

American Indian Culture and Research Journal , 21(4)

ISSN

0161-6463

Authors

Brod, Rodney L.
McQuiston, John M.

Publication Date

1997-09-01

DOI

10.17953

Copyright Information

This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at <https://creativecommons.org/licenses/by-nc/4.0/>

Peer reviewed

The American Indian Linguistic Minority: Social and Cultural Outcomes of Monolingual Education¹

RODNEY L. BROD AND JOHN M. MCQUISTON

ABSTRACT

During World War II, the United States Army Signal Corps enlisted the aid of Navajo and other native-speaking tribal members to use their native tongue in radio messages so that enemy forces could not understand or break the "code" being used. The Navajo language was found to be so complex and so little known that it was ideal for use as a code. A ready supply of Navajos still spoke their native language and answered the nation's call despite the educational system's efforts to deny the importance of native language.

This article explores the extent of English and non-English language use, ability, and understanding among American Indians and Alaska Natives as children and as adults adapting to a mono-English education system and the impacts of these factors on literacy levels and educational outcomes. Implications are drawn for bilingual educational programs and cultural transmission among Indian Americans. Specifically, early (primary school level) bilingual (English and traditional language) instruction is argued to be crucial for successful lin-

Rodney L. Brod is professor of sociology and adjunct professor of Native American studies and education; and John M. McQuiston is emeritus professor of sociology at the University of Montana.

guistic and cultural transition. Data collected as part of the first and only national survey of Indian adult education and literacy show that although one out of four adult Indians normally speak a non-English language to carry out their daily activities, only about 5 percent were able to use that non-English language in school. Currently, few teachers are capable of teaching in the traditional tongue. Nearly half of Indian Americans reported that as children they did not speak English, yet they were educated in schools that provided education solely in English. Regional differences in educational attainment and proficiency are described and compared among groups as graded by English language proficiency. These comparisons show conclusively that the failure of the educational system to provide primary-level bilingual education is a major barrier to educational success among American Indians and Alaska Natives, particularly those in the West.

Viewed as countercultural and the result of intercultural paternalism, monolingual education delivered in English in the long term is shown to constitute a deprivation of culture due to the loss of the basic element of cultural transmission once so vital to these Americans, their languages and language skills. The article concludes with a discussion of the lack of funding for the 1990 Native American Languages Act and the need to develop, test, and implement appropriate programs at the local level that will provide effective education for American Indians who have been left behind solely because of the educational system's failure to teach in their native tongue.

PROLOGUE

More than fifty years ago, during World War II, each country at war sought to communicate on radio frequencies in coded language which its enemies could not understand or break. Systematic code languages and machinery became complex, yet all were potentially readily decipherable. Needed was a coded language so complex and different from others that it could be used in voice communications without fear of translation. The United States had many such languages readily available: American Indian languages, spoken by few outside of each tribe.² Navajo speakers were recruited and utilized by the military service as "code talkers" in order to fulfill this vital wartime need. The Navajo "code" was extremely successful,

legendary now as the key to a unique and brilliant military strategy.³

This use of American Indian languages during the mid-twentieth century was possible only because Native speakers still learned to speak their language as children within their own tribal cultures and folkways. Somehow American Indian cultures managed to retain irrepressible vitalities, despite governmental policies that isolated them from mainstream society. The most segregated and excluded of all United States racial or ethnic groups, American Indians were officially cloistered within territorial boundaries designated by their captors, the U.S. government. Adding importantly to the reduction in cultural and linguistic pluralism, or even assimilation, this captive, segregated, and isolated relationship continues today.

Following the earlier pattern of British colonialism, American colonists sought to subdue and socialize without engaging in a fully integrative or pluralistic relationship between colonist and colonized by forcing American Indians to conform more closely to the mores and folkways of Anglo-America. English-only schools were established in order to “upgrade” American Indian culture and knowledge to that of the industrialized and advancing captors, eliminating Native culture. But English as a second language was and is a poor substitute for the native language learned as children within a meaningful cultural and social context. Regardless, education reinforced European culture at the expense of Native cultures and used the English language as its vehicle. Not just a means for transmitting new knowledge and culture, the imposition of monolingual English language use was—and is—the fulcrum of cultural conflict and demise, a means for the dominant Anglo culture to replace the traditional indigenous ones.

CULTURES IN CONFLICT: A BRIEF HISTORY

In neocolonial United States, social differentiation was not highly regarded and “fusion” was reinforced regardless of cultural or racial origin. Newcomers were forced to learn English and reduce the importance of their parent cultures in order to survive socially and integrate into society. Their day-to-day contact and immersion into the new society reinforced not simply acculturation but Anglo conformity, cultural assimilation, and amalgamation. As an excluded isolate, however, the

American Indian had only the United States Bureau of Indian Affairs contacts and a few others—frontiersmen, soldiers, traders, and outlaws—to use as role models and cultural messengers. Certainly those role models were far from the mainstream of America, just as Americans were out of the mainstream of their parent European culture. Children taken from their homes and placed in distant and isolated total institutions called boarding schools and most other American Indians could not assimilate out of forced daily contact, as they were isolated. All of these factors then—neocolonialism, forced isolation, insulation, exclusion, lack of integration, lack of ideal role models, lack of need for assimilation as a part of their daily lives, and the captor/captive relationship—added to the longevity of the precolonial culture and lessened acculturation into an “ideal” monolingual English state. Reinforced by these factors, the strength, resilience, and longevity of indigenous cultures were totally unanticipated by both early and latter-day colonizers. By mid-century, many Native languages remained vital. Thus, despite Anglo-America’s English-only penchant and its educational system’s efforts to deny the importance and inclusion of American Indian languages, Navajo and other Native tribal language speakers were still readily available during World War II and served honorably in that conflict.

At war’s end, however, American Indians most often returned to pre-war poverty and unemployment and were greeted with a series of new legislative efforts designed to “mainstream” them while the government itself attempted to get out of the “Indian” business. Applying the neocolonial techniques of Operation Bootstrap, used to rejuvenate former colonies like Puerto Rico, and of new “trust” territories and non-mainland “U.S. soil” acquired in the war, administrators of the government’s American Indian treaty and trust responsibilities during that period worked to achieve the “final solution” of the Indian problem by applying those techniques to the internal colonies of American Indian tribes, lands, and holdings. Incorrectly assuming that the 1946 Land Claims Commission would soon accomplish its purpose of finally settling Indian land claims (even today many claims are still being litigated), the U.S. Government embarked on several misguided plans, one of which was to terminate all American Indian tribes. As such, those actually terminated, along with many other reservation and rural Indians, were then relocated to urban areas, where during the early 1960s unemployment,

poverty, and racial confrontations brought the subject of social and cultural segregation and enforced differentiation to public scrutiny.⁴

Declaring the Eisenhower-era government's policy of terminating American Indian tribes and then reneging on its trust responsibilities to be too harsh and premature, a new egalitarianism of the 1960s influenced law, and neocolonial folkways, mores, and institutions were regarded as barriers to integrative, egalitarian society. Yet, still locked into an isolated, segregated society, American Indians remained largely unintegrated, if not excluded, even after the civil rights movement.

Ironically, the Nixon administration established the notion of Indian "self-determination," which continues to guide American Indian policy today. Yet Anglo-American mono-culture, language, and "ideals" were, and still are, held as models for American Indian society under the administration's implementation of limited self-determination. Real self-determination and social equality are impossible among American Indian and Anglo cultures without cross-cultural knowledge and understanding as a minimum, acculturation as a maximum, and cultural and linguistic pluralism as an ideal. The American Indian simply cannot function as a full participant within the larger society without proper cross-cultural preparation. Based on historical trends, that participation has as its *sine qua non* language and understanding. Nearing the twenty-first century, postindustrial society is driven by education and a well-developed and complex language. But understanding one's own culture and language is a precursor to understanding another. Thus, real cross-cultural preparation is elusive in this case, because American Indians have been systematically denied access to their own language and culture.

