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ABSTRACT

This collection of 20 essays by 21 authors presents teaching methods and resource material promoting productive school experiences for American Indian students. The chapters are organized into five sections. The opening chapter of section 1 emphasizes that teachers must understand and respect the cultures and backgrounds of their students, an attitude essential to a bilingual and multicultural approach to Indian education. Other chapters in this section (1) outline the historical background of Indian education; (2) discuss tribal language policies and the ingredients of a successful bilingual program; and (3) examine multicultural education goals and the value of cultural relativism for minimizing ethnocentrism and eliminating racism. Section 2 (1) describes the stages of oral language development and the role of the first language in second language development; (2) provides practical suggestions for teaching English as a second language; (3) discusses necessary elements for reading comprehension; and (4) presents a whole-language approach to language arts. A section on teaching Indian literature discusses the inadequacies of basal reading textbooks, examines the use of storytelling in the classroom, provides a motif bibliography, and lists sources of culturally appropriate books for different grade levels. Section 4 makes specific suggestions for teaching social studies, science, mathematics, and physical education to Indian students. The final section discusses the parents' role as first teachers, a positive working relationship between parents and teachers, theories concerning self-efficacy, and means to empower Indian students.

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TEACHING
THE INDIAN
CHILD A Bilingual/Multicultural
Approach

Edited by Dr. Jon Reyhner

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TEACHING THE INDIAN CHILD: A BILINGUAL/MULTI-CULTURAL APPROACH, Second Edition

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Preface

The first question of the reader of the first edition of *Teaching the Indian Child* upon looking at the second edition would probably be, "What happened to Dr. Gilliland's chapters?" The answer is that they have been revised and updated along with some additional chapters by myself and others in a new book, *Teaching the Native American*, being published by Kendall/Hunt Publishing Company in cooperation with the Council for Indian Education. That book emphasizes practical advice and help for Indian educators. This second edition has a more theoretical approach with new chapters on oral language development and multicultural education.

The continued need for information in the field of Indian education is indicated in reports such as *American Indian/Alaska Native Concerns* issued in June, 1987, by the National Education Association. This report echoes the concerns of previous reports as to the need for quality educational programs designed to meet the particular educational needs of both urban and rural Native Americans.

As with the first edition, this second edition is designed to aid teachers with ideas about resources and methods, and the research and theories backing those ideas, especially appropriate for Indian students. Good teachers have always recognized the individual background and character of each student and have taken advantage of those unique characteristics when planning lessons. This book hopes to provide the good teacher of Indian students with some teaching methods and materials they will find useful. The editor would appreciate negative and positive feedback from the field as to the usefulness of the material in this book. Its purpose will only be served if Indian children have a better school experience, from both academic and personal standpoints, as a result of ideas taken from this book and put to use by educators of Indian children.

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INTRODUCTION

Perhaps the greatest effect on American educational reform came from the report, *A Nation at Risk: The Imperative for Educational Reform*, April 26, 1983, issued by the National Commission on Excellence in Education. This education report was responsible for creating, from the public, a mandate for reforming the educational system that has never been seen before in this country. A very cogent point made in this report is that

part of what is at risk is the promise first made on this continent: All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost. This promise means that all children by virtue of their own efforts, competently guided, can hope to attain the nature and informed judgment needed to secure gainful employment and to manage their own lives, thereby serving not only their own interest but the progress of society itself. (p. 9)

To begin with, being an American Indian in itself is no problem; however, being an American Indian and growing up and going to school in a non-Indian environment and society frequently is a problem. Children from the dominant American culture grow up experiencing and being influenced by one predominant way of life while American Indian children grow up experiencing at least two very different views of the world they live in.

Too often teachers and other school personnel are oblivious of the fact that American Indian students undergo traumatic cultural conflicts while attending school. Sadly, many of these students develop strong feelings of alienation and soon learn to withdraw psychologically and, in time, physically. The school dropout rate by American Indian students is among the highest in our country. This high dropout rate is attributed to the lack of relevant curricula and the poor self image of Indian students.

A National Education Association publication, *American Indian/Alaska Native Education*, estimates that twenty-five per-

cent of American Indian children begin school unable to speak English (1983, p. 27). As a result, they have difficulty reading. Those who come to school with limited English speaking ability also face tremendous difficulties. Many do not hear standard English spoken at home; some hear no English at all. Bilingual programs are critically necessary for the majority of these students.

Our world is rapidly changing; we are living in the age of vastly expanding technology. In the coming decade change and innovation will be the principle challenge facing educational leaders. Conventional teaching methods and school curriculum, developed to cope with our past, relatively stable environment, have largely become obsolete. We must find new ways to educate our future generation.

This book attempts to address the specific instructional programs and teaching methods that may help promote more productive schooling experiences, especially for American Indian students attending the schools of our country.

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The Need for Bilingual/ Multicultural Indian Education

Ricardo L. Garcia

This book is about looking at education from a different perspective. Everything about this book requires that we approach Indian students and their education from both bilingual and multicultural viewpoints. In *Teaching the Indian Child* different educators present their perceptions of the educational needs of the Indian child. Yet while these educators present a myriad of viewpoints, there exists a fundamental consensus among them regarding Indian children. Indian children are all individuals like other children. At home some are sad, bratty, cute. Some are fat, some are thin; some like to sleep at night, others during the day. At school some are curious, or bright, not so bright, or timid, or aggressive. Some like to talk, or read, or count. They all descend from very old cultures, the oldest in North America.

Attitude is the crux

The fundamental consensus that Indian children are like most other children provides the foundation for the book's major assumption: teaching Indian children is no different than teaching any other children. This assumption is predicted on the belief that good teaching requires that teachers understand and respect the individualism of all children including the cultures and back-

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grounds which the students represent. Herein is the crux of *Teaching The Indian Child*: truly understanding and genuinely respecting the Indian child are teaching characteristics that will surmount a multitude of other shortcomings.

This idea of respect and understanding is not a pie-in-the-sky, do-gooder attitude. Rather, it is an attitude that must pervade all of teaching regardless of the ethnic and cultural backgrounds of the students. So what? If all that's needed are respect and understanding, then why a whole book on the topic? Why not a short article filled with platitudes on respect and understanding? The answer is that true understanding and respect do not come easily when teachers are not members of the culture to which the students belong. And even when they are members of the same culture, true understanding and respect are attitudes and behaviors which take time and effort to develop. Understanding and respect are the antecedent attitudes for teaching Indian children. The attendant behaviors to put the attitudes into effect are the efforts to provide Indian children a thorough foundation in the academic areas needed for school and occupational success.

A teacher that respects their Indian students will take the time needed to learn about them which will lead to understanding. There is a body of research that addresses the educational needs of Indian students that educators need to be aware of and a body of curriculum materials that have been developed. This book is a working synthesis of the research to date and a reference work as to curriculum materials available. Teachers need knowledge of research on Indian, bilingual, and multicultural education to adequately understand and meet the needs of their Indian students.

Respect and understanding should undergird an academically strong curriculum in all subject areas. Respect and understanding can be developed through the use of cultural relativism as a teacher's guiding ethos.

Cultural relativism and teaching

Teachers should keep their focus first on transcendent problems common to all cultures and students—ignorance, poverty, disease, hunger—and second, on the cultural differences manifest in the way their students learn and behave. A posture of cultural relativism, which views cultural groups from their vantage point, can assist the teacher with the awesome task of dealing with and teaching Indian students who come from many different cultures. Cultural relativism takes the attitude that cultures are

different but not necessarily inferior or superior. Actually, cultures differ because groups of people develop them to accommodate unique ecological, demographic, and economic situations. Cultural relativism necessitates that we perceive cultures from their unique perspectives rather than from the perspective of the white, middle-class American, the cultural viewpoint most common in schools.

All too often we tend to view other cultures from the viewpoint of our own culture. Using our own culture as the standard or model, we compare other cultures to our own culture. After the comparison we may conclude that the other cultures are "better" or "worse," or we may think of one as "civilized" and the other as "savage." Cultural relativism asks us to view other cultures from their viewpoints, and when they differ from ours, they merely differ. They are not to be perceived as superior or inferior.

Cultural relativism does not mean that anything in the name of culture is acceptable. The purpose of cultural relativism in this book is to assist educators to develop more objective attitudes about Indian cultures in the United States. Cultural relativism can provide a climate of acceptance for the cultures of Indian children; it allows public schools a way to incorporate these cultures into classrooms. Cultural relativism allows teachers to approach a new culture with an open mind. Without cultural relativism teachers are likely to approach a new culture through their own cultural biases. Consequently, cultural relativism should not be perceived as nihilism where "anything goes" but rather as a way of building acceptance toward the cultures of Indian children.

Cultural discontinuity and teaching

We should use cultural relativity as a means of ameliorating more basic problems that confront all cultures, including the cultures of Indian children. These problems—poverty, hunger, ignorance, and disease—are powerful enemies of Indian children that can discourage even the most idealistic teachers; teacher turn-over in Indian reservation schools is quite high primarily because these problems, especially those caused by poverty, may overshadow the more positive and viable aspects of Indian culture.

As discouraging as these words may sound, teachers have very little direct control over the problems of poverty and its consequences. Yet, teachers have control over their classrooms, what is

learned in their classrooms, and how knowledge and skills are learned in their classrooms. So while teachers have little direct control over poverty, by slow degrees within their classrooms, they can have an academic impact on their students, which in the long haul, can serve to neutralize the effects of poverty.

In general, Indian children have difficulty in schools and classrooms owing to the problem of cultural discontinuity rather than other factors such as cognitive or intellectual deficits. Cultural discontinuity refers to the situation by which the experiences of schooling, and more specifically, classroom experiences do not accommodate or are not compatible with the cultural backgrounds of the students. As infants, Indian children are reared within the context of their home cultures. They start a socialization path that begins within the attitudes, values, and beliefs of their home cultures. Then when they commence schooling, if the school and its classroom experiences ignore their home culture, then their socialization path is abruptly discontinued; in other words, the infant begins life within the home culture and then is jerked into an entirely different culture upon entering school, *if the school and the classroom experiences do not accommodate the child's cultural background* (Spindler, 1987; Garcia, 1982). The chapter on "Teachers and Parents: Working Together" in this book will help teachers understand this problem. The value of formal education in schools tends to be implicit within the dominant culture. For the Indian student it needs to be made explicit in terms of future value and what is required.

Cultural continuity and instruction

To mitigate cultural discontinuity in the classroom teachers should fit their instruction to the child's cultural background as much as possible. Indian children do exhibit cultural and linguistic differences when compared to their non-Indian peers. In the past these differences were viewed as handicaps rather than assets. Analysis of the classroom behavior of Indian and majority group students in the areas of life styles, learning styles, language preferences, and historical perspectives indicate that majority group behaviors dominate the classroom, causing unconscious cultural clashes for both teachers and students.

Classroom experiences should be compatible with the student's life style. This requires understanding the student's culture and life style and understanding how life style affects motivation. Understanding differences between Indian and non-Indian child

rearing practices are important. Both family patterns stress similar school-related behaviors but for different reasons. For example, both types of families encourage children to achieve, but the Indian children may be encouraged to achieve for the entire family or group and to share. The non-Indian youngster may be encouraged to achieve for the benefit of the individual youngster.

I remember an Indian student who rarely worked for individual gain. She always shared what she knew, even to the extent of giving away answers on tests. I accused her of cheating; she claimed she was "sharing" her knowledge. I arranged the class into groups, and students were to help each other. Then each group would be tested for mastery of the lesson. The Indian student researched and shared her topic with the group; her group mastered the data. I shouldn't have been surprised. The class was compatible with her family life style, which motivated her to learn.

Classroom experiences should be compatible with the student's learning style. Experience indicates that the learning styles of minority students who have been reared in extended families tend to differ considerably from the learning styles of students from nuclear families. While these experiences are based on personal observations, there is strong reason to believe that the differences in styles do exist. This may account for a student's poor reading and academic achievement, especially if teachers are unaware of the differences or if they ignore the learning styles of these students.

Cultural continuity and curriculum materials

Not only can cultural discontinuity occur during the day-to-day instructional practices in the classroom but it can also occur within the content of curriculum materials. Often curricular content reflects the cultural backgrounds of the authors and advisors used by publishers. These materials are intended for nation-wide distribution, so that its cultural content tends to be generic at best and ethnocentric at worst (especially when the materials portray a generalized "typical" American family or "typical" American youngster).

Curriculum materials should be used as much as possible that reflect the cultural backgrounds of the Indian children within the classroom. This material is site or community specific. It is intended to be used for the students who reside in a specific community or reservation. Examples of site-specific curriculum

materials are the curriculum materials project in the Hays/Lodge Pole schools in Montana and the Jicarilla Reservation in New Mexico. In both school districts, where most of the students are either Assiniboine (Montana) or Apache (New Mexico), reading primers were developed by collecting legends and stories from the Indian communities. These primers, some illustrated by local artists, others by the students who produced them, tell about different legendary characters and are written in English and the indigenous Indian language. Classroom activities and discussion topics center around the primers. Over time students are encouraged to add stories to the collection for future classroom uses (Allen, 1987; Dulce, 1977).