From this brief historical background, we now explore the extent of English and non-English language use of adult American Indians and Alaska Natives and the relationship between monolingual education and educational attainment and performance, based on national survey and census data. These results provide an initial description of English use and comprehension among American Indians, which is indicative of true integrative potential. Next we examine some important regional outcome differences and the extent to which the American Indian population tends to lag behind that of the dominant majority culture within which it resides. Some implications are then made for American Indian language and bilin-

gual education needs as necessary means for *effective* cultural transmission among Indian Americans.

ENGLISH USE, ABILITY AND EDUCATIONAL ACHIEVEMENT

The National Indian Management Service of America, Inc. (NIMSA) conducted a four-year study, between 1978 and 1981,⁵ of American Indian and Alaska Native adult educational attainment and educational performance.⁶ The true population definition included all adult American Indians, sixteen years and older, residing in counties or census tract units possessing 250 or more target subjects in the 1970 U.S. Census.⁷ Based on five population strata within geographic regions (west and east of the Mississippi for the purposes of the present analysis), five sub-regions were assembled for ease of data collection, and within these over one hundred tribes representing sixteen cultural areas provided a multistaged, stratified random sample of about 4,000 American Indian and Alaska Native adults, which produced an accurate and comprehensive first view of American Indian literacy and education. Specially trained home interviewers who were members of the randomly selected reservations, communities, and rural areas obtained measures on virtually every major aspect of life among American Indian families and assessed the quality of that life as an outcome of education.

For the purposes of this analysis, interviewees were asked, "What language was usually spoken in your home when you were a child?" Several interesting and previously unreported facts related to this question were not fully developed within the initial study and subsequent reports. A critical discovery was that although nearly half (44 percent) of all American Indians reported that as children they usually spoke a language other than English at home, virtually all (94.4 percent) said that at school their course subjects were taught in the English language. Furthermore, as adults at the time of the interviews (1978 to 1980), one-fourth still did not usually speak English (Table 1).

The parameters of the mismatch between language spoken and language of educational delivery can be estimated from the data in Table 1. If we limit our discussion to the one-fourth who as adults still do not normally speak English, and if we

TABLE 1

**English Use Among the American Indian Population,
16 Years and Older
(numbers in decimals indicate percentage)**

Use of English	Residence of the United States		
	Total	East	West
Usually Speak English	75.3	82.5	73.6
Bilingual	14.1	11.9	14.6
Speak English with Children	76.5	79.1	75.9
Speak English with Friends	75.6	80.6	74.4
Attended English-Only School	94.4	94.4	94.3
Number Responding	3,830	737	3,093

assume that only these persons comprised all 5.6 percent who attended non-English schools (i.e., had a language match), this implies that at least one out of five American Indians adults (19.1 percent) received his or her schooling in mono-English when in fact he or she does (and did) not speak English. A slightly higher percentage (20.7 percent) of Indian adults living in areas west of the Mississippi were linguistically mismatched with their education delivery language. If this assumption is not true, the mismatch between school language and individual language usually used approximates one out of four American Indians (75.3 percent subtracted from 100 percent). Yet these estimates could be as high as four out of nine (i.e., from 38 percent or up to all 44 percent of those not speaking English as children). Since 19 percent (75.3 percent minus 56 percent) have actually learned English since childhood, the one-out-of-four mismatch is stated quite conservatively. In postindustrial society, these figures demonstrate the failure of a neocolonial and paternalistic English-dominated educational system in meeting the needs of those being educated. Under such a system, basic literacy in English may be a practical goal, but technical and educational competence for full participation in society certainly cannot. When discussing these percentages of mismatch between language spoken at home and language used by schools, we presume that those who speak English speak it well. Participants in the study also were asked, "How well do you understand" and "speak English?"

Seven percent of American Indian adults report (Table 2) that

TABLE 2

**Self Reported Ability to Speak and Understand
English Among American Indians, 16 Years and Older
(numbers indicate percentage)**

Ability	Speak			Understand		
	Total	East	West	Total	East	West
Well:						
Very Well	61.1	69.2	59.3	64.9	72.3	63.0
Well or OK	31.6	25.8	32.9	28.5	22.8	29.8
Not Well:						
More Than a Few Words	3.4	2.9	3.5	3.1	2.9	3.2
Just a Few Words	2.0	1.4	2.2	2.3	1.0	2.7
Not at All	1.9	0.7	2.1	1.2	1.0	1.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

they do not speak English well, almost 8 percent among those who live in the West. Also, about 7 percent say they do not understand English well (compared to about 5 percent in the East). Together, about 40 percent of each of these two groups assess their speech or understanding of English as less than "very well." In a monolingual English language situation, then, we would expect one out of fourteen to have serious trouble communicating and perhaps one out of four to have some problems (if half of those who report speech or understanding as "well or OK" actually have some difficulty). If we apply English language usage, ability, and understanding to years of school completed, we can see that the associations are important measures of educational success, given the present educational system.

The patterns of association between the use of the English language and educational attainment are shown in Table 3. Using high school education as a plateau from which to depart, we find that 56.9 percent of those who usually speak English completed at least twelve years of education.

Only 27.9 percent of those who usually do not speak English completed high school, a drastic difference. Those "speaking or not speaking English with one's children" also show these marked differences—55.8 percent for those completing at least high school and speak English at home versus only 30.0 per-

cent among those who do not speak English at home. Similarly, the respective figures for language used “with friends” are 57.8 percent versus 25.0 percent. Given the English-only education system in place, we might well deduce that in order for one to advance successfully in school, the more likely that one would necessarily have to become more acculturated by converting to English, which would increase the probability of passing that

TABLE 3

**Use of English and Formal Education Plateau
Among American Indians, 16 Years and Older
(numbers indicate percentage)**

USE OF ENGLISH	EDUCATION PLATEAU				
	Less Than 1 Year	1-6 Years	7-11 Years	12 Years or More	TOTAL
Usually Speak English	0.6	3.6	38.9	56.9	100.0
Usually Do Not Speak English	17.9	18.6	35.6	27.9	100.0
Bilingual	3.3	15.7	41.6	39.4	100.0
Not Bilingual	5.2	5.9	37.0	51.9	100.0
Normally Speak English With Children	0.7	4.3	39.2	55.8	100.0
Normally Don't Speak English With Children	18.7	17.3	34.1	30.0	100.0
Normally Speak English With Friends	0.7	3.7	37.8	57.8	100.0
Normally Do Not Speak English With Friends	17.7	18.9	38.4	25.0	100.0
Attended English-Only School	1.2	7.3	39.8	51.7	100.0
Attended Non-English School	67.3	8.4	8.3	16.0	100.0
TOTAL AMERICAN INDIAN POPULATION (N=3830)	4.9	7.3	38.1	49.7	100.0

language on to the children, speaking it with friends, and as a result of English proficiency, going farther in school.

Persons who spoke more than one language were defined as "bilinguals," and as Table 3 shows they do go farther in school than those who normally or usually do not speak English, with 39.4 percent achieving a twelfth-grade education, but considerably more monolingual English speakers complete high school. American Indians who acculturate (learn English) achieve more than those who do not, when measured by years of formal education successfully completed.⁸ Those who try to maintain two separate cultures attend more years of school than those who do not acculturate at all, but by comparison with those who accept the new culture's language they attain fewer years of education. This finding, however, does not so much speak against bilingual education as it points to problems in achieving educational success when learning a new language and culture is basic to the total educational package. That is, the education systems in place prior to 1980 for nearly all of these American Indian adults were English-only schools that did not provide true bilingual education. Secondly, although bilingual American Indians attend fewer years of school than mono-English Indians, we will later show that both groups achieve identical levels of educational proficiency as measured by basic literacy.

Looking at educational plateaus, not being taught in English at school basically means not attending school. That is, for the few adult American Indians (5.6 percent) who were not taught in the English language, two-thirds did not complete even the first year of school. At the other end of the spectrum, only 16 percent of those in non-English schools completed high school. Interestingly, however, almost half of those attending non-English schools who completed the first year finished high school. If we examine completion rates for those who attended "English only" schools and adjust the 51.7 percent who are high school graduates to account for those who dropped out without completing a year's education, we find that 52.3 percent in English-only schools completed high school. Yet virtually the same proportion (48.9 percent) of those who similarly completed at least one year of schooling in non-English schools completed high school. Thus, the cultural and language barrier past the first grade is great for American Indian students in both English and non-English schools, but language match is clearly a greater problem in the early grades. Even the first year

of schooling is very problematic for those who "usually do not speak English," especially for those who attended "non-English" schools.

If we now closely examine early flight from the educational system, say after six years, we find that more than one-third of non-English-speaking American Indians leave school by the end of the sixth grade, as compared to about one out of twenty-five for those who normally or usually use English. Thus, the primary level, where basic skills are established, is a major barrier to non-English-speaking children. At the other end of the spectrum, an examination of the data on high school completion, adjusted for this high early attrition, shows that early attrition accounts for the reduced numbers of high school graduates among the non-English use population. To be sure, the middle school years are a consistent barrier to between 34 and 41 percent, regardless of English use except for the group that did not use English in school. However, it is the primary years that account for the majority of the difference in numbers that complete high school.

Turning now to patterns of self-reported ability to speak and understand English and educational success (Table 4), we find similar patterns except that the delineations by education plateau are sharper, with English proficiency driving the educational plateau. As we move from "well" to "not well" categories, the pattern becomes even more clear. Consistently fewer students move from plateau to plateau as English proficiency decreases. Noting the zero years of formal education category, one can see that virtually all students who do not speak (93 percent) or understand (98 percent)⁹ English well drop out of school early regardless of bilingual potential. That is, whether bilingual or not, American Indians must speak and understand English well in order to succeed educationally in the mono-English school systems that virtually all have attended thus far. Almost 60 percent of those who speak just a few words and 67 percent of those who understand just a few words of English fail during the first year of school. Rather than learning the new language, they are dropping out immediately even though some language skills are reported. But for those who speak no English at all, the first grade is their last.

To summarize, mono-English American Indians stayed in school more years than bilinguals, who in turn attended much more school than non-English speakers. Also, English language ability, as measured by self-reported speaking ability or under-

TABLE 4

English Language Ability and Formal Educational Plateau Among American Indians, 16 Years and Older (numbers indicate percentage)					
ENGLISH LANGUAGE ABILITY	EDUCATION PLATEAU				
	Less Than 1 Year	1-6 Years	7-11 Years	12 Years or More	TOTAL
SPEECH:					
A. Well:					
Very Well	0.4	2.9	35.4	61.3	100.0
Well or OK	2.2	9.7	49.1	39.0	100.0
B. Not Well —					
More Than a Few Words	9.4	46.5	37.0	7.1	100.0
Just a Few Words	57.9	39.5	2.6	0.0	100.0
Not at All	92.9	7.1	0.0	0.0	100.0
UNDERSTANDING:					
A. Well:					
Very Well	0.4	3.0	35.8	60.8	100.0
Well or OK	2.6	11.0	49.4	37.0	100.0
B. Not Well —					
More Than a Few Words	12.7	49.2	34.7	3.4	100.0
Just a Few Words	67.0	31.8	1.2	0.0	100.0
Not at All	97.8	0.0	0.0	2.2	100.0
TOTAL AMERICAN INDIAN POPULATION (N=3830)	4.9	7.3	38.1	49.7	100.0

standing, is highly related to greater achievement, as measured by years of education attained. However, even among mono-English American Indians, spending more years in English-only schools does not translate into greater educational attainment as measured by actual educational proficiency. To demonstrate this we investigated English use, ability, and understanding and their relationships to educational proficiency as measured by literacy in the basic three Rs: reading, writing, and computation.

ENGLISH USE AND EDUCATIONAL PROFICIENCY

As a part of the original NIMSA study, an abridged version of Northcutt's Adult Performance Level Inventory (APL),¹⁰ a paper-and-pencil literacy test, was given to each respondent. Modified by a national panel of American Indian educators to better reflect American Indian culture prior to administration, the test measured several dimensions of performance which presumably may be linked to education. Any bias introduced by that procedure would show American Indians getting higher, rather than lower, literacy scores.¹¹ Along with the typical areas of reading, writing, and computations, the original (Northcutt) and abridged (NIMSA) forms of the APL also included the domains of "problem solving" and "interpretation of facts and figures." Since all five domains showed similar results, to simplify this analysis we report here only on the single "3Rs" index, which aggregated the scores for reading, writing, and computational skills into a single measure. The median percent of questions answered correctly from among those items comprise the 3Rs index and we report that as a percentage with 100 being a perfect score. As these thirty-six aggregated questions were all multiple-choice ones, and as all but one included only four choices, one would expect a pure guess to yield a net percentage 3Rs score of 25.

Table 5 shows the median 3Rs percentage score by English language usage. At least half of those who usually speak English score 64 or higher on the 3Rs index, while those who do not score 28, a mere three percentage points above pure guesswork. Note that these tests were administered one-to-one by a trained interviewer who could read the mathematics question to the respondent, thus eliminating reading bias from the computational question. In skimming Table 5, it is obvious that

TABLE 5

**English Use and Median 3Rs Percentage Score
Among American Indians, 16 Years and Older**

USE OF ENGLISH	MEDIAN 3Rs PERCENTAGE SCORE
Usually Speak English	64
Usually Do Not Speak English	28
Bilingual	64
Not Bilingual	31
Normally Speak English With Children	64
Normally Don't Speak English With Children	28
Normally Speak English With Friends	64
Normally Do Not Speak English With Friends	28
Attended English-Only School	58
Attended Non-English School	22
AMERICAN INDIAN POPULATION MEDIAN	58.5

TABLE 6

**English Ability and Median 3Rs Percentage Score
Among American Indians, 16 Years and Older**

ABILITY	MEDIAN 3Rs PERCENTAGE SCORE	
	SPEECH	UNDERSTANDING
Well:		
Very Well	67	67
Well or OK	50	50
Not Well:		
More Than a Few Words	28	28
Just a Few Words	25	22
Not at All	19	19
AMERICAN INDIAN POPULATION MEDIAN	58.5	58.5

the use of the English language was and is critical to success as measured by the 3Rs index. It is not surprising that our initial example of a continuing traditional, non-aculturated tribe, the Navajo scored a median of 28 on the 3Rs items, again three points above guesswork.

Table 6 reflects English ability as it relates to the 3Rs score, and there can be no question that regardless of whether one considers ability to speak or to understand English, the 3Rs percentage score and ability are intrinsically related. The greater one's ability, the greater the understanding, again, with interviewer translation assistance where it did not interfere with the context of the scale. As children, the respondents were taught their school lessons in the English language, and if they did not have those skills, they were not otherwise exposed to them in such a way as to enhance understanding.