To develop culturally relevant curriculum materials teachers should assess the extent to which their students may be bilingual or bicultural. Do not assume that Indian children are all bilingual and bicultural. Think of a thermometer on which the child can be described in degrees of bilingualism and biculturalism. At the base of the thermometer the child may speak only one language and may identify with only one culture. Half way up the thermometer, the child may be to some degree bilingual and to a greater or lesser degree, bicultural. At the top, the student would be fully bilingual and bicultural. In a class of Sioux students, some of the students may speak only Sioux and identify only with the Sioux culture. The students are monolingual and monocultural. Some may speak both English and Sioux, but Sioux may be their stronger language. Others may identify with both the Sioux and mainstream cultures, but they may not speak Sioux. Other students come from homes that have rejected their native culture so they could accept the Anglo culture. This book is written around the idea that Indians need not reject their tribal culture and language as they become acculturated to the larger American culture. Thus, a student can have any degree of bilingualism and biculturalism, depending on the student's unique background.

Cultural continuity and multicultural education

Cultural continuity can be enhanced by using a multicultural approach. Multicultural instruction requires lessons in the student's native culture as well as in other cultures within the United States. The student's "native culture" includes the history and culture of the geographic region associated with the

native language. To comply with this requirement, teachers have tended to add a minority unit to their monocultural programs. Having the student memorize a group's contributions or string of heroes is of doubtful value when a program is essentially a monocultural process. Adding a few token units on historical events or cultural contributions is insufficient. Substantive changes in all subject areas are necessary to create a multicultural process requiring, at least, answers to two questions: 1) Is the program's content permeated with multicultural themes? 2) What type of images are evoked by the program's content?

History lessons should be permeated with multicultural themes. American history is traditionally taught with an "easterncentric" perspective of a progression from East to West. Groups encountered by the advancing easterners are depicted as obstacles of progress and civilization. For example, Indian students may learn that their ancestors were "savages" who led massacres. Rarely are Indians portrayed as a people defending homes, families, and territories against the onslaught of eastern invaders.

Other academic areas, such as family living lessons, should be permeated with multicultural themes. What kinds of foods are included in the study of nutrition and diet? Are the foods of linguistic minority groups studied from the perspective of dietary and nutritional value? Or are they treated as novelties? What kinds of family structures and relations are studied? Are extended and single-parent families studied for their ethnic and economic context? Academic areas such as science and math can also be permeated with multicultural themes. Why not use the Aztec calendar to teach concepts of time? Counting devices unique to American Indians can be used in math lessons. Medicines and remedies discovered by American Indians can be used in natural science. The chapters on science and math in this book will aid the teacher in reaching this multicultural goal.

Curriculum materials and stereotyping

What images are evoked by the curriculum's content? This question is especially important. The following generalizations should be kept in mind: Indian groups are 1) similar, 2) different, 3) diverse, and 4) ongoing, social realities. Their political, economic, and aesthetic histories are evident in their folklore and art. Yet every group is different in many ways. Navajos and Crows are considered American Indian but their regional cultures, climatic adaptations, and language differ vastly.

Using the four generalizations should counter cultural stereotyping. When stereotyping appears it should be identified — "That's a stereotype!" — so that students will be sensitized to its pernicious effect rather than be victimized by it. A stereotype is an exaggerated image or generalization of a group of people. Moreover, the stereotype lumps people together as though they all had the same qualities or characteristics. In spite of the linguistic, tribal, and regional diversity of Indian's in the United States, they have been stereotyped into at least three general images: 1) noble savage, 2) conquered savage, and 3) savage (Garcia, 1982).

The Iroquois people are a model for the noble savage stereotype. They have been portrayed as good, honest, and fair ("noble") but were nevertheless "uncivilized and savage." Though Indians were good, they were viewed as uncivilized because they refused to take on Anglo ways. Longfellow's "Song of Hiawatha" uses the word "savage" more than fifty times to describe Indians.

The Cherokee people are a model for the conquered savage stereotype. They have been portrayed as a conquered people who had assimilated partly but not entirely into Anglo culture. They were the "almost civilized" people who were conquered and divested of most of their ways.

The Sioux people are a model for the savage stereotype. They have been portrayed as warriors on the warpath. The Indians with this stereotype were neither "noble" nor "civilized." Their main functions were to wage wars and to massacre. "The only good Indian is a dead one" epitomized the stereotype. Keep in mind that these are only three of the many stereotypes about American Indians. What is important to understand is that stereotypes divest people and groups of their diversity and their basic humanity. Yet, humans tend to stereotype groups of people and then to treat them as though the stereotypes were accurate images of the whole group.

Classroom curriculum materials and instructional activities should accommodate the child's linguistic background. From birth the student associates certain ways of doing, feeling, and valuing through the native language. Self-esteem and esteem for others are developed as the student is enculturated through the native language. If the language is not used in school to continue the enculturation process, or if it is taught in a mechanical or de-meaning fashion disregarding the culture it transmits, then the

student has no positive way of identifying with schooling. Because the student identifies language with culture, language rejection is considered cultural rejection. As the student's feelings of rejection intensify, self-esteem and expectations shift, and a negative self-concept develops. Eventually, the child rejects schooling. The chapters in this book on what stories Indian students should read and on self-efficacy discuss these issues in greater length.

Conclusion

Cultural relativism provides teachers an approach by which they can develop respect and understanding for the child's cultural background. The teaching-learning process, if based on cultural relativism, would accommodate different learning and language styles and allow students to understand and accept their unique ethnicity as well as the ethnicity of others. Human and civil rights, the right to be different, the right to be oneself, and the right to dissent—with their concurrent responsibilities—should be inherent to the process. Teachers should develop curriculum materials that reflect the school's community and region. These materials can be used to provide cultural continuity and avoid stereotypes.

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2

Bilingual Education: Teaching the Native Language

Jon Reyhner

A popular historical notion has been that traditional Indian society has kept Native Americans from becoming assimilated into English-speaking American society. In the late Nineteenth Century, reformers felt the only thing needed to get Indians to progress was to detribalize and individualize them. With this accomplished by boarding schools and the break up of reservations, Indians could "leap into the mainstream of American life" (Utley, 1984, p. 211).

Examination of the issue by researchers has shown that it is the attempt at quick assimilation that leads to failure. Rapid erosion of traditional culture by submersing students into an all-English environment in off-reservation boarding schools often leads to cultural disintegration, not cultural replacement. As early as 1928, an investigation of the Bureau of Indian Affairs called for curriculum based more on "local Indian life, or at least written within the scope of the child's early experiences" (Meriam, 1928, p. 33). The anthropologist Clyde Kluckhohn, describing the impact of white culture on the nation's largest tribe, wrote, "Navajo culture is becoming an ugly patchwork of meaningless and unrelated pieces, whereas it was once a finely patterned mosaic" (1962, p. 340). The Cherokees in the 1830s, using an alphabet invented by a tribal member, Sequoyah, started their

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own educational system which developed literacy in Cherokee as well as English. They also published a Cherokee language newspaper. However, their schools were closed by the federal government in the late 1890s (Fuchs & Havighurst, 1973, p. 7).

Many Indians see the loss of their language as "one of the most critical problems" facing Indian people today. The loss of language leads to a breakdown in communication between children and their grandparents and causes children to be "cut off from their past and their heritage" (Ahenakew, 1986, p. 1). Tribal heritage provides a sense of group membership and belonging badly needed in an overly individualistic and materialistic modern society. In the words of John Collier, modern society has lost the "passion and reverence for human personality and for the web of life and the earth which the American Indians have tended as a central sacred fire" (1947, p. 17).

Tribal language policies

Since the 1970s, the official U.S. government policy has been that of self-determination, a reversal of the assimilationist policies of the late Nineteenth and early Twentieth centuries and the termination policies of the 1950s. Self-determination is a continuation of the policies of John Collier and the "Indian New Deal" of the late thirties and early forties. The policy of self-determination allows Indian people and tribes to determine their future directions.

In recognition of the importance of tribal language and culture, several tribes have gone on record supporting native language instruction. The Northern Ute Tribal Business Committee passed resolution 84-96 in 1984 declaring,

The Ute language is the official language of the Northern Ute Nation and may be used in the business of government—legislative, executive and judicial—although in deference to, and out of respect to speakers of English, English may be utilized in official matters of government.

We declare that the Ute language is a living and vital language that has the ability to match any other in the world for expressiveness and beauty. Our language is capable of lexical expansion into modern conceptual fields such as the field of politics, economics, mathematics and science.

Be it known that the Ute language shall be recognized as

our first language, and the English language will be recognized as our second language. We assert that our students are fully capable of developing fluency in our mother tongue and the foreign English language, and we further assert that a higher level of Ute mastery results in higher levels of English skills. (Northern Ute, 1985, p. 16)

The Northern Ute tribe requires Ute language instruction preschool through twelfth grade, encourages "pre-service training in Ute language theory and methodology for teachers," and requires three credits of inservice training in Ute language for teachers within one year of employment (Northern Ute, 1985, pp. 16-18).

In a preface to the 1985 Navajo Tribal Education Policies, Navajo Tribal Chairman Peterson Zah declared

We believe that an excellent education can produce achievement in the basic academic skills and skills required by modern technology and still educate young Navajo citizens in their language, history, government and culture. (Navajo, 1985, p. vii)

The Navajo Tribal Education Policies support local control, parental involvement, Indian preference in hiring, and instruction in the Navajo language (pp. 4-9). The code declares

The Navajo language is an essential element of the life, culture and identity of the Navajo people. The Navajo Nation recognizes the importance of preserving and perpetuating that language to the survival of the Nation. Instruction in the Navajo language shall be made available for all grade levels in all schools serving the Navajo Nation. Navajo language instruction shall include to the greatest extent practicable: thinking, speaking, comprehension, reading and writing skills and study of the formal grammar of the language. (p. 9)

The Tribal Education Policies also require courses in Navajo history and culture (p. 9).

Fuchs and Havighurst (1973), in the most recent national study of Indian education, found that "most [Indian] students and parents approve of their schools," but that Indian community leaders were "overwhelmingly in favor of the school doing something to help Indian students learn about their tribal culture" (pp. 181 & 187), and that the most common parental sug-

gestion was that "schools should pay more attention to the Indian heritage" (p. 170). Rosalie and Murray Wax's research (1968) on the Pine Ridge Reservation showed that tribal elders and the students' extended families were forces for keeping students in school and that the forces causing students to drop out of school were those of cultural disintegration, similar to those forces that cause dropouts in all schools. Lin found that Crow boys expressed a "concern for and motivation toward education" equal to that of white male students (1985, p. 9).

Educational advantages of bilingualism

James Cummins (1986), summarizing research on bilingual education, concluded that subtractive educational programs which seek to replace Native American language and culture with English language and culture cause students to fail while additive educational programs which teach English language and culture in addition to native language and culture create conditions which enable students to succeed in their schoolwork.

In a review of research on bilingual education, Cummins (1981) found several studies showing "that the use of a minority language in the home is not a handicap to children's academic progress" (p. 32). He found many studies reporting "that bilingual children are more cognitively flexible in certain respects and better able to analyze linguistic meaning than monolingual children" and that bilingual education can reinforce students' cultural identity and reduce their mixed feelings about the dominant society (p. 37). Cummins found no group of students for which research has shown that bilingual education will not work and concluded that the "enrichment potential of bilingual education is accessible to all students" (p. 42).

Types of bilingual programs

Numerous types and subtypes of bilingual programs have been identified (Trueba, 1979). For the purposes of this chapter, three basic types need to be examined in terms of how they affect Indian children's ability to use their tribal language and English. These programs are all in contrast to what has been called "submersion" education for non-English speaking children which involves the common practice of placing them into a regular all-English classroom with little or no special attention and letting them "sink or swim."

Under the administration of John Collier in the late 1930s and

1940s some preliminary work was done to provide native language instruction in Bureau of Indian Affairs' (BIA) schools, but after Collier left the BIA, it was not till the 1960s that Bilingual Education became an issue again for Indian children.

In response to pressure by Hispanics and other groups for bilingual education, Congress passed in 1968 a Bilingual Education Act as Title VII of the Elementary and Secondary Education Act. This original act was designed as a compensatory program for "disadvantaged" students. Only students who came from low income households could participate in bilingual programs funded under the original act.

In the case *Lau v. Nichols*, the Supreme Court found in 1974 that the historically-common practice of "submersing" students in a regular classroom did not give non-English-speaking students an equal education opportunity compared with English-speaking students as was required by the Civil Rights Act of 1964. This case concerned Chinese speaking students in San Francisco public schools who were given no special education program even though they spoke no English. The Supreme Court mandated that they be given some form of special bilingual or English as a Second Language (ESL) instruction until they could speak English well enough to be put into a regular classroom.

The low-income provisions of the bilingual education act were removed in 1974, and in 1978 the act was amended again to specifically include funding for programs for Limited English Proficiency (LEP) Indian children. The 1978 amendments also allowed up to forty percent of the students in bilingual programs to be monolingual English speakers so that the programs did not segregate non-English-speaking students from English-speaking students. The Bilingual Education Act was extended in amended form in 1984 and currently funds maintenance (described in the Act as developmental), transitional, and immersion (described in the Act as a "special alternative") bilingual programs. The names "maintenance" and "transitional" refer to the long-term role of the first language in the school's educational program whereas "immersion" refers to the way in which the second language is taught. However, in the United States, immersion programs with respect to the teaching of English are tending to become specifically designed, English-only programs for non-English-speaking students. All three types of bilingual programs can use various ESL teaching methods for the English-language portion of the instructional program.

Maintenance bilingual programs place the most emphasis on developing children's native as well as English language abilities. They are designed to teach reading, writing, and some other subjects in children's native language while adding English language skills and instruction in some subjects. The maintenance bilingual program at Rock Point Community School on the Navajo Reservation in Arizona graduates students who can read and write in Navajo and who also test out on English language standardized achievement tests as superior to comparable Indian students who have not had a bilingual education (Holm, 1985; Rosier & Holm, 1980). Bilingual education has effects beyond increased English and mathematics achievement scores. In Chicago's bilingual-bicultural Little Big Horn High School the dropout rate was reduced from the city-wide public school rate of ninety-five percent for Indians to eleven percent (Hakuta, 1986, p. 221).

Transitional bilingual programs are designed to teach English to language-minority students as quickly as possible. While children are taught extensively in their native language during their first year of school, instruction in English is quickly phased in so that by about fourth grade all instruction is in English. Transitional programs do little to promote native language skills. Even though they are the most common form of bilingual programs in the United States, Cummins found no educational justification for transitional bilingual programs and that quick exiting of students from transitional programs had negative effects (1981, p. 43).

Immersion bilingual programs were designed to teach French to English-speaking children in Canada. Immersion programs give students an environment where they are "immersed" in the second language. Immersion teachers speak to the children only in the language to be learned. This type of program has been found to be effective in teaching French and Spanish to middle-class English speaking students with no long-term negative effects on children's skills in using English (Ovando & Collier, 1985, p. 43).

Whether a child should learn a second language by immersion or by a maintenance bilingual program is dependent not on the language spoken at home, but on the socio-economic and cultural background of the child, the social status of the child's native language, and the language preferences of the child, the parents, and the community (Cummins, 1981, p. 41). Students who come

from a middle or upper class background and are members of the dominant society (language-majority students) do well in immersion programs where they hear and are encouraged to speak only the new language in the classroom. However, such programs were never intended to replace the home language, and English language instruction was continued in school or was brought back after an initial period of all second language instruction (*Studies*, 1984, p. 2). Students whose families often have below average incomes and who have minority group cultural backgrounds (language-minority students), such as Indian students, tend to lose first language skills in immersion programs.

For Indians, immersion programs can reinforce feelings of inferiority and worthlessness by ignoring the home language and culture of children. For dominated minorities such as Indians, Cummins found studies suggesting that students do better in school if their language and culture are a part of the school's curriculum (1986, p. 25). Bernadine Featherly (1985), after an extensive study of the literature and research on the Crow reservation, concluded that native language speaking parents should not try to "teach" their children to speak English and that Crow-speaking children should be taught reading first in Crow (pp. 384-386).

Exposure to television, schooling, and English-speaking children can get Indian students speaking English fairly well in about two years as can transitional bilingual programs usually found in the first three or four grades. However, those speaking skills are "context-embedded," meaning that the situation being talked about is familiar to students. Many classroom situations after grade four, especially those involved with reading textbooks, are "context-reduced," meaning that information must be gained only from the words. Academic competence to understand English in a "context-reduced" situation takes an average of five or six years to learn (Cummins, 1981, p. 5). Under the old submersion or new transitional bilingual approach, Indian students often experience so much failure that they give up and drop out, never catching up to their white peers.

A frequent criticism of bilingual education is that it delays the learning of English. However, K.ashen has found the reverse to be true:

The proper use of the first language can help the acquisition of English a great deal: well-organized bilingual pro-

grams are very effective in teaching English as a second language, often more effective, in fact, than all-day English programs that 'submerge' the child in English. (1985, p. 69)

In fact, the older grammar-based English-as-a-Second-Language-(ESL)-only programs are found by students and teachers to be boring (Spolsky, 1978, p. 355). ESL instruction has been seen as a quick fix to the shortage of bilingual teachers. As the chapter on secondary ESL instruction in this book emphasizes, teachers need extensive training which involves knowledge of the structure of the native language of their students and a background in the students' culture. No generic ESL training can provide competent teachers for all minority-language groups.

The result of traditional English only "submersion" programs for Indian students is that their achievement actually falls further behind whites as they progress through their school years. Coleman's 1966 study, *Equality of Educational Opportunity*, reported the reading achievement scores of Indian students in sixth grade to be 1.8 grade levels behind the average scores of whites, by ninth grade that figure became 1.9. By twelfth grade Indian students were 2.6 years behind. Mathematics achievement and verbal ability scores were very similar. At the twelfth grade level, Indian students were 2.5 years behind in English verbal ability and a full three grade levels behind in mathematics. Blacks and Hispanic Americans were either as far behind or further behind whites in achievement than Indians while Asian Americans were either equal to or slightly behind white students. Using an intelligence test not requiring knowledge of the English language (the Goodenough Draw-A-Man Test), a sample of 867 Indian and Eskimo children were found to have average IQs of 103 for boys and 108 for girls, above the average for white students (Fuchs & Havighurst, 1973, p. 119-125).

A sample maintenance bilingual program

The Rock Point Community School on the Navajo Reservation in Arizona began a program of bilingual education in 1967. At Rock Point most students enter school speaking mostly or only Navajo, and they are taught to read first in Navajo. Students add English reading instruction starting in the middle of the second grade. Most Rock Point teachers were initially non-degreed, but an on-site training program brought college level courses to Rock Point that eventually led to most of them getting degrees and

teacher certification through the Arizona State Department of Education. Training had been provided after the School Board concluded that the only way an isolated Navajo community could get a stable teaching staff would be to hire and train local people (Rosier & Holm, 1980, p. 11).

At Rock Point some teachers teach only in English and others only in Navajo. In kindergarten seventy percent of the instruction is in Navajo; the rest of the time is spent teaching students oral English. By second grade students are receiving half their instruction in English and half in Navajo. In the upper grades fifteen to twenty percent of the instruction is in Navajo with the rest in English. In the early grades, mathematics is taught first in Navajo; specialized English vocabulary is taught later (Rosier & Holm, 1980, p. 10-12). By teaching content-area subjects in the early grades in Navajo, Rock Point students are not held back in those subjects until they learn English. The concepts they learn in Navajo are retained and usable by the student later in either language, and almost all basic reading skills learned in the Navajo reading program transfer into the English reading program.

Teachers were required to produce many of their own materials to teach in Navajo. Bernard Spolsky found in 1973 a "good bit" of Navajo language material around, but not enough "to fill out a first grade year of reading" (Spolsky, 1973, p. 31). Although there is now considerably more material, most schools also rely on student made materials. Considering that the Navajo are by far the largest tribe and have a history of concern for the preservation of their language, it is easy to see that there is a lot less material in the native languages of other tribes.

The community, teachers, and administrators at Rock Point were very concerned that the bilingual program lead to greater academic achievement in English as well as reading and writing skills in Navajo. The decision was made to use standardized tests to evaluate how well Rock Point students did in comparison to students in surrounding schools, in the state, and in the nation (Rosier & Holm, 1980, p. 2). In 1983 eighth-grade Rock Point students outperformed Navajo students in neighboring public schools, other Navajo speaking students throughout the reservation, and other Arizona Indian students in reading on the California Achievement Test. On the grammar (written English) portion of the test, the results were much the same. In mathematics, the Rock Point students did even better, outperforming the com-

parison groups and approaching or exceeding national averages (Holm, 1985, p. 3). It is important to remember these excellent results did not appear right away, but only after sixteen years of a maintenance bilingual program.

Bernard Spolsky of the University of New Mexico summed up the results of the Rock Point School's educational program:

In a community that respects its own language but wishes its children to learn another, a good bilingual program that starts with the bulk of instruction in the child's native language and moves systematically toward the standard language will achieve better results in standard language competence than a program that refuses to recognize the existence of the native language. (Rosier & Holm, 1980, p. vi)

Ingredients of a Successful Bilingual Program

Importance of Indian teachers

More Indian teachers from the students' community are a key to programs which teach native languages as well as a key to better academic achievement for Indian students. In an Arizona study of Bureau of Indian Affairs and Indian-controlled contract schools, Hirst (1986) found that Indian students who have Indian teachers do better on standardized achievement tests in reading and language arts than Indian students with non-Indian teachers (p. 48).

Fuchs and Havighurst (1973) concluded that research suggests "teachers of Indian children should be systematically trained to take account of the sociocultural processes operating in the community and classrooms where they work" (p. 303). The Rock Point school administration concluded that most "college-trained teachers" are not prepared to teach in a situation like that at Rock Point (Rosier & Holm, 1980 p. 110).

One big problem in developing any educational program on reservations has been the high turnover of teaching staff. Indian teachers are beginning to provide a staff stability that allows for long-range planning. Another necessary condition for long-range planning is school board and administrative stability. School boards and administrators can learn from the Rock Point School experience that extensive curriculum planning and long-term effort are needed to raise student achievement test scores.

The role of linguists

A full-fledged bilingual program requires teaching reading in the native language. This requires an orthography. At least two hundred and six Indian languages are spoken in the United States (Leap, 1982, p. 20). A writing system (orthography) has to be developed for each language if it is to be written. Robert St. Clair (1982) has outlined the needs of bilingual programs. He feels that while professional linguists tend to develop sophisticated orthographies that reflect the grammatical structure of the language, literacy programs for elementary schools need simple, practical writing systems similar to the Initial Teaching Alphabet (i.t.a.) (p. 9). A linguist with an educational background is to be preferred in developing a simplified orthography suitable for use with children. Sources of linguistic help for schools and tribes include universities, the Wycliffe Bible Translators found on many reservations, and a number of Indian linguists trained at the Massachusetts Institute of Technology, University of Arizona, and other schools with linguistic departments that have shown an interest in Indians and Indian languages.

In addition to simple, practical (most often phonetic) orthographies, St. Clair sees the need for simple classroom dictionaries of frequently-used words, an "experience based dictionary," which includes only common definitions of words and uses the words in sample sentences. He does not see a problem with competing tribal dialects since the same orthography can be used with different dialects (p. 11). St. Clair feels tribal elders have an important role to play in a bilingual program:

If there are any tribal members who can really save the program [of language renewal], they are the elders. These are people who may be in the sixty- to eighty-year old range who have actually spoken the language fluently as children and who fully participated in the ways of the tribe. They still know the ceremonies and are the most valuable elements in any language renewal program. The secret is to get them to work with young children. They can teach them to speak the language and, if circumstances permit, the children can teach them how to read and write in the new system. This program, then, requires parental as well as communal support. (p. 8)

In New Zealand, Maori grandparents are running a volunteer program of day care centers which feature an immersion program in

the Maori language. A similar program with university help is being run in Hawaii.

The natural approach to language acquisition

Linguists and educators warn against a translation approach to teaching any language (Krashen & Terrell, 1983; Leap, 1982, p. 20). Krashen and Terrell (1983) have developed what they call "The Natural Approach" to learning languages.

The first principle of this approach is that "comprehension precedes production." This implies,

1. The instructor always uses the target language (the language to be learned)
2. The focus of the communication is on a topic of interest to the student
3. The instructor strives at all times to help the student understand (p. 20)

The second principle is that language production, whether oral or written, is allowed to emerge in stages, first by nonverbal communication, second by single words such as yes or no, third by combinations of two or three words, fourth by phrases, fifth by sentences, and finally by more complex discourse. In the beginning students use a lot of incorrect grammar and pronunciation. Krashen and Terrell emphasize in their method that "the students are not forced to speak before they are ready" and that "speech errors which do not interfere with communication are not corrected" (p. 20).

The third principle is that the goal of language acquisition is communication. Each classroom activity or lesson is organized around a topic rather than a grammatical structure. Topics can include field trips students are taking, classroom science activities students are doing, or games students are playing in the language to be learned, such as "Red Rover." Students need to do more than just talk about a topic; they need to participate in as well as talk about activities. "Young people learn best from their own and not other people's experiences" (Cantiene & Tremblay, 1979, p. 248).