Although specific figures are not available for this abridged 3Rs index for the total U.S. adult population, based on the comparisons between American Indian and United States medians for the original APL subscales, we would expect a 3Rs percentage score of at least 80. The median 3Rs percentage score for both mono-English and bilingual Indians is 64, a significant difference compared to Americans in general, but not with respect to each other. It should be recalled here that monolingual Indians who speak English tend to attain higher educational plateaus than do bilingual Indians, yet these results clearly show that their significantly longer educational stay does not result in actual greater adult literacy. Thus, compared to their mono-English peers, bilingual American Indians drop out of school sooner, but have an identical level of measured literacy performance in the combined areas of reading, writing, and computation.

REGIONAL DIFFERENCES IN EDUCATIONAL ATTAINMENT

This situation does not speak well for the quality schooling of American Indians, particularly in the western region of the country where the vast majority of American Indians reside. The regional data in Tables 1 and 2 indicate that compared to American Indians residing in the East, those in states west of the Mississippi tend to show lower levels of English use (8.9 percent less), speaking ability (9.9 percent less), and understanding (9.3 percent less). The NIMSA study results previous-

ly reported elsewhere indicate that American Indians in the West attained a greater level of education than those residing in the East, but ironically showed dramatically lower adult literacy levels in all measured areas.¹² The median 3Rs percentage scores found among American Indians residing east of the Mississippi were 58 for those with no diploma, 78 with a high school diploma, and 83 with a GED or some postsecondary schooling. For those residing in western states, where most American Indians live, the median 3Rs scores were only 31, 53, and 57 respectively. The highest performance level attained by Indians in the West was one point below the lowest figure found among eastern Indians (i.e., among those with no degrees or diplomas). Since Indians receiving GEDs in the West averaged 67 on the 3Rs index and make up about two-thirds of the 57 figure, this result is actually much lower than stated. Also, in the abridged version of the APL reported here, a few items were modified to make it more likely that American Indians would be able to respond, so these literacy levels are likely lower than stated. Contrary to the expected positive linear relationship between years of education and the 3Rs score found in the East, no such relationship was found in the western data.

Indeed the pattern found in the West was so pronounced and so drastically different from that shown among Eastern Indians that [the researchers could] only conclude that there is something seriously wrong with the educational systems in the West where [most] Indians are trained. Regardless of degree or lack of degree, Western Indians are far less well educated in the three R's than are Indian residents of the East.... Formal education [especially in the West] is simply not changing one's ability to demonstrate basic educational skills for a substantial number of tribes.¹³

Moreover, adult literacy rates in all measured areas of competence were significantly lower among adult American Indians residing in the West, even though they had more years of schooling than those in the East.

Thus far, we have demonstrated that educational proficiency as measured by English literacy in reading, writing, and computation is at a significantly lower level among American Indians, especially among those residing in the West, than it is for Americans in general. Next, we review national trends that

directly compare American Indian adults with Americans in general, with regard to educational attainment. To accomplish this, we look at the national outcomes for American Indians of neocolonial schooling on their educational attainment found in NIMSA data and assess the resulting changes in their language use and educational attainment from 1980 to 1990 using comparable U.S. census data.

OUTCOMES OF NEOCOLONIAL EDUCATION

We have used the term *neocolonial* throughout this essay not in its politically charged context but as a representation of a morphological change economically and socially as Europeans discovered and inhabited territories new to them. The historical social context was one of ethnocentrism, paternalism, and an extension of the social order and status from the ancestral home to the New World location. Thus, regardless of political orientation, Europeans and, later, Americans assumed a higher status and at a maximum accepted the paternal role in dealing with indigenous tribal peoples. American Indians were not considered equal, were to accept, learn, and adopt the invasive folkways, mores, and culture; and if they did not, it was perceived by the colonists to be merely a reflection of lesser status. There can be no doubt that the acceptance and adoption of the English language was and still is the precursor to academic success in mono-English schools.

Today, American Indians still are residents of scattered colonies within the United States, mostly located in the West. If they are to achieve full participation in postindustrial twenty-first century society, the negative social dimensions of this neocolonial profile must be removed. Successful removal of these dysfunctional vestiges associated with American Indian education depends on documenting current trends in language use and educational attainment found among adult American Indians. Therefore, we must assess the results presented thus far in light of comparable data available in the 1980 and 1990 U.S. censuses.

RECENT TRENDS IN LANGUAGE USE

Thus far we have presented the findings of the NIMSA study, the first national survey of American Indian education and literacy, which was conducted from 1978 to 1980. We have not yet

grounded the data outside of that study. To accomplish this, we directly compare the NIMSA language results with comparable information gathered from American Indians in the same time frame (1980) by the U.S. Bureau of the Census. Table 7 illustrates the data results gathered by the U.S. Bureau of the Census in 1980 for Indians eighteen years and older (in the left column of the table).¹⁴

Where the NIMSA data (16+ years) gathered between 1978 and 1980 show that 75.3 percent spoke only English (Table 1), the 1980 Census of Population (18+ years) found 72.6 percent, within the levels of confidence defined by the NIMSA study. For those who speak English either "not well" or "none," the

TABLE 7

LANGUAGE SPOKEN	Language Use Among The American Indian Population 1980 (18+ and 5+ Years of Age) and 1990 (5+ Years of Age) (numbers in decimals indicate percentage)			
	1980		1990	
	18+ Yrs	5+ Yrs	5+ Yrs	CHANGE 5+ Yrs
Speak Only English	72.6	73.9	76.2	+2.3
Language Other Than English	27.4	26.1	23.8	- 2.3
Am Indian or Alaskan Spoken	21.3	20.6	*	
• Speak English Very Well/Well	18.1	17.5		
• Speak English Not Well/None	3.1	3.1	9.2	+ 6.1
Other Language Spoken	6.2	5.5		
• Speak English Very Well/Well	5.3	4.8		
• Speak English Not Well/None	0.8	0.7		
Population	915,614	1,329,321	1,817,347	+488,026

* Blank cells indicate no data available for 1990.

1980 census found 3.1 percent, while the NIMSA data found 3.9 percent at that level of speech and 3.5 percent at that level of understanding (Table 1), again within the prescribed levels of confidence. Having established a solid grounding of the NIMSA study language-use findings with those of the comparable 1980 census results, we look at some language-use trends found in the 1980 and 1990 census data for the American Indian population, five or more years of age (Table 7).¹⁵

From 1980 to 1990, the situation changed somewhat with respect to the proportion of mono-English-speaking American Indians. The 1990 Census of Population reports that 76.2 percent of the American Indian population (five or more years of age) speaks only English, a 2.3 percent increase since 1980. However, 9.2 percent (or nearly 38 percent of Indians who speak a language other than English) now do not speak English very well, a 6 percent (or at least a 5.4 percent¹⁶) increase since 1980. The former change of 2.3 percent may be in part the result of sampling error, but the latter is not likely to have been error-driven. The difference in those speaking English poorly or not at all increased nearly threefold over the ten-year period from 1980 to 1990. This occurred despite the fact that the aged population, which is less likely to have English skills comparable to the younger population due to mass communication, is also less likely to have survived the decade. That is, as the older population dies and is replaced by youth, we should see a substantial decline in the population that speaks no English or that doesn't speak English well if English is making some headway over the native tongue. *The opposite is the case.* Thus, native language use as a sole vehicle of communication may actually be increasing (or at least maintaining), not decreasing. Second, those speaking a language other than English are now even more likely to speak English poorly or not at all than in the previous decade. This means that in the mono-English school systems where most American Indians are educated, students are at a greater disadvantage now than they were at the time of the NIMSA survey. With these language-use trends in mind, we turn now to the current outcomes and trends in American Indian educational attainment relative to that found among Americans in general.

RELATIVE LEVELS OF EDUCATIONAL ATTAINMENT

Removal of the negative vestiges of neocolonialism associated

with American Indian education depends on knowing not only the present language use but also the current educational attainment of adult American Indians. To approach this topic in more detail, we assess the levels of educational attainment obtained by adult American Indians found in the 1980 NIMSA and U.S. census data shown in the first two columns of Table 8 below.

Table 8 displays the academic status of the American Indian population (twenty-five years and older) as reported by both the 1980 and 1990 Census of Population and by the NIMSA study. While the results from the two different 1980 studies are not directly comparable due to different ways of defining adult American Indians, it nevertheless is interesting to see that in comparison with the NIMSA (sixteen years of age and older), the 1980 census (only twenty-five years of age and older is available for this census year) found very similar but not equivalent outcomes of formal education. For the "8 or fewer years" group, the 1980 census found 24.4 percent of the population over twenty-four years of age, while the NIMSA survey found 22.2 percent, slightly fewer than the census, considering the level of confidence for both surveys. Still, the numbers are close. In fact, the percentages are similar for all categories except for those who completed some high school but did not graduate; the 1980 census (twenty-five-plus years) found 19.8 percent (19.5 percent for eighteen years and older) while the NIMSA survey found 28.0 percent (for sixteen years and older)—an 8 percent difference. Three percent may be found among GED recipients who would have been aggregated with the high school graduate group, but that still leaves about 5 percent fewer reported by NIMSA study than were reported by the census. Clearly there are some slight differences when one considers these two data sets, with the differences among those having some education above the eighth grade but not completing high school being the most important. The main point here, however, is simply to demonstrate that no matter which data set is used, American Indian adults clearly have achieved educational outcome levels that are significantly below that attained by Americans in general (see the "1980 Census" column under the "U.S. Population" section on the right half of Table 8). Furthermore, compared with a United States median education for Caucasians which is well above two years of college and has been since 1970, American Indian education is woefully lacking.

TABLE 8

Years of School Completed by the American Indian and U.S. Population 25+ Years of Age, 1980 and 1990 (numbers in decimals indicate percentage)

YEARS OF SCHOOL COMPLETED	AMERICAN INDIAN POPULATION			U.S. POPULATION		
	1978-80 Nimsa	1980 Census	1990 Census	1980 Census	1990 Census	Census Change
Elementary (0 - 8 yrs)	22.2	24.4	14.0	18.3	10.4	-7.9
High School 1 - 3 yrs	28.0	19.8	20.4	15.3	14.4	-0.9
High School or GED	28.2	31.4	29.2	34.6	30.0	-4.6
College 1 - 3 yrs	16.6	16.7	20.8	15.6	24.9	+9.3
College Degree	5.0	7.7	9.3	16.2	20.3	+4.1
Total	100.0	100.0	100.0	100.0	100.0	0.0
Population	3,830	691,452	1,079,621	132835687	158868436	+26,032,749

RELATIVE TRENDS IN EDUCATIONAL ATTAINMENT

Finally, we assess the trends or the direction of educational outcomes for American Indian adults over time (from 1980 to 1990). Since the NIMSA data were gathered at only one point in time, the best comparable data are for American Indian adults in both census years, but are only available for persons twenty-five years and older.

Using the census data from the left half of Table 8, we find that there were gains and losses in education among the American Indian population (twenty-five years and older) from 1980 to 1990. Because the older population tends to be less educated than the younger one, we would expect educational levels to increase over time as the older population dies and is replaced by a new cohort of twenty-five to thirty-four-year adults previously too young to be reported. We do find a decrease of 10 percent (almost one-half) for those who have completed fewer than eight years of education. That population is replaced by one that has some college but not a degree. This appears to be promising for the American Indian population, as the change is positive.

Looking at the right half of Table 8, however, brings us back to reality. The results are similar for the United States as a whole; that is, there are fewer people with less education and more people completing at least some college. When we compare the *relative* gains and losses of the two groups, we find that one-third more American Indians had completed only eight years of formal education in 1980 than we should have found were American Indians following the population trend as a whole.¹⁸ In 1990 that percentage had increased slightly (to +34.4 percent, or a relative net gain of 1.3 percent), although the difference is within the level of confidence of the U.S. census. The number of American Indians who had completed some high school but had not attained a degree, however, increased some 12 percent (a +29.4 percent relative increase for American Indians in 1980 to +41.7 percent in 1990) compared to the population as a whole. American Indians were decidedly losing ground here. By 1990 American Indians reduced their deficit among high school or GED diploma holders (+6.5 percent relative increase), although still not at parity with the population as a whole. However, American Indian college attendees or degree holders lost substantial ground, with more than an 11 percent drop from 1980 to 1990 in the relative percentage

attaining higher education compared to Americans in general.

With the exception of the numbers of people completing some but not all of high school, the NIMSA study and the U.S. census both found comparable profiles of educational dropout among the American Indian population. More importantly, while the census indicated some positive change among American Indians during the past decade, that change lags far behind when compared to the percentages and change in higher levels of education experienced among the U.S. population as a whole. In contrast to the educational trends among Americans as a whole, there are relatively more American Indians who have not completed high school and relatively fewer who have completed at least one or more years of college today than there were in 1980. It is clear that the decade of the 1980s was not the decade of educational progress for American Indians. Some progress was made but it was far outweighed by the gains of Americans in general. Under the mono-English school systems now in place, American Indians are losing ground educationally as compared to Americans in general.

SUMMARY OF FINDINGS

As we have demonstrated, language has acted as a major differentiator between modern and traditional, educated and uneducated, anglicized and Native. In particular, the original NIMSA study found that as children nearly half (44 percent) of adult Indians spoke a language other than English, yet nearly all (94 percent) were given formal schooling in English only. Although one-fourth (24.7 percent) of American Indian adults still usually speak a language other than English, only one out of four of these attended a school in which a non-English language was used, and only one out of fourteen successfully completed the first year of education in such a school (i.e., only 1.8 percent of the American Indian population attended a non-English school *and* proceeded beyond the initial year).

In general, the extent of the mismatch between school and individual language used is at least one out of five. But since one-fifth of the adult American Indian population has learned English since childhood, the extent of the language mismatch could be as great as four out of nine. These levels of mismatch assume that American Indians who speak English speak or understand it well, but 7 percent do not speak or understand

English well and about 40 percent of adult American Indians report that they do not speak or understand English "very well."

Given the mono-English school systems that now enroll virtually all (94 percent) of American Indians, it is not surprising that levels of English use, speech, and understanding are highly related to years of formal education. The primary level of schooling, where basic skills are established, is a major barrier, especially to non-English-speaking children. In fact, for those who speak no English at all, the first grade is their last. Except for the small group (less than 6 percent) who did not use English in school, the middle school years also are a consistent barrier to between a third and 40 percent of American Indians regardless of English use. Whether bilingual or not, American Indians must speak and understand English well in order to advance educationally, but while bilingual Indians drop out of school earlier than do their mono-English Indian peers, they have exactly the same level of measured literacy performance in the areas of reading, writing, and computation.

Significant regional educational attainment and proficiency differences were found. That is, American Indians in the West, where most reside, have attended school more than those in the East, yet they have significantly lower adult literacy rates in all measured areas of competence. Also, educational proficiency as measured by adult literacy in reading, writing, and computation is at a significantly lower level among American Indians, especially among those residing in the West, than it is for Americans in general.

Current American Indian language use and education patterns also reveal some important national trends. First, American Indian language use as a sole vehicle of communication may actually have been increasing (or at least maintaining), not decreasing, during the last decade. Also, American Indians speaking a language other than English are now even more likely to speak English poorly or not at all than in the previous decade. Finally, American Indian students are at a greater disadvantage educationally now than they were a decade and a half ago. That is, no matter which data set is used, American Indian adults clearly have achieved educational outcome levels that are significantly below those attained by Americans in general. In contrast to the educational trends among Americans as a whole, there are relatively more American Indians who have not completed high school and relatively fewer who have completed at least one or more years of college today than there were in 1980, and they are losing ground educationally.