Krashen and Terrell's fourth principle is that classroom activities must lower the "affective filter of the students." This means that,

Activities in the classroom focus at all times on topics which are interesting and relevant to the students and en-

courage them to express their ideas, opinions, desires, emotions and feelings. An environment which is conducive to acquisition must be created by the instructor—low anxiety level, good rapport with the teacher, friendly relationship with other students—otherwise acquisition will be impossible. Such an atmosphere is not a luxury but a necessity. (p 21)

It is easy to see that the above principles apply equally to teaching a native language or English. By not focusing on vocabulary, such as memorizing the names of numbers and colors, or grammar, students acquire language skills they can use. Only if students use the language skills they acquire will they remember them. It is important that an environment be provided inside and outside of school where a student can use newly-acquired language skills. The home is an obvious place to use the native language, but some tribes have also started radio and television stations with native language programming. Students must also have environments where they can use English in conversation. One important factor in the success of the Rock Point Community School curriculum is that students are encouraged and required to talk and write a lot in Navajo and in English.

Teaching materials for bilingual programs

Without materials a bilingual program will fail, and it is pointless to teach reading in an Indian language if only a few books are available in that language. Commercial publishers are not interested in the small markets which even the largest tribes represent. However, there is a long history of missionary interest in translating religious works into Indian languages. In 1663 John Eliot, with the assistance of Indian translators, had fifteen hundred copies of the *Bible* printed in the Massachusetts dialect of the Algonquian language. Among the other Algonquian books Eliot had printed was an Indian primer (Salisbury, 1974). Christian missionaries have researched and published dictionaries, such as the Franciscan Fathers' (1910) *An Ethnologic Dictionary of the Navajo Language*, which still serve as basic sources of information on Indian languages. The Wycliffe Bible Translators are very active on a number of reservations and have freely provided help to school bilingual programs.

More recently, Bilingual Materials Development Centers have been funded by the Bilingual Education Act (Title VII) to produce materials not available through commercial sources. These Centers have printed materials in many Indian languages.

Organic Reading and Language Experience

Even when Native American language material is available, it seldom has the controlled vocabulary teachers think is important to make beginning reading easier for students. Stories transcribed from elders may contain words with which Indian children are unfamiliar. An excellent method for avoiding inappropriate vocabulary in beginning reading is the "language experience" approach to teaching reading. This approach has been used by many good teachers throughout history, but it received a lot of attention when it was written about by Sylvia Ashton-Warner (1963) after she used it to teach English to native Maori children in New Zealand who did not have standard English vocabularies. Calling it "organic reading," her approach is equally useful for teaching reading in any language. She taught in a New Zealand Infant School, equivalent to kindergarten in the United States.

Ashton-Warner emphasized the power of words, an idea familiar to Indian cultures. She felt:

First words must have intense meaning for a child. They must be a part of his being.

How much hangs on the love of reading, the instinctive inclination to hold a book!...Pleasant words won't do. Respectable words won't do. They must be words organically tied up, organically born from the dynamic life itself. They must be words that are already part of the child's being... (1963 , p. 33)

The child must already have a deep emotional tie with the words he first learns to read if the teacher is going to get the child to give maximum attention. Writing words on the chalkboard as they were suggested by her students, Ashton-Warner built up what she called a "Key Vocabulary." These words were put on cards for the children to identify. Then, the words were combined to form sentence-length captions for student drawings. Then children wrote simple story books used to teach reading. She also encouraged autobiographical (journal) writing (p. 51). Daily journal writing is well worth encouraging throughout the grades as a life-long activity leading students to practice writing and to examine their own lives.

It was important to Ashton-Warner that students' words and writing were not criticized. She believed in using rather than suppressing students' energy, letting them work together, and having them read to each other (pp. 102-104).

Examples of material development at the local level

As director of a bilingual program on the Blackfeet Reservation, I arranged for the videotaping of some elders telling traditional and historical stories in the Blackfeet language. These stories were then transcribed by a Blackfeet linguist working with the Blackfeet Dictionary Project at the University of Lethbridge. A selection of the stories was made into a booklet of Blackfeet stories for use with intermediate grade students (Reyhner, 1984b). A tape recorder would work as well as a video tape for gathering materials.

As an approach to language experience, in addition to having students draw pictures and the kindergarten teacher writing down students' captions for their pictures, photographs can be taken of the community and made into a book with text students supply when they reply to, "Tell me about this picture." Older students can take pictures, interview elders and other community members, and write their own book. An example of materials that can be produced with the help of younger students is *Heart Butte: A Blackfeet Indian Community* (Reyhner, 1984a). An example that includes work of older students at Rock Point Community School is *Between Sacred Mountains* (1984).

As the bilingual program director on the Havasupai Reservation, I encouraged linguists involved in a Bible-translating project who volunteered to do a three-day workshop with the bilingual teacher aides. Using the language-experience approach, the aides wrote stories about their childhood and going to school which were then published in a booklet, *Gwe Gnaavja*, (1985) for use with junior high students.

The poet, Mick Fedullo, has edited a number of booklets of expressive poetry by Indian students (1983, 1984, 1985a, 1985b). Some of the students' teachers disbelieved that their students could write expressive poetry in English until they observed the activities and saw the results. While this poetry was in English, the same expressive language activities can be done in the native language. A good example is the booklet, *Hman Qaj Gwe Tnuudja*, done in Havasupai at Havasupai Elementary School in 1985 with the assistance of Akira Yamamoto, a Yuman language linguist.

For primary grade children, self-made books, hand printed and student illustrated, work fine and are appreciated by parents. For older children, more elaborate books are also useful. Only a few years ago to publish such language-experience books would have

required expensive professional typesetting and printing. The special characters required by most Indian language orthographies added to that expense. With today's microcomputers and dot matrix printers, good quality material can be produced in school at a fraction of former costs, and, using photocopying machines, an unlimited number of copies can be made relatively inexpensively.

A note of caution needs to be given to teachers who want to publish native language material with cultural content. Some tribes require prior approval of such material by a tribal cultural committee before it can be printed. In all cases, local people should be involved in producing and editing traditional stories.

Conclusion

Kenji Hakuta concluded a historical study of bilingual education with the thought that,

Perhaps the rosiest future for bilingual education in the United States can be attained by dissolving the paradoxical attitude of admiration and pride for school-attained bilingualism on the one hand and scorn and shame for home-brewed immigrant [and Indian] bilingualism on the other. The goals of the educational system could be seen as the development of all students as functional bilinguals, including mono-lingual English-speakers. The motive is linguistic, cognitive, and cultural enrichment... (1984, p. 229)

It is important to remember that native-language instruction is not being promoted as a substitute for English-language instruction but as a supplement. William Leap could find no tribe that had let native language restoration outrank the importance of teaching English (1982, p. 151). Malcolm McFee (1968) has pointed out that assimilation is not a one-way street to progress and that Native Americans can learn to participate successfully in white society and, at the same time, retain their language and traditional Indian values to become what he has described as the 150% man. This 150% person is the goal of bilingual education.

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The Historical Background of Indian Education

Jeanne Eder and Jon Reyhner

Since the goals of Indian education have been changed over the years, if we are to understand its present situation, we must know its history. The European immigrants to what is now the United States first wanted to obtain Indian lands by purchase or force and move the Indians to vast lands west of the Mississippi, lands once thought to be unsuitable and not needed for white settlement, the Great American Desert. Little need was seen for educating Indians that were far away except by missionaries interested in what they saw as their God's work to save souls. As it became apparent after the Gold Rush of 1849 and the building of railroads into the west that colonization would extend across the continent, reservations were established through treaty negotiations throughout the west for Indians. Whenever there was close contact between white settlers and Indians, efforts were made to make Indians conform to white ways of behaving, including religion, dress, and homes. Schools and education were seen as ways of assimilating young Indians into the dominant society. Attendance was enforced, students were not allowed to speak their tribal languages, and schools labeled tribal traditions as enemies of progress. Had the goal of assimilation been reached, there would be no culturally-recognizable Indian people today.

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But the goal has not been reached; instead, many Indian children have not found success in schools which did not recognize their languages and cultures. Many older Indians have worked against government schools they saw as undermining their religion, heritage, and way of life.

Besides making Indians ready for "civilization," Indian education has also been a money-making business. In the late Nineteenth Century corruption in the Bureau of Indian Affairs was notorious. When Civil Service reforms brought corruption under control, rapid growth of the Indian education budget seemed to give the bureaucracy that administered it a life independent of the students served. Public school boards of education and superintendents, once not interested in having Indian students, became interested when Congress authorized tuition payments and other funding to replace the lack of property taxes from Indian trust land.

The failure of many Indian students to succeed in Bureau of Indian Affairs (BIA) and public schools over the years has led to many studies, including the Meriam and Kennedy Reports, that asked why Indian students have not learned to read and write as well as non-Indian students. These reports became ammunition for reformers who used them to support passage of a variety of special programs funded by the federal government. Some, such as Johnson O'Malley and Indian Education (Title IV), are for Indian students only. Others including Chapter 1, Bilingual (Title VII), and Special Education are for any students who meet achievement, language, or handicap criteria of the laws. If educators are to understand why these programs exist in their schools and why certain types of curriculums are considered more likely to lead to success for Indian students, they must know about the past failures of Indian Education. This chapter summarizes the history and present conditions of Indian education. Other sources of excellent information include Fuchs and Havighurst's study, *To Live on This Earth* (1973); the Kennedy Commission report, *Indian Education: A National Tragedy, a National Challenge* (1969); and Margaret Szasz's, *Education and the American Indian* (1977).

Missionary activity and paternalism (1492-1870)

The original idea behind Indian education was to "civilize" and assimilate Indians into the mainstream of the dominant culture brought from Europe. The Spanish after 1492 sought both to exploit Indians through forced labor and to convert them to



Catholicism. For example, when DeNarvaez took possession of the coast around Pensacola Bay, Florida, he had with him four Franciscan fathers who came to start missions. In 1568, the Jesuits established a school in Havana for Florida Indian youths. Protestants were not far behind Catholics and for the next three hundred years religious groups dominated non-Indian attempts to "educate" Indian children (*Indian Education*, 1969, p. 10).

In 1617 the British King James asked Anglican clergy to collect money "for the erecting of churches and schools for ye education of ye children of these barbarians in Virginia" (*Report*, 1976, p. 26). In 1631, the Reverend John Eliot arrived in America and established a school in Roxbury. Five years later, the same year Harvard was founded in part to provide education for Indian youth, the Reverend Eliot instructed some Pequot war captives "in the habits of industry." A year later he published an Algonquian translation of the *Bible* (*Report*, 1976, p. 27; Salisbury, 1986). Eliot also developed a plan to bring Indians together in small, "praying" towns to be instructed in Christian ethics and arts. To become accepted by the Puritans in these praying towns, Indians had to give up totally their old way of life, including long hair for men and short hair for women.

In 1723, a house was built on the campus of the College of William and Mary for Indian students. However, twenty-one years later the Six Nations of the Iroquois Confederacy, as reported by Benjamin Franklin, rejected an offer to send their sons to that college:

You, who are wise, must know that different Nations have different conceptions of things; and you will therefore not take it amiss, if our Ideas of this kind of Education happen not to be the same with yours. We have had some Experience of it; Several of our young people were formerly brought up at the Colleges of the Northern Provinces; they were instructed in all your Sciences; but, when they came back to us, they were bad Runners, ignorant of every means of living in the Woods, unable to bear either Cold or Hunger, knew neither how to build a Cabin, take a Deer, or kill an Enemy, spoke our Language imperfectly, were therefore neither fit for Hunters, Warriors, nor Counsellors; they were totally good for nothing. We are however not the less oblig'd by your kind Offer, tho' we decline accepting it; and, to show our grateful Sense of it, if the Gentlemen of Virginia will send us a Dozen of their Sons, we will take great Care of

their Education, instruct them in all we know, and make *Men* of them. (Fuchs & Havighurst, 1972, p. 3)

The necessity for Indian education based on the European model was dependent on the speed with which white settlement progressed among the tribes. King George issued a royal proclamation in 1763 that closed the West to white settlement in an attempt to reduce friction between colonists and Indian tribes because of the expense of Indian wars and the desire to preserve a profitable trade in furs. However, many colonists ignored the royal restrictions. In fact, taxation of colonists to pay for Indian wars and for a standing army to enforce the provisions of the 1763 proclamation was a major cause of the American Revolution.