LANGUAGE AND DECOLONIALIZATION

If the magnitude of these negative social outcomes of neocolonialization are to be overcome and eventually eliminated from American Indian life, whether that life is to be independent of mainstream American society or integrated pluralistically with it, language conformity (uniformity) must be removed as a differentiating factor. This is no small task. Social and cultural isolation, conflict, and the history of paternalism between colonist and Native¹⁹ have in a sense preserved native tongues yet insulated them from the morphological changes which would have taken place as new words would have been added to the languages as needed to describe new concepts, situations, and things. Original dictionaries and grammar texts in native languages were often relatively rare or nonexistent in the past.²⁰ Because of the colonial and neocolonial approaches in the United States, some linguists and groups like the Native American Language Issues Institute (NALI)²¹ have designated Navajo, along with 175 or more other American Indian languages,²² as "endangered" and have predicted that "by the mid twenty-first century not more than a dozen Native American languages will still be actively spoken."²³

While these voices may sound somewhat like those of many nineteenth-century anthropologists and linguists who made similar predictions for the first part of the twentieth century, the situation today is not at all the same; the threat to native language survival is far more real now than ever before. Unlike most of today's children, those of earlier times were still learning an Indian language as a first language. In addition to dealing with overt oppression of their native languages, Indian people today must also overcome many more subtle mechanisms, such as monolingual American radio, television, movies,²⁴ and electronic media that tend to lessen the isolation and to increase the language pressure in favor of English. Of the 250 or more American Indian languages in North America, about one-fourth are spoken in California, placing that state behind only New Guinea and the Caucasus in linguistic diversity. Yet the vast majority of that media-mecca state's fifty extant native languages have fewer than ten speakers, and with the death of the last Native speaker of these at-risk languages, another language becomes extinct in California about once a year.²⁵

Until recently, indigenous languages of the world have often

tended to exist more as "tradition" than as "science." Even in Indian country today, language retention and maintenance efforts are often argued to be social movements that run counter not only to colonialization, but often to science and modernization as well.²⁶ Indeed, under repressive federal policies, traditional Indian religions; cultures; social, political, economic, and educational systems; and the indigenous languages that historically gave and presently give those essential institutions life and vision were often forced underground. As a consequence, native languages also have become viewed by some people as sacred rather than secular. But "being repressed *often* does not kill a language, and being held sacred seldom can save a language (there are many examples from around the world). The key to language survival is the percentage of children who grow up using the language fully in their everyday lives."²⁷ While true, the crucial point here is that whether independent or integrated, monolingual or bilingual, the American Indians to come must be able to at least understand the world which envelops them and, better yet, interact with it as a full partner.

This suggests that as a self-imposed isolate, American Indians must develop and transmit complex systems of knowledge in at least an updated, expanded, recorded, and documented native language. It also means that they must upgrade the traditional language to fit contemporary situations *and* become proficient in the English language in order to function in the larger society. Such changes will require some very basic reorganization of the educational systems of this country, along with major changes in the extent and manner in which American Indian languages are utilized in those settings. The basic principles to guide these changes are already in place at both the local and federal levels, but they need to be fully activated and implemented.

FUNDING AMERICAN INDIAN LANGUAGE PROGRAMS

Following the logic of Indian self-determination, there appears to be federal support of American Indian languages and education, but perhaps more on a rhetorical or symbolic than actual operational level, particularly with the initial but belated efforts of the Native American Languages Act (NALA). Enacted by Congress in 1990 and signed into law by then-President Bush, NALA was specifically designed to:

preserve, protect, and promote the rights and freedom of Native Americans to use, practice, and develop Native American Languages; . . . recognize the right of Indian tribes and other Native American governing bodies to use the Native American Languages as a medium of instruction in all schools funded by the Secretary of the Interior, . . . [and] encourage State and local education . . . to put this policy into effect.²⁸

However, from the tribal point of view of receiving any benefits, NALA languished, unfunded for nearly five years. Furthermore, at the 1995 fiscal-year funding level of only one million dollars,²⁹ NALA will likely fund fewer than twenty projects a year, and Indian educators are calling for "full funding" of at least \$7 million, so that between fifty and sixty projects per year could be well supported.³⁰ Thus, to move beyond the current tokenism and make a serious attack on the problems of language and their demonstrated linkages to educational attainment for America's first inhabitants, attaining full implementation and federal funding levels for revitalizing American Indian languages is a logical and necessary next step.

Beyond this, there have been many ground-breaking tribal-specific bilingual programs and efforts to retain and restore various American Indian languages.³¹ A unifying but unfortunate aspect of several of these activities has been the fact that they also have been "non-funded," or under-funded initial "spot treatments" to initiate the process of achieving the goals of "self and other" understanding, problem solving and advancement. Thus far, these and federal efforts serve primarily as emblematic examples that are potentially enabling, but individually and collectively they have not yet achieved even the practical, let alone the theoretical, goals, as none have been fully funded.

IMPLEMENTING AMERICAN INDIAN LANGUAGE-BASED EDUCATION

In the long run, support of grassroots programs like NALI and full funding of NALA can become a critical basis for guaranteeing that native languages would be solidly in place for actually *delivering* education. With education as the real goal, one might argue that the specific tongue—as the vehicle rather than the goal—is relatively less important. Concept formation,

adapted to the contemporary environment and situation, must be taught to students, then language options may be considered. As demonstrated, mono-English-speaking American Indians' longer stay in school does *not* translate into greater educational proficiency when compared to the reading, writing, and computational literacy found among bilinguals, nor does educational attainment of either monolingual or bilingual Indians resemble that of Americans in general. Consequently, no empirically based argument can be made for a full-scale return to or continuation of the dysfunctional mono-English language education model of the past as the sole vehicle for concept formation, understanding, and social life, as the historical and contemporary evidence presented here precludes that.

More appropriate is the 1991 U.S. Department of Education, Indian Nations At Risk Task Force's second listed goal concerning Indian languages, which states that by the year 2000, "all schools will offer native students the opportunity to maintain and develop their tribal languages and will create a multicultural environment that enhances the many cultures represented in the school."³² This may mean, however, that schooling among American Indians might initially consist of monolingual education in a profusion of tongues across the United States for the first few years of the child's education. Later, during the educational process, as English is considered a desirable and worthwhile second or perhaps primary language, students may shift in part or wholly to the English language. The important consideration here remains not simply language but learning, achievement, understanding, and self-determination.

This kind of change—dual yet integrated systems—will be difficult and expensive to accomplish. A new kind of educator will be needed, one trained in the traditional language who can teach the three Rs, for example, in the language and perhaps in physics and chemistry as well in later years. It will mean experimenting with variously organized bilingual and/or ESL classrooms and, where required, two sets of texts, training materials, and aids or perhaps "Indian language immersion schools" like those already operating in the United States and Canada³³ that teach entirely in an Indian language in the early grades and gradually introduce English later on. "There are many ways to organize bilingual and ESL education, from alternative languages on alternate days, to different languages for different subjects to different languages in the morning and afternoon, to both languages all the time in all classes."³⁴ But since

much of the bilingual and ESL teaching now in place is inadequate or poorly supported, more has to be funded, developed, and studied.

OTHER OBSTACLES TO AMERICAN INDIAN EDUCATION AND LANGUAGE RENEWAL

Finally, some additional powerful internal and external factors prohibitive to language and school renewal still remain deep within the very heart and infrastructure of American Indian education. In addition to full external funding of the NALI, NALA, and other American Indian language programs, tribal sign-offs are needed on Impact Aid, increased funding for Johnson O'Malley, higher education scholarships in the Bureau of Indian Affairs and, tribal departments of education, and an infrastructure supportive of Indian education. American Indian students still need rudimentary support in such matters as simply "getting federal funding for Indian programs on an entitlement basis, ... [and replacing] 377 dilapidated schools in Indian Country ... with new, safe structures."³⁵ It must be noted that most of these substandard schools are located in the West, where relatively low basic literacy rates are so pervasive.