In 1775 the Continental Congress appropriated \$500 to educate Indians at Dartmouth. After independence, the Constitution of the new United States gave only Congress the power to regulate commerce with Indian tribes and make treaties. Congress approved its first Indian treaty with the Delaware tribe in 1778. The 1789 treaty with the Oneida, Tuscarora, and Stockbridge Indians was the first to contain education provisions (*Report*, 1976, p. 63). During the next eighty-four years, the Senate approved almost 400 treaties of which 120 had educational provisions. These treaties allowed for white settlement on lands formerly tribal and brought on closer contact between Indians and whites and increasing pressures for, at first, Indian removal west of the Mississippi and then, when that did not prove the permanent solution it was first thought to be, for assimilating the Indian. Almost a billion acres of land were ceded to the United States in these treaties (*Indian Education*, 1969, p. 11; *Report*, 1976, p. 30). Article III of the *Northwest Ordinance* of 1787 declared,

The utmost good faith shall always be observed towards the Indians; their lands and property shall never be taken from them without their consent; and in their property, rights, and liberty they never shall be invaded or disturbed, unless in just and lawful wars authorized by Congress. (Vogel, 1972, p. 74)

Many treaties had provisions for general education, teachers' salaries, school construction, supplies, and so forth. The 1802 Trade and Intercourse Acts incorporated a plan to civilize Indians that included providing them with social and educational services. Up to \$15,000 per year was authorized "to provide

Civilization among the aborigines." As more treaties were negotiated, provisions for educational and civilization purposes increased, sometimes at the request of tribes who saw they would have to change to survive. The House Committee on Appropriations reported in 1818:

In the present state of our country one of two things seems to be necessary. Either that those sons of the forest should be moralized or exterminated... Put into the hands of their children the primer and the hoe, and they will naturally, in time, take hold of the plow... (Roessel, 1962, p. 4)

The next year Congress established a civilization fund, which lasted until 1873, to provide financial support to religious groups and others willing to live among and teach Indians.

A combination of greed for Indian lands and the friction which sometimes resulted from close Indian-white contacts led to the development of a policy of removal of tribes from close contact with whites. In 1820, Congress began to develop plans to move Eastern Tribes such as the Cherokee west of the Mississippi. In 1830 the Indian Removal Act was passed authorizing President Jackson to exchange lands in the West for Indian lands in the Eastern States. In *Cherokee Nation v. Georgia*, Chief Justice John Marshall opinioned,

Though the Indians are acknowledged to have an unquestionable, and, heretofore, unquestioned right to the lands they occupy, until that right shall be extinguished by a voluntary cession to our government; yet it may well be doubted whether those tribes which reside within the acknowledged boundaries of the United States can, with strict accuracy, be denominated foreign nations. They may, more correctly, perhaps, be denominated domestic dependent nations. They occupy a territory to which we assert a title independent of their will, which must take effect in point of possession when their right of possession ceases. Meanwhile they are in a state of pupilage. Their relation to the United States resembles that of a ward to his guardian. (Vogel, 1972, p. 117)

The next year in *Worcester v. Georgia*, the Supreme Court struck down an attempt by Georgia to keep missionaries and white friends off the Cherokee Nation. Again, Chief Justice John Marshall held,

The treaties and laws of the United States contemplate the Indian territory as completely separated from that of the states; and provide that all intercourse with them shall be carried on exclusively by the government of the Union.

The Indian nations had always been considered as distinct, independent, political communities, retaining their original natural rights, as the undisputed possessors of the soil, from time immemorial. The words 'treaty' and 'nation' are words of our own language, selected in our diplomatic and legislative proceedings, by ourselves, having each a definite and well understood meaning. We have applied them to Indians as we have applied them to the other nations of the earth. They are applied to all in the same sense. (Vogel, 1972, p. 130)

However, President Jackson supported the state of Georgia's effort to keep missionaries and white friends off Cherokee land and to force the Indians' removal west of the Mississippi. He is reported to have remarked: "John Marshall has made his decision, now let him enforce it" (Vogel, 1972, p. 124).

Despite the fact that the Cherokee had done more to adopt white life styles, including keeping slaves and establishing schools, than most other tribes, the forced removal of the tribe was approved by Congress in 1838. The Cherokee's success at assimilation and the wealth they had gained as a result might have been part of their downfall. The tribes with the most undesirable land (based on white desires) and the least wealth have had the best success in holding on to their lands. Assembled at bayonet point and marched west, an estimated 4,000 of 11,500 Indians who started on "The Trail of Tears" died of dysentery, malnutrition, exposure, or exhaustion before they reached Oklahoma (Woodward, 1963, p. 218). The "Five Civilized Tribes" of Oklahoma promptly established school systems. Within ten years the majority of their teachers had changed from Eastern-educated missionaries to locally-trained teachers. These schools were financed by the tribes.

In 1832 the position of Commissioner of Indian Affairs was created in the War Department to provide for coordination of federal relations with Indian tribes. By 1838, the federal government was operating six manual training schools with eight hundred students and eighty-seven boarding schools with about 2,900 students (*Indian Education*, 1969, p. 11). In 1839, Commissioner Harley Crawford formalized development of manual labor

schools to educate Indian children in farming and homemaking (*Report*, 1976, pp. 38-39). Ten years later the Office of Indian affairs was transferred from the War Department to the Department of the Interior. This transfer had little effect on Indian education, and missionaries continued to be the major influence on Indian children.

Americans in the Nineteenth Century saw their country expanding across the continent. They began to feel that their continued success was God's will and that their "manifest destiny [was] to overspread and possess the whole continent which providence ha[d] giver' them (Sullivan, 1845). As wagons and then trains crossed the continent and settlers moved west of the Mississippi, the removal option ended and, in the 1850s, the period of reservation settlement began and did not end until the nineteen thirties. Schools set up on the reservations were designed to devalue the traditional culture and religion of Indian people and to coercively assimilate Indian youth into the dominant society. The forced settlement on reservations caused an almost total dependence on the federal agent for food, shelter, and clothing. This was especially true for plains tribes who had been dependent upon the buffalo which had been decimated in the third quarter of the Nineteenth Century. On the reservations, the government usually proposed something similar to what was offered the Crow Indians at Fort Laramie,

to build a house for your agent to live in, to build a mill to saw your timber, and a mill to grind your wheat and corn, when you raise any; a blacksmith shop and a house for your farmer, and such other buildings as may be necessary. We also propose to furnish to you homes and cattle, to enable you to begin to raise a supply of stock with which to support your families when the game has disappeared. We desire to supply you with clothing to make you comfortable and all necessary farming implement so that you can make your living by farming. We will send you teachers for your children. (Prucha, 1985, p. 18).

There was some question as to whether education was needed because of the rapid decline in Indian population. From an estimated number as high as ten million before Columbus's arrival, Indian population was rapidly declining as a result of diseases from Europe to which they lacked natural immunity and to increased, and increasingly deadly warfare (caused by guns), brought about by the pressures of the growing white population.

Even starvation took its toll as buffalo and other game disappeared. Predictions of the ultimate demise of Indians led to the popularity of the term "Vanishing American." By 1900, the Indian population of the United States had declined to two hundred thousand. Many humanitarians saw education and the life of a farmer as the only hope for Indians despite the fact that much of the land they had been left with was, at best, suitable for ranching. Of course, many policy makers in Washington had never been west of the Mississippi.

After the Civil War, in order to make the reservation system work, President Grant instituted a "Peace Policy." Grant appointed a Board of Indian Commissioners to supervise the appointment of Indian agents, teachers, and farmers and the purchase of supplies. This board continued to operate until 1933. The Board of Indian Commissioners divided up reservations among various religious groups. For example, in Montana, Methodists were assigned the Blackfeet and the Crow while Catholics were assigned the Flathead reservation (*Report*, 1976, pp. 40-41). As in the days of King George, it was much cheaper to make peace with Indians than to fight them. The Commissioners felt that missionaries could best facilitate the peaceful assimilation of Indians into the dominant society.

Government control and dependency (1870-1923)

Congress appropriated \$100,000 in 1870 to support industrial and other schools among Indian tribes. This moved control of education for Indians directly under the Bureau of Indian Affairs. Emphasis was on day, boarding, and industrial schools teaching basic skills such as arithmetic and speaking, reading, and writing English. Indicative of the declining powers of Indian tribes and the increasing power of the United States was the ending by Congress of all treaty-making with Indian tribes the next year as a result of a dispute over power between the House and Senate. (Two years later, in 1873, discovery of gold in the Black Hills set the stage for conflict between the United States and the Sioux and Cheyenne Nations.) Contemporary Westerners often had a dim view of Indians, the Indian Bureau, and Eastern government officials:

[The Indian Bureau] is responsible for arson, murder and rape; it is a refuge of incompetents and thieves...From the Indian agent the savage obtains his supplies of food to enable him to make his raids; from some creature of the

agent, he obtains his supplies of ammunition and improved arms that make him more than a match for the raw recruit that the American government enlists from the city slums, dignifies by the name of soldier, and sends out to meet these agile warriors.

The whole system of Indian management is a fraud: the Indian Department rotten from the outmost edge to the innermost core.

[Putting the Indian Bureau back under the army] would do away with our junketing peace commissions, composed of low-brow, thick-lipped, bottle-nosed humanitarians, the inferiors of the savages in every manly trait and objects of unlimited contempt by these shrewd marauders. (Triplett, 1883, p. 347)

President Grant's Peace Commission of Eastern "humanitarians" reported in 1869 that:

The history of the Government connections with the Indians is a shameful record of broken treaties and unfulfilled promises. The history of the border white man's connection with the Indians is a sickening record of murder, outrage, robbery, and wrongs committed by the former, as the rule, and occasional savage outbreaks and unspeakably barbarous deeds of retaliation by the latter, as the exception. (Jackson, 1886, p. 339)

Civil Service reform finally ended the worst forms of corruption. Increasing amounts of law in the west decreased the worst injustices towards Indians, including murder. (It is interesting to note that Canada—which eventually formed a federal police force for its western provinces, the "Mounties," and pursued a more steady, and some say fairer, policy towards its Indians—avoided almost all the Indian warfare that seemed endemic in the United States.)

With the repeal of the Civilization Fund in 1873, the federal government became more involved in direct operation of Indian schools. The government's intent, as reported in the *Annual Report* of the Indian Commissioner to the Secretary of the Interior in 1885, was "to free the children from the language and habits of their untutored and often times savage parents" (Roessel, 1962, p. 5). The Secretary of the Interior optimistically declared in 1883 that

if a sufficient number of manual labor schools can be established to give each youth the advantages of three to five years of schooling, the next generation will hear nothing of this difficult problem, and we may leave the Indian to himself (Roessel, 1962, p. 5).

The first off-reservation Indian Boarding School was opened at Carlisle, Pennsylvania, in 1879, under the directorship of Captain Richard Henry Pratt. Pratt saw the purpose of boarding schools for Indians as to take the "Indian" out of his Indian students. Haskell Institute was established in 1884 at Lawrence, Kansas. Over the years Haskell has been changed from a manual training school to its present status as a Junior College, although still operated by the Bureau of Indian Affairs.

Not only in the schools was Indian culture suppressed. In 1881 in an attempt to force change among Plains Indian Tribes, the religious practice of the Sun Dance was banned. In 1885, this ban was extended to a general policy forbidding traditional Indian religious ceremonies and all aspects related to such ceremonies. In 1886, Indian men were ordered to cut their hair short. A situation began to emerge where Indians felt the government owed them a living of annuities and rations in return for land taken and game killed. Many treaties provided for annuities, but only for a transitional period during which Indians were expected to learn to be farmers. However, the marginal quality, even for grazing, of much reservation land and the lack of desire among most Indians to become farmers frustrated the government's attempts to make Indians self sufficient on their reservations. A demoralizing situation of dependency developed on many reservations which continues to this day.

Education in white ways was seen as a way to end this growing dependency and to destroy traditional Indian tribal life. Another attempt to end this dependency was the General Allotment (Dawes) Act passed in 1887. The Dawes Act granted 160 acres to each family head and 80 acres to single persons over eighteen and orphans under eighteen. Fee patent title was issued to each allottee to be held in trust by the government for twenty-five years. Indians were given four years to decide what land they wanted; if they did not decide, the Secretary of the Interior would decide for them. All allottees would be given citizenship, and land left over after allotment was to be sold to the U.S. government with the profits used for "education and civilization." Allotment reduced tribal holdings from about 140 million acres to 50 million acres.

Supporters of the Dawes Act had three goals: to break up tribal life, to enable Indians to acquire benefits of civilization, and to protect the remaining Indian land holdings (*Report*, 1976, p. 43). Not all reservations were allotted; the Navajo Reservation was the largest exception. When oil was found on the Navajo Reservation in the late 1920s, an attempt was made to allot the lands then, but the Teapot Dome scandal in Wyoming discredited the Secretary of Interior and his policies, and the Dawes Act was repealed soon after.