Who ultimately is to accomplish this complex and expensive mission? With NALA, the government has admitted its responsibility for past failures and for assisting American Indian language restoration and retention. Although such external resources are desperately needed, few are likely to be forthcoming. Given the present political climate of program cutting, along with the colonial vestiges of the U.S. educational system that still exist today in Indian country, the real impetus for positive change must come from within tribal society.

Looking beyond external funding, the Flathead Reservation's fluent tribal language speakers recently produced the following list of local obstacles that still mitigate against tribal language renewal: lack of interest, poor self-image among many Indians, no consistency between classes at the various age levels or between the few schools that even offer such classes, limited language practice in the home, low pay for teachers, few Indian teachers, difficulty of maintaining immersion standards, and little parental assertiveness toward getting Indian languages included in reservation school curricula.³⁶ Heeding the wisdom of its elders, the internal culture

must also understand its world and adapt as needed to that which lies beyond it. All barriers to effective education must be identified and removed through exemplary language methods devised by American Indian people who are fully immersed, sustained, and armed by their own vibrant cultures to live as full partners in the twenty-first century. Without that conceptualization from within, educational problem solving and advancement in the native languages will come very slowly, as in the case of the underfunded fiscal year 1995 Native American Languages Act, or, alternatively, advancement may not come at all, as cultural conflict predominates into the next millennium.

EPILOGUE

Although the consequences of monolingual education among American Indians have been addressed in this essay, the concepts, conclusions, and many of the implications may be applied to other neocolonial examples found in the United States and throughout the world. Inhabitants of the earth speak about 6,000 different languages, but according to Michael E. Krauss, director of the University of Alaska's Native Language Center in Fairbanks, all but about 250 to 600 will likely disappear within the next century.³⁷ This worldwide threat looms clearly, yet it is no more imminent and evident than it is among the indigenous languages of America.

Our discussion of these topics now comes full circle, as current world events intervene just a half-century after American Marines captured the Mariana Islands. A U.S. commonwealth since 1978, these Pacific Islands and their natives have also tasted the "inedible feast" of America's mono-English schooling and "bootstrapping" operations. Juan Babauta, a resident representative of the Islands in Congress, recently traveled, not to Washington, D.C., but to Window Rock, the Navajo Nation capital, to remember the Navajo code talkers for their heroic deeds in liberating those Island peoples by using the code that the Japanese never broke.³⁸ Today, just as in those days, it is clear that the forced march of the external monolingual language solution is not the best, most efficient, or even an adequate one. Without such a fundamental change, our symbolic Navajo will remain an outsider to be called upon only when needed to serve in ways that suit the needs of the dominant

culture but whose own needs, understanding, and independence are beyond the majority's ken—isolated if not excluded from American society. The problem of language as a barrier to education when equal understanding among racial, cultural, or ethnic groups is a goal must be addressed not by a forced march but by an enlightened stroll there. But without effective early cultural and linguistic intervention and reinforcement in our educational systems, there may be no Navajo or other American Indian speakers to come to our aid.

NOTES

1. For important insights on an earlier draft of this article, the authors especially wish to thank May J. Boyd, a former bilingual teacher/coordinator at Teecnospos Boarding School and language arts teacher at Chemawa Boarding School.

2. The phrase *American Indian* used throughout this article refers to both American Indians and Alaska Natives. While many of the same problems and arguments addressed here are common to other native Americans, such as Hawaiians, this essay will focus on the American Indian and Alaska Native population.

3. Unlike the long waits associated with using regular military code systems that required mathematics and machines, the Navajo code speakers were able to provide instant coding and decoding. Armed with their inherently tonal and extremely complex Athabaskan language, the Navajo talkers transmitted critical war information by employing their knowledge of word games and of nature, naming planes after birds and ships after fish. The "code" seemed so simplistic, yet even untrained Navajo recruits could not break it. See Bruce Watson, "Jaysho, moasi, dibeh, ayeshi, hasclishnih, beshlo, shush, gini," *Smithsonian* 24:5 (August 1993) and Kenji Kawano, *Warriors: Navajo Code Talkers* (Flagstaff, AZ: Northland Publishing Company, 1990).

4. For a general overview of this period, see Clifford E. Trafzer and Duane Champagne, "Chronology of Native North American History, 1500 to 1965," *The Native North American Almanac*, ed. Duane Champagne (Washington, DC: Gale Research Inc., 1994), 53-54. For a detailed review of the federal policies enforced during this century, particularly as these pertained to and impacted American Indian education, see David H. Dejong, *Promises of the Past: A History of Indian Education in the United States* (Golden, CO: Fulcrom Publishers, 1993).

5. The NIMSA project was supported by three grants from the U.S. Department of Education/U.S. Office of Indian Education, originally under subpart A of Title IV, Part C of the Indian Education Act and later under the Adult Education Act sections (a)(Z) and (4) of the Indian Adult Education Act.

The three phases of the project randomly sampled adult American Indians east (1978) and west (1979) of the Mississippi and those in Alaska and Hawaii (1980). The final report was written and delivered in 1981.

6. Rodney L. Brod and John M. McQuiston, *The Status of Educational Attainment and Performance of Adult American Indians and Alaska Natives* (Philadelphia, MS: National Indian Management Service—NIMSA, Inc., 1981); this 500-plus page monograph was the first of its kind and culminated three years of research consisting of a national random sample survey (interviews with more than 4,000 American Indian adults). It was republished by ERIC/CRESS, Las Cruces, NM and abstracted in *Resources in Education* 19:4 (April 1984). For study summarizations and related specialized topics, see the following four articles by Rodney L. Brod and John M. McQuiston: "Literacy and Educational Needs of American Indian Adults: Some Initial Results and Observations on Conducting the First National Study," *Indian Participation in Educational Research: Working Papers* (Washington, DC: National Institute of Education, 1981), reprinted by ERIC/CRESS Publications, Las Cruces, NM and abstracted in *Resources in Education* 16:11 (November 1981); "American Indian Adult Education and Literacy: Some Findings of the First National Survey and Their Implications for Educational Policy," *Research and Policy in Sociology of Education Session, Pacific Sociological Association Meeting* (San Diego, CA, April 1982), reprinted by ERIC/CRESS Publications, Las Cruces, NM and abstracted in *Resources in Education* 18:6 (June 1983), also abstracted in Tonemah, Stuart, and Elaine Roanhorse Benally, *Trends in American Indian Education* (Las Cruces, NM: ERIC/CRESS Publications, 1984); "American Indian Adult Education and Literacy: The First National Survey," *Journal of American Indian Education* 22:2 (January 1983); and "Self-Determination in Native American Educational Research and Program Development," *National Institute of Education Conference on Native American Educational Research* (Washington, DC, April 1981).

7. The geographic sampling frame consisted of counties within cultural region and within census region (census districts were substituted for counties in Alaska and Hawaii). County estimates of American Indian adults were calculated by multiplying the total target population for each county by the percentage of Indians sixteen years or older residing in the state where the first stage sampling was located. For complete details of the entire methodology, see Brod and McQuiston, *The Status of Educational Attainment and Performance of Adult American Indians and Alaska Natives*, 46-60 and Appendix D, 11-68.

8. Yet, as we demonstrate later, the relatively greater number of school years attended by mono-English-speaking Indians does not match that achieved by Americans in general, nor does their education translate into acquiring the general levels of basic literacy found among Americans.