By 1887, Congress was appropriating more than a million dollars a year to educate Indians. About half the appropriations went to missionaries contracted to educate Indians. However, feuding between Protestants and Catholics, aggravated because Catholics were more successful in establishing schools, led Protestants to support funding only government-run schools which still included *Bible* reading (Utley, 1984, pp. 216-217). In 1889, General Thomas Morgan became Commissioner of Indian Affairs. His educational plan called for compulsory attendance and standardized curriculum, textbooks, and instruction. As a result, Congress passed laws permitting him to enforce school attendance through withholding of rations and annuities from Indian families who did not send their children to school.

However, as the government's education program that sought to "de-Indianize" the Indian became standardized in Indian schools a countervailing trend was starting in the country:

the old view that Indian cultures had nothing to offer American society, that the sooner they were destroyed and replaced the better, gave way little by little to an interest in Indian ways and then to a positive appreciation of Indian art and other contributions (Prucha, 1985, p. 58).

This change in attitude was due, in part, to a new scientific outlook that went beyond the ethnocentric view that all cultures were inferior to the dominant culture and, in part, to books like Helen Hunt Jackson's *A Century of Dishonor* (1886) which described the mistreatment of American Indians. Jackson's book has been compared in its political effect to *Uncle Tom's Cabin*. It emphasized broken treaties, stolen land, and the concept that Indians had no legal rights in state courts because they were not citizens. Franz Boas, an anthropologist, wrote in 1911,

It is somewhat difficult for us to recognize that the value which we attribute to our own civilization is due to the fact

that we participate in this civilization, and that it has been controlling all our actions since the time of our birth; but it is certainly conceivable that there may be other civilizations, based perhaps on different traditions and on a different equilibrium of emotion and reason, which are of no less value than ours, although it may be impossible for us to appreciate their values without having grown up under their influence. (p. 208)

Francis E. Leupp, Commissioner of Indian Affairs during Theodore Roosevelt's second term, reported to the House of Representatives in 1905 that,

The Indian is a natural warrior, a natural logician, a natural artist. We have room for all three in our highly-organized social system. Let us not make the mistake, in the process of absorbing them, of washing out of them whatever is distinctly Indian. Our aboriginal brother brings, as his contribution to the common store of character, a great deal that is admirable and which needs only to be developed along the right line. Our proper work with him is improvement, not transformation. (Prucha, 1985, pp. 58-59).

At the same time this change of thinking was beginning at the top, George Wharton James could report in 1908,

Again and again when I have visited Indian schools the thoughtful youths and maidens have come to me with complaints about the American history they were compelled to study...[They tell me] "When we read in the United States history of white men fighting to defend their families, their homes, their corn-fields, their towns, and their hunting-grounds, they are always called 'patriots,' and the children are urged to follow the example of these brave, noble, and gallant men. But when Indians—our ancestors, even our own parents—have fought to defend us and our homes, corn-fields, and hunting-grounds they are called vindictive and merciless savages, bloody murderers, and everything else that is vile." (Vogel, 1972, pp. 3-4)

Albert Yava who started in school around 1893-94 wrote in his autobiography,

You have to remember that this school business was new not only to the children but also to most of the people in the

villages. There had been a big commotion when the Government gave the order that all the children would have to attend school. There was a lot of resistance. The conservatives—you can call them that or Hostiles—felt very strongly that the white man was cramming his ways down our throats. Many people felt that the Government was trying to obliterate our culture by making the children attend school. And if you want to be honest about it, the schooling the children have been getting over the past seventy-five or eighty years has educated them to the white man's ways but made them less knowledgeable about the traditional ways of their own people. A lot of what they have been taught is good. It makes them able to understand the way the white man thinks, and to compete in the outside world. But at the same time, they aren't getting as much of their own traditions as they should. Something important is being gained, but something important is being lost.

In the years just before I appeared on the scene, the [Hopi] villages were split down the middle over whether to allow the children to be sent to the day schools or boarding schools... (1978, p. 10)

For the vast majority of Indians, boarding schools did not seem to work, Kluckhohn and Leighton report that 95% of Navajo children

went home rather than to white communities, after leaving school, only to find themselves handicapped for taking part in Navajo life because they did not know the techniques and customs of their own people (1962, p. 141).

Moves to reform Indian education (1924-1944)

With the start of the Twentieth Century, a trend began to educate Indian children in public schools (Roessel, 1962, p. 7). Tuition payments were authorized by Congress in 1890 to some public schools enrolling Indian children. By 1912 more Indian children were in public schools than in government schools, and the number of government schools with Indian children began to decline. The use of federal funds to support instruction in church schools was made illegal in 1917. In 1924, passage of the Indian Citizenship Bill (Snyder Act) made all Indians citizens of the United States. That same year, the Committee of One Hundred called for adequate school facilities, competent personnel in-

creased number of Indian students in public schools, and scholarships for high school and college. These recommendations led to reservation day schools offering a sixth-grade education and off reservation boarding schools offering an eighth-grade education (*Report*, 1976, p. 47). The Meriam Report in 1928 condemned the allotment policy and the poor quality of services provided by the BIA, urged protection for Indian property, and recommended Indians be allowed more freedom to manage their own affairs. In discussing education, it pointed out shocking conditions in boarding schools, recommended not sending elementary age children to them, and urged an increase in the number of day schools. It stated,

The philosophy underlying the establishment of boarding schools, that the way to "civilize" the Indian is to take Indian children, even very young children, as completely as possible away from their home and family life, is at variance with modern views of education and social work, which regard the home and family as essential social institutions from which it is generally undesirable to uproot children. (1928, p. 403)

A number of fictionalized accounts exist about Indians who went to boarding schools. Most interesting are Oliver LaFarge's Pulitzer Prize winning *Laughing Boy* (1929) and his *The Enemy Gods* (1937). Ruth Underhill's *Hawk Over Whirlpools* (1940), and Frank Waters' *The Man Who Killed the Deer* (1942). Autobiographies of Indians who attended boarding schools show the schools more favorably since unsuccessful students were not likely to write much. Of particular interest are Charles A. Eastman's *From the Deep Woods to Civilization: Chapters in the Autobiography of an Indian* (1916), Albert Yava's *Big Falling Snow* (1982), and Elizabeth Q. White's (Polingaysi Qoyawayma's) *No Turning Back* (1964).

World War I and the Great Depression which began in 1929 caused considerable rethinking about whether the United States was progressing towards a Utopia of wealth and plenty on earth and what the goal of education, Indian or white, should be. Some people in their doubts looked to the close-knit, non-materialistic world of American Indians for an alternative to what they saw wrong with modern society. One such person was John Collier who in the twenties became an advocate of Indian rights. With the election of Franklin D. Roosevelt in 1933, Collier became

Commissioner of Indian Affairs. He immediately sought to end allotment of Indian lands and to implement the recommendations of the Meriam Report. This resulted in the Indian Reorganization (Wheeler-Howard) Act of 1934 which ended allotment of Indian lands and provided for Indian religious freedom, a measure of tribal self government, and Indian preference in hiring of Bureau of Indian Affairs employees.

Also in 1934, the Johnson-O'Malley (JOM) Act, which authorized the Secretary of the Interior to contract with states or territories to provide services to Indians, allowed the federal government to pay states for educating Indians in public schools. Originally, the money went into the general operating funds of school districts and could, in fact, be used to support education of non-Indian students. Today, the JOM Act still provides money to public schools educating Indian children; however, current JOM programs must be supplemental, such as special counseling, tutoring or native culture programs. They must also be approved by an Indian parent committee.

Besides the effects of what was called the "Indian New Deal," Indians also benefited from many mainstream New Deal employment programs such as the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC). These public works projects provided jobs for boarding school graduates, provided on-the-job training, introduced many Indians to wage jobs, and began creating a cash economy which gradually transformed the old reservation trading economy.

Under Collier's administration the BIA built more day schools and closed some boarding schools. A few native language textbooks were written and greater emphasis was placed on Indian culture in BIA classrooms. Summer Institutes were held to give teachers special training in teaching Indian students. A bi-monthly publication, *Indian Education*, was started for bureau employees which continued publication into the 1960s. Most gains were quickly wiped out, however, when funding dried up with the start of World War II. However, what education was lost in schools because of funding cuts was more than made up for by on the job training as twenty-four thousand Indians served in the armed forces and thousands of others found work in cities. The most famous of the Native Americans participating in the war effort were the Navajo code talkers who served in the South Pacific using a communications code based on their native language which the Japanese could not break. According to

Szasz, World War II "given the comparatively short time span of the conflict...affected some tribes more than any other major event in the four centuries of Indian-white relations" (1977, p. 107).

The termination era (1945-1968)

At the end of the war there was a renewed call to "set the American Indian free." The thinking behind this call was that Indians would then need no special educational or other programs.

The argument was made and accepted in Congress that the Indian Reorganization Act had forced a collectivist system upon the Indians, with bigger doses of paternalism and regimentation, and that "tribal control and governmental regulations constantly remind the Indian of his inferior status" (Armstrong, 1945, pp. 49 & 50). The "final solution" Congress came up with for the Indian problem was to "free" the Indians by terminating special Indian programs and their reservations. In 1953 six termination bills were passed. As part of termination, states were to assume responsibility for educating Indian children in public schools. One of the first tribes to feel the effects of this policy was the Menominee in Wisconsin, which had its reservation terminated by Congress in 1954, but was to recover somewhat because the termination policy of the 1950s was judged a failure much more quickly than the earlier allotment policy. Land still owned by the Menominee tribe was put back into federal trust status in 1973. A form of the termination program involved relocation of Indians off reservations into cities where they often had great difficulty adjusting to the new conditions and returned home.

The typical reservation school of the termination era, Bureau-, mission-, or public-operated, has been described by Murray L. Wax:

The situation almost appears colonial, or at the least caste-like: between Indian community and schools there is a strong social barrier, typified by the fences which surround the [school] compound. Parents rarely visit the schools; teachers rarely visit the homes; each side finds interaction with the other uncomfortable.

The consequence of this barrier [between the school and the community] is that by the intermediate grades Indian children have begun to develop a closed and solitary peer society within the walls of the school. (1971, p. 83)

Ralph Nader testified before the Special Subcommittee on Indian Education that

In any school with Indian students, BIA or public, cultural conflict is inevitable. The student, bringing with him all the values, attitudes, and beliefs that constitute his "Indianness" is expected to subordinate that Indianness to the general American standards of the school. The fact that, he, the student, must do all the modifying, all the compromising, seems to say something to him about the relative value of his own culture as opposed to that of the school...

It is estimated that for half of the Indians enrolled in Federal schools English is not the first language learned. Yet when the child enters school he is expected to function in a totally English-speaking environment. He muddles along in this educational void until he learns to assign meaning to the sounds the teacher makes. By the time he has begun to learn English, he has already fallen well behind in all the basic skill areas. In fact, it appears that his language handicap increases as he moves through school. And although it is no longer official BIA policy to discourage use of native languages, many reports in the hearings indicate the contrary in practice. (*Indian Education*, 1969, pp. 47 & 51)

The effort to get Indians into public schools encouraged by funding provided by the Johnson-O'Malley Act got another boost through Impact Aid. First passed in 1950, P.L. (Public Laws) 874 and 815 authorized funds for public schools in federally-impacted areas. These Acts were designed to ensure that children living on tax-exempt land such as military bases did not cause a financial burden for public schools. In 1953 the Impact Aid laws were amended to include Indians living or working on reservations or other federal trust land. P.L. 874 provides a large part of the operating expenses of many reservation public schools today, while many reservation schools were built using P.L. 815 funds.

The need for special educational programs for non-mainstream cultural groups was increasingly recognized by college and university educators. In 1959, the first Center for Indian Education was established by Arizona State University. The Center began publishing the *Journal of American Indian Education* which remains today as the only journal solely devoted to publishing information and research on Indian education.

The move towards self-determination (1969 Present)

As a result of the partial success of Indian educational programs, the involvement of Indians with federal programs spurred by the Indian preference clause of the Indian Reorganization Act, and the generally increased experience gained in working with white America, Indian tribes were developing a core of leadership capable of telling the federal government what the tribes wanted, using the news media and other democratic forums. This leadership was almost unanimous in opposing termination. The alternative put forward was self-determination; letting Indian people—through their tribal governments—determine their own destiny.

After World War II, other minority groups besides Indians demanded better educational services. With *Brown v. the Board of Education* (1954), "separate but equal" schools for Blacks were declared unconstitutional. The treatment of all minorities in the United States received increased attention in the 1960s. At the end of the decade two major studies of Indian education were completed. The National Study of American Indian Education was carried out from 1967 to 1971 directed by Robert J. Havighurst of the University of Chicago. The results were summarized in *To Live on This Earth* (Fuchs & Havighurst, 1983). The second study was by the Special Senate Subcommittee on Indian Education. Testimony from hearings by this committee fill seven volumes with a summary report entitled, *Indian Education: A National Tragedy, a National Challenge* (1969). Also known as the *Kennedy Report*, the Senate subcommittee's findings led directly to passage of the Indian Education Act, Title IV of P.L. 92-318, which provided funding for special programs for Indian children in reservation schools, and, for the first time, urban Indian students. This law, as amended in 1975, required committees of Indian parents to be involved in planning these special programs, encouraged establishment of community-run schools, and stressed culturally-relevant and bilingual curriculum materials (Szasz, 1977, pp. 198-199). In 1974, parent committees were required for JOM programs.

Indian educators, often assisted by civil rights activists, became increasingly active during the 1960s, and at the end of the decade they formed the National Indian Education Association. In 1971 the Coalition of Indian Controlled School Boards was formed. While more mainstream Indian leadership testified before congressional committees and lobbied congress, more

radical young urban Indians followed the lead of the Black Panthers. In 1969 Alcatraz Island in San Francisco Bay was seized by a group called "Indians of All Tribes" which demanded the island be turned into an Indian cultural and educational center. Three years later the American Indian Movement (AIM) took over the BIA headquarters building in Washington, DC. Later AIM took over the village of Wounded Knee (Prucha, 1985, pp. 81-83). On a more local level, AIM organized a number of sit ins and walk outs in high schools insisting on more Indian culture and history and more Indian involvement in school administration.

On the whole, the mainstream, non-AIM, Indian leaders in the 1960s did not find schools, whether public or BIA, responsive to demands for greater local control and local, Indian, curriculum. Then, in 1964, the Economic Opportunity Act (OEO) authorized programs such as Head Start, Upward Bound, Job Corps, and Vista. As a result, in 1966, in an attempt to have a school they could call their own, a group of Navajos started an experimental school at Rough Rock, Arizona, funded under contract with the Bureau of Indian Affairs and the OEO. Over the next seven years, eleven additional contract schools were started. Today there are sixty. In 1975 the Indian Self-Determination and Assistance Act (Public Law 93-638) required the BIA to contract as many of its services to tribes as those tribes desired. The purpose was "to promote maximum Indian participation in the government and education of Indian people" and "to support the right of Indians to control their own educational activities" (*Indian Education*, 1982, p. 120). Tribally-controlled community colleges were also established on reservations through BIA funding. The first, Navajo Community College, began operation in 1969. By 1978 there were 15 such colleges located in Arizona, California, Michigan, Montana, Nebraska, North Dakota, South Dakota, and Washington. Most of these colleges have been plagued by "inadequate facilities" and lack of funds (Oppelt, 1984).

American Indians today: population and education

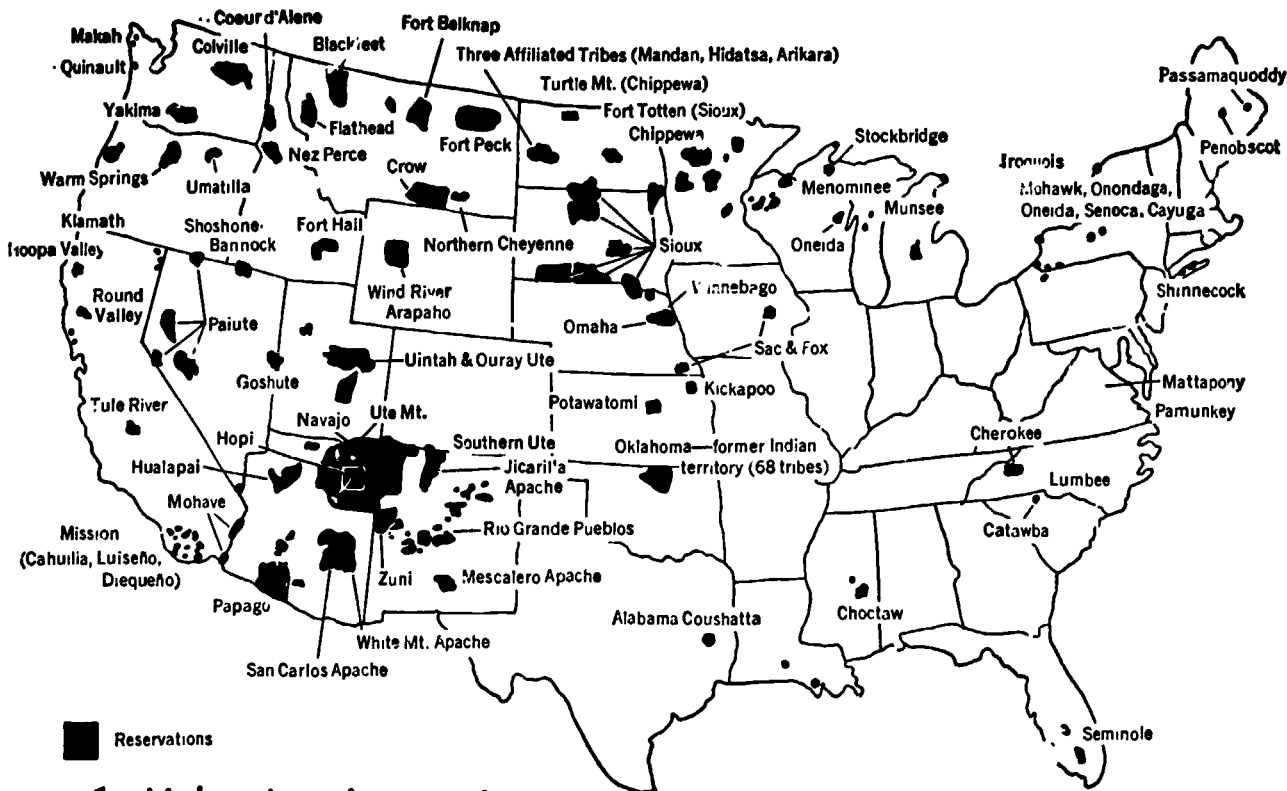
In 1974 there were 170 Alaska Native Villages, 258 Indian Reservations and Indian Trust Areas, and 27 federally-recognized tribes with trust areas in Oklahoma (*Federal*, 1974). Little, if any, change has occurred in these figures since then. The

maps shown in Figure 1 and 2 show how the reservations and Indian populations are concentrated in the western half of the United States. About a third of a million American Indians live on reservations with another hundred thousand living in the historic areas of Oklahoma. Of the adults over 25 years old, 57% have not graduated from high school and 16% have completed less than five years of school. Twenty-seven percent of reservation American Indians over 16 are unemployed, 45% live below the poverty level, 21% have homes without piped water, and 16% are without electricity (*American Indians*, 1985, pp. 16-95).

The 1980 census shows a total U.S. population of 227 million of which .7%, one and a half million, were identified as American Indians of whom a little less than half live in rural areas. A half million, about one-third, of the Indian population, are enrolled in school; a half million are employed; and 76,865 are unemployed, a 13% unemployment rate. The mean household income for whites is \$21,173 and for American Indians it is \$15,418 even though the average Indian household size is 3.3 persons compared to the average white household size of 2.7 persons (*General Social*, 1984, 92-130).

In 1984 there were 32,672 American Indians enrolled in United States colleges and universities, the lowest figure for any U.S. minority group reported and a 5.7% decrease from 1982, the first two-year decline in the last eight years. American Indians represent approximately .7% of the United States population and .7% of the enrollment in higher education (*Racial*, 1986, p. 25). In 1984, 73 American Indians received Doctor's Degrees, again the lowest number for any minority group reported and only .2% of the total (*Summary Report*, 1986, p. 30).

The average Scholastic Aptitude Test (SAT) verbal score of American Indians has risen four points between 1976 and 1985 while the corresponding score for white Americans has dropped two points. However, Indians still have an average score 57 points below white Americans. (The average score for blacks, Mexican-Americans, and Puerto Ricans is even lower than the score for Indians.) The Indians' SAT math scores are very similar to the verbal scores. The number of Indians taking the SAT test has increased 2% over the past five years compared to a 5% drop for blacks, a 48% increase for Asian-Americans, an 11% increase for Puerto Ricans, and a 26% increase for Mexican Americans. (*Number*, 1986, p. 108).

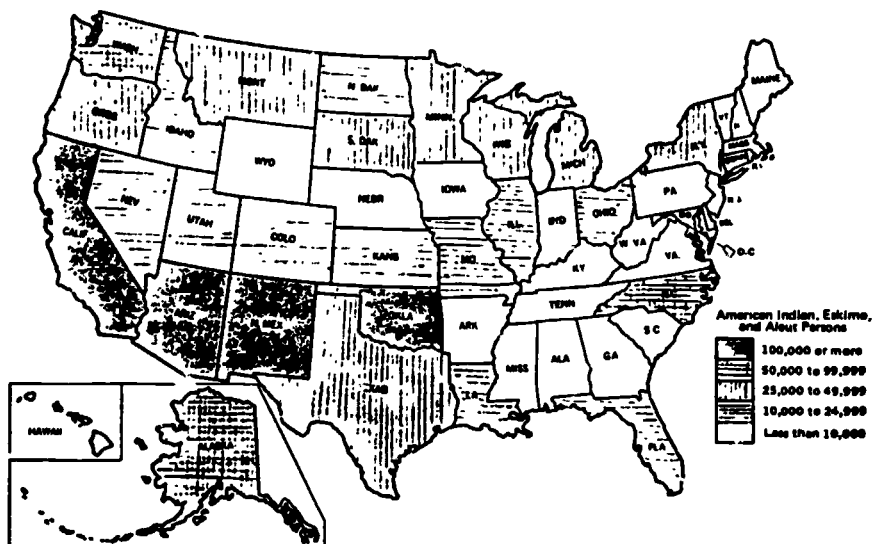


■ Reservations

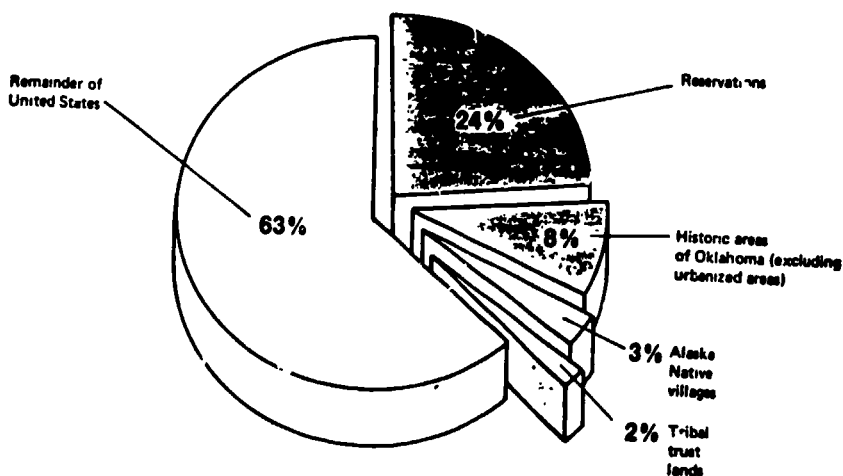
Figure 1. Major American Indian tribes and reservations in the continental United States.

(Illustration from *To Live on This Earth* by Estelle Fuchs and Robert J. Havighurst. Copyright © 1972 by Estelle Fuchs and Robert J. Havighurst. Reprinted by permission of Doubleday & Company, Inc.)

Figure 2. Number of American Indian, Eskimo, and Aleut Persons by State: 1980



Distribution of the American Indian, Eskimo, and Aleut Population: 1980



From supplementary report PC80-S1-13 issued August 1984, *American Indian Areas and Alaska Native Villages: 1980-1980 Census of Population*. Washington, DC: U.S. Government Printing Office.

A hundred thousand Indian children between the ages of five and seventeen live on reservations. About a third of them attend BIA schools. Over 80% of the 15,729 BIA employees are Native American or approximately 2.5% of all employed Native Americans (*American Indians*, 1984, p. 14). Almost 14,000 Native Americans are teachers, librarians, or counselors representing about 2.7% of the Native American work force, whereas 3.2% of the white work force are teachers (*General Social*, 1984, pp. 137-138).

Today there are 106 elementary and secondary schools operated by the BIA and 60 elementary and secondary schools operated by tribes or tribal organizations under contract with the BIA with a total of 38,535 students. Despite long term efforts to eliminate Indian boarding schools, 13,245 students still board at their schools. The BIA operates three post-secondary schools and funds twenty tribally-controlled community colleges (*Education directory*, 1985-86, p. 1; *Comprehensive School Report*, 1985). While Indian students were once excluded from many public schools, now some state departments of education have done extensive work to provide supplemental curriculum about and for Indians in their schools. Oklahoma and California are especially to be noted for their efforts. Most Indian students now attend public schools BIA schools still educate a substantial number of students while contract and mission schools serve a small percentage. The increase over the years in Indian students attending school in the United States is shown in Table 1.