9. One individual indicated having no understanding of English yet reported completing sixteen years of school. While bilingual students tutoring non-English-speaking Indian peers have produced some amazing results, it seems more likely that this individual may simply be joking around.

10. Norvell Northcutt, *The Adult Performance Level Study* (Austin, TX: University of Texas, 1973) and *Adult Functional Competency: A Summary* (Austin, TX: University of Texas, 1975).

11. Since any bias introduced would clearly favor American Indians, any "deficit" in measured basic literacy relative to Americans in general will therefore be underestimated.

12. Brod and McQuiston, *The Status of Educational Attainment and Performance of Adult American Indians and Alaska Natives*.

13. Ibid; also see Brod and McQuiston, "American Indian Adult Education and Literacy: The First National Survey."

14. *1980 Census of the Population, Characteristics of American Indians By Tribes and Selected Areas* (U.S. Department of Commerce, Bureau of The Census, 1989), PC 80-2- 1C, S1, T 5, 203.

15. Ibid; also see *1990 Census of Population: Social And Economic Characteristics of the Population* (U.S. Department of Commerce, Bureau of The Census, 1993), 1990 CP-2-1, T 124, 142.

16. This figure could be a 5.4 percent increase, if the 0.7 percent from the "not well/none" category of "other language spoken" is included with the 3.1 percent figure for the "not well/none" category among Indian language speakers in 1980 (i.e., $9.2\% - 3.8\% = +5.4\%$).

17. *1980 Census of Population: Social And Economic Characteristics of the Population, U.S. Summary* (U.S. Department of Commerce, Bureau of the Census), PC 1, T 83, 1-21 and *1990 Census of Population: Social And Economic Characteristics of the Population*, CP-2-1, T 124, 142; the NIMSA data in Table 8 are from Rodney L. Brod and John M. McQuiston, "American Indian Adult Education and Literacy: The First National Study," T 1.

18. The gains or losses of American Indians relative to those of Americans in general are found by employing the following formula for each census year in Table 8: $[(\text{American Indian \%} - \text{U.S. Total \%}) / \text{U.S. Total \%}] \text{ times } 100$; among those with eight years of education in 1980 for example, the result would be $[(24.4\% - 18.3\%) / 18.3\%]100 = + 33.3\%$, or American Indians had a third more in this category than should have been found compared to Americans in general.

19. For a full discussion of cultural and social conflict and self-determination in American Indian education, see John M. McQuiston and Rodney L. Brod, "Structural and Cultural Conflict in American Indian Education," *The Journal of Thought* 19:3 (Fall 1984); or see "Conflict in American Indian Education," a slightly condensed version of the above article reprinted for the special 50th Anniversary Edition of *The Education Digest* L:8 (April 1985). For more recent discussions, see Guy B. Semese, *Self-Determination and the Social Education of Native Americans* (Westport, CT: Greenwood, 1991) and its review by Rodney L. Brod, *CHOICE* (September 1992): 307-308; also see Norman T. Oppelt, *The Tribally Controlled Indian Colleges: The Beginnings of Self Determination in American Indian Education* (Navajo Community College, 1990) and its review by Rodney L. Brod, *CHOICE* (February 1992): 471-472.

20. Recently, however, a growing number of dictionaries, grammar books, and teaching materials have already been created or are in the process of being developed across Indian country. An interesting recent example of a tribally developed dictionary with basic grammar and exercises is a pamphlet published and disseminated to tribal members by the Miami Nation of Indians of the State of Indiana, Inc., a state-recognized tribe that has petitioned for federal recognition; this dictionary is also being used by the Miami Tribe of Oklahoma. The Internet is being used to reconstruct the language. See Daryl Baldwin, *Kepaelatawangenene* ("Our Language") (Peru, Indiana: Miami Nation of Indians of the State of Indiana, Inc., 1994).

21. Based on the goals and efforts toward developing, maintaining, and preserving American Indian languages "through exploration of new and indigenous forms of language transmission," the Native American Languages Issues Institute (NALI) represents an example of a decade and a half grassroots effort to encourage traditional ways of learning language through "processes of song, stories, dance and oral histories and academic schooling models"; see Marjane Ambler, "Native language conference looks to children to keep the spirit alive," *Indian Country Today* 14:24 (December 1994): A5.

22. Grimes, *Ethnologue: Languages of the World* (1992), cited in "Shaping our Future through Language and Song," 14th Annual Native American Language Issues Institute Conference (Santa Fe, NM, Institute of American Indian Arts, November 9-14, 1994).

23. William Bright, "North American Indian Languages," *The Native North American Almanac*, ed. Duane Champagne (Washington, DC: Gale Research Inc., 1994), 445-46; also see "Shaping our Future through Language and Song."

24. Contrary to this pattern, native language efforts on the Wind River reservation have taken a proactive language approach with popular media. They recently were approved and funded by Walt Disney Studios to redub *Bambi* entirely in the Arapaho language; Professor Stephen Greymorning, The University of Montana, personal communication, December 21, 1994.

25. These figures are from Leanne Hinton, University of California, Berkeley and summarized in J. Raloff, "Languishing Languages: Cultures at Risk," *Science News* 147:8 (February 1995): 117.

26. Arguments along these lines are currently the basis of an historical dissertation by Ben F. Irvin, "Language and Culture Mobilization in Public Schools on the Crow Reservation Since the Crow Act of 1920," Unpublished dissertation., The University of Montana, 1995, which deals with language activation and maintenance patterns found among the Crow; personal communication with the author, December 20, 1994.

27. Anonymous reviewer, February 1995.

28. The "Native American Languages Act," P.L. 101-477 (U.S. Statutes At Large, 1990): 104 pt. 2:1153-56; also see Donald Fixico, "Law and Legislation," and Karen Swisher, "Education: Primary and Secondary U.S. Native Education," ed. Duane Champagne, *The Native North American Almanac* (Washington, DC: Gale Research Inc., 1994), 509, 865.

29. Dean Chavers, "FY 95 Federal Budget," Coalition for Indian Education, *Newsletter* 7:2 (May 1994): 1-2.
30. Dean Chavers, "NALA Funded," Coalition for Indian Education, *Newsletter* 7:2 (May 1994): 5.
31. Navajo bilingual and language-survival programs, as well as many other "effective language education practices" programs springing up throughout Indian country, are currently gaining much attention. See Jon Reyhner, ed., *Teaching American Indian Students* (Norman, OK: Oklahoma Press, 1992) and its review by Rodney L. Brod, *CHOICE* (May 1993): 499-500. Also see Jon Reyhner, *Teaching the Indian Child: A Bilingual/Multicultural Approach* (Billings, MT: Eastern Montana College, 1988) and its review by Rodney L. Brod, *American Indian Quarterly*, 24:1 (Winter 1990): 89-90.
32. Indian Nations at Risk: An Educational Strategy for Action, Final Report of the Indian Nations at Risk Task Force (Washington, DC: U.S. Department of Education, 1991); also see Karen Swisher, "Education: Primary and Secondary U.S. Native Education," *The Native North American Almanac*, ed., Duane Champagne (Washington, DC: Gale Research Inc., 1994), 867.
33. Don McCaskill, "Education: Canadian Native Education," *The Native North American Almanac*, ed. Duane Champagne (Washington, DC: Gale Research Inc., 1994), 886-7.
34. Anonymous reviewer, June 1995.
35. Dean Chavers, personal letter, January 17, 1994.
36. Patti Sessions, "Language Preservation is Subject of Grant Request," *Char-Koosta News* 25:41 (July 1994): 3.
37. Raloff, "Languishing Languages: Cultures at Risk," 117.
38. "Navajo code talkers thanked," *Indian Country Today* 13:38 (March 16, 1994): A3.