Conclusion

Federal Indian policy over the years has swung between supporting tribal governments and terminating their special relationship with the federal government. Allotment and termination were one side of the pendulum's swing, and John Collier's Indian New Deal and the current policy of self-determination are the other side. Self-determination in education has led to an increased number of tribally-controlled schools (although that increase has leveled off in the last few years), a more active role by tribal councils in education (see tribal education policies quoted in chapter two on bilingual education), and an increase in reservation public schools with all Indian school boards. Many reservation schools have large numbers of Indian teachers; however, efforts to seriously modify the curriculum have not really taken place except in a few schools like Rock Point Community School.

Sometimes the purpose of local control has become, as was felt by an external evaluator about the first locally-controlled school at Rough Rock, more to give employment to local Indians than to provide a program of quality education (Szasz, 1977, pp. 171-172). Two major reasons for this concern for employment rather than education are the high unemployment rate on most reservations and the lack of educational expertise on the part of local school boards. On the one hand these school boards are told by the conservatives to get back to the basics and teach phonics and the three r's, and on the other hand they are told by the more liberal to open up their classrooms and teach bilingually. Whom are they to believe?

The pressing need for employment tends to override what is not a clear-cut educational mandate in the first place. The economic rehabilitation of reservations that John Collier hoped for fifty years ago is still mostly a dream. However, Indian people

Table 1. Number of Indian children enrolled in school

Year	Total Enrollment
1822	1,100
1879	4,488
1887	14,333
1900	26,451
1938	65,166
1951	102,322
1959	141,548
1980	501,840

Sources: Jedediah Morse, *A Report to the Secretary of War of the United States on Indian Affairs*. New Haven: S. Converse, 1822, p. 396. S. Lyman Tyler, *A History of Indian Policy*, Washington, DC: U.S. Department of the Interior, Bureau of Indian Affairs, 1973. *Statistics Concerning Indian Children, Fiscal Years 1956 and 1960*. Washington, DC: U.S. Department of the Interior, and *1980 Census of Population. General Social and Economic Characteristics: U.S. Summary*. Washington, DC: U.S. Department of Commerce, Bureau of the Census. PC80-1-C1, p. 98.

have been given a say in their own destiny through elected parent committees, school boards, and tribal councils. As the federal government tries to cut funding to all programs, the question becomes whether schools can turn out Indian graduates who are self assured, employable, and capable of providing leadership in making reservations, often located on marginal land, self sufficient.

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Multicultural Education for Native Americans

Janet Goldenstein Ahler

Multicultural education is a philosophy for formal schooling which has been promoted among educators for nearly two decades now. The old assimilation policy of the "Melting Pot," especially as it was and is still reflected and projected in American schools, came under attack as the political and social consciousness of the relatively powerless minorities was raised during the Civil Rights Movement of the 1960s. Multicultural education responds to and makes provision for the cultural pluralism and diversity of our country. The multicultural curriculum is composed of the cultural fabric of the many cultural and ethnic groups in the United States, including, but not dominated by, the American mainstream culture. Multicultural education has implications and potential benefits for Native Americans.

Educational anthropologists and multicultural educators have offered a variety of models for implementing multicultural education. Gibson (1976) has outlined five approaches: Benevolent Multiculturalism, Cultural Understanding, Cultural Pluralism, Bicultural Education, and Multiculturalism as the Normal Human Experience. Garcia (1982, pp. 105-187) and Banks (1987, pp. 21-32) each conceptualize models and strategies differently but retain similar elements in their discussions. While these approaches respond to different situations, are aimed at different

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populations, and specify varying goals, there are two major goals which can embrace most circumstances in multicultural education. The first of these is to meet the educational needs of culturally diverse students by recognizing that they bring worthwhile cultural knowledge with them to school and by reinforcing and expanding upon that knowledge in the classroom in such ways so as not to force assimilation processes on those students who are not members of the American mainstream. This goal is a direct response to the demands by American minority groups for educational opportunities historically denied them. There is no reason to presume in meeting this goal that students who are not members of the American mainstream are culturally deficient or deprived.

Another, more encompassing, goal of multicultural education is to promote cultural awareness and sensitivity among all students which will lead to the understanding of and respect for one's own and other's cultures. This can be achieved primarily by reducing ethnocentrism and eliminating racism and other predominantly negative attitudes about others such as stereotyping, bigotry, and resulting discrimination. Initially, this goal was aimed especially at American mainstream students who would have to learn to appreciate the minority cultures in order for equity in education to be realized. However, it has become clear that this goal is appropriate for all cultural groups of students.

Commitments toward achieving these two goals through multicultural education in teaching training stem from a variety of sources. Most national professional education organizations have encouraged the implementation of multicultural education, and the National Council for Accreditation of Teacher Education (NCATE) which evaluates teacher education institutions for accreditation has mandated the inclusion of multicultural education in the training of all new teachers since 1980. In addition, several states have certification requirements that stipulate some training in Native American studies. The rationale for these requirements is that new teachers of Indian students will get enough acquaintance with the content area to be able to meet the needs of their students. But content knowledge alone will not serve to improve attitudes of some teachers toward Indian students. A combination of training in Native American studies and multicultural education will better equip teachers to attain both multicultural education goals.

What does multicultural education mean for Indians, especially in reservation schools? Francis McKenna (1981) of Pennsylvania State University has alleged that:

multiculturalism, with its presumed liberal, humane acceptance, even sponsorship, of cultural difference is for the Indian a Potemkin village—a facade—to mask the real agenda for American Indians. That agenda is the acceleration of domestic dependency or internal colonialism, the major features of which are political destabilization, economic exploitation, cultural annihilation, and the destruction of the spirits and persons of Indian nations. (p. 2)

In other words, McKenna views multicultural education as an extension of the centuries-long assimilationist, "Melting Pot" policies of the United States government toward native peoples. Indeed, some federal bureaucrats and ill-informed and misguided educators may well have expectations of effecting the assimilation of Indian students under the guise of multicultural education, but that would certainly be a subversion and misuse of the expressed purpose. For that matter, any education program has the potential for hidden agendas. Most multicultural educators strive to ensure that individual choice in cultural affiliation is protected to avoid forced assimilation.

The attitudes of teachers and parents on a North Dakota reservation toward multicultural education were surveyed by Dr. Karen Swisher (1984), a native of the reservation. Although she found that teachers' attitudes were more positive than parents' attitudes toward multicultural education and its implementation in their reservation schools, specific results within groups of parents and teachers which were significant are noteworthy. Parents who had lived away from the reservation for more than ten years had a more positive attitude than those who had lived away fewer years or who had lived all their lives on the reservation. The more educated the parents were, the more positive their attitudes. Parents who were designated as "full-bloods" and parents who were enrolled members of that reservation expressed less positive attitudes than others. Younger teachers and teachers with fewer years of teaching experience on the reservation had more positive attitudes toward multicultural education (pp. 5-8). While this study is descriptive, we might speculate, nevertheless, that those parents who have less positive attitudes may possess the type of skepticism expressed by McKenna above. Moreover, the older, more experienced reservation

teachers may still expect assimilation for their Native American students.

Despite some misgivings on the part of some educators and reservation residents, multicultural education is becoming a reality in many reservation schools. Although there is some variation in the implementation, only one of the two goals is usually directly addressed: the one specifying meeting the needs of students who are not members of the American mainstream, particularly the Indian students on reservations. The response has been to introduce Native American content, often representing the traditional aspects of the dominant reservation culture, in the form of arts and crafts, music, traditional stories and histories, and native language vocabulary. Much of this information is a mere addition to the regular curriculum which remains representative of the American mainstream culture. The focus on this one goal and the process and content for implementation does have several justifications. Learning more about one's own culture in school allows for the development of more positive self-concepts among Native American students, a prerequisite for broader cultural awareness. It is also appropriate in view of the historical exclusion of Native American cultural content in reservation schools as part of the attempted assimilation process. Further, meeting this goal would serve to protect and preserve the cultural integrity of the reservation cultures. The result, however, is a bilingual/bicultural exposure, not a truly multicultural education.

Some educators would argue that the current form of multicultural education in reservation schools is only "tokenism" (and might eventually conform to McKenna's assessments), or that it is only a beginning. There is reason to believe that it is an auspicious beginning, but that the role of native culture in reservation schools still needs to be expanded and deepened. Basic values and practices of the reservation cultures should be added to the present content. Native language should be treated as a serious aspect of language learning to include conversation, grammar, syntax, and structure. Even this particular goal of meeting Indian students' needs will not be realized as long as American mainstream standards continue to be imposed through such means as standardized testing and as long as native cultural content is a minor addition to rather than an integral part of the

core curriculum. Reservation school standards should represent the cultural values, experience, and aspirations of the populations being served. American mainstream cultural content could be reduced in the core curriculum in favor of Native American cultural content without sacrificing commitments to teaching "basic skills." Indeed, the definition of "basic skills" might be subject to revision by the population served.

There is further need to look at multicultural education for Native Americans in terms of the other major goal, to increase the cultural awareness and sensitivity in all students. First, it should be pointed out that the assessments and recommendations that follow are intended to concentrate on Indians only because that is the purpose of this book, not because Indians need to address these issues more than any other group. This multicultural education goal is aimed at everyone from all cultural groups. In order to meet this goal, there must be a recognition that there is cultural diversity and pluralism. Dillon Platero, writing about cultural pluralism with regard to Indian education in 1973, stated:

Cultural pluralism and its implications for teaching in the nation's public and private schools is a phenomenon which has become almost a fad. To members of other clearly defined cultural groups, such as many American Indians, there is more than a touch of irony in observing the non-culturally differentiated mass clamor about the desirability of multicultural facility. (p. 29)

Platero would probably not admit fifteen years later that this issue is more than a mere fad. More important is the need to recognize that the group to whom he refers as the "nonculturally differentiated mass" is indeed a diverse group in many respects. There appears to be a tendency to ignore cultural diversity among those of European descent. In fact, few Euroamericans so strongly identify with the American mainstream culture that they have no ties to or identification with a specific European culture or a combination of European cultures. A Norwegian-American may be as different from a Polish-American as an Arikara is from a Cheyenne. Cultural diversity within a reservation population must also be recognized. In addition to tribal and band group differences, there are varying degrees of affiliation with traditional and modern reservation cultures.

Learning from anthropology

Educators will find that the discipline of anthropology is an essential resource in the development of curricular materials for use in accomplishing both major goals of multicultural education. In particular, reaching the goal of cultural awareness and sensitivity demands an understanding of basic concepts, attitudes, and processes associated with anthropology. For instance, reservation schools continue to reinforce the confusion between the concepts "culture" and "race" by using them interchangeably. Native American students (as much as any other students) should be engaged in learning the complexities of the concept "culture" which is defined as "the shared and learned ways of feeling, thinking, and acting among a particular group of people" (Harris, 1975, p. 661). Reservation schools can enhance their students' understanding of culture by exposing them to descriptions of many different cultures in this nation and the world. Language is an integral aspect of culture and should be treated with a seriousness beyond vocabulary learning. "Race" refers to physical, observable traits associated with ancestry (Hunter & Whitten, 1976), p. 326). The criteria for determining racial categories is arbitrary and is culturally defined; that is, many human geneticists and physical anthropologists seriously question a scientific basis for racial categories (see Montagu, 1974). Native American students should be encouraged to question the criterion of "blood quantum" which is fundamental for the legal definition of an American Indian used by the United States government.

To date, no one has been able to demonstrate a direct link between a person's inherited physical characteristics and the way they think, feel, and act. The one does not directly determine the other. A "white-skinned," blue-eyed person who is raised from birth by Chinese in China will likely behave like a Chinese, not a European. A person who "looks" like an "Indian" will not necessarily exhibit any specific Indian cultural behavior unless they have been raised in an Indian culture. Reservation schools can promote their students' cultural awareness by making them aware of these concept distinctions. For instance, references to "white" versus "Indian" behavior misconstrue a direct link between the two concepts. The term "Indian" has come to imply either a cultural or a racial classification which complicates the situation further; but terms such as "Euroamerican" or "American mainstream" are more precisely indicative of cultural description than the term "white" is.

Minimizing ethnocentrism and eliminating racism

Attitudes play a major role in the development of cultural understanding and awareness. There are two types of prejudice, each associated with the concepts "culture" and "race," which warrant examination. "Ethnocentrism" is a prejudice based on culture and is defined as "a preference toward one's own way of life versus all others, and judgment of other groups' life-styles (usually negative) in terms of the value system of one's own life-style" (Hunter & Whitten, 1976, p. 447). Multicultural education endeavors to minimize ethnocentrism in all groups of people. Many social scientists argue that feeling good about one's life-style, one's own cultural group is necessary to the cohesiveness of the group, its very survival as a group; but that the negative, judgmental extremes of ethnocentrism impede cultural understanding and awareness. We need not lose our own cultural values and practices by learning to view others simply as different. This latter approach, referred to as "cultural relativism," seeks understanding of others' beliefs and practices within their own cultural contexts.

Ethnocentric barriers between and among Native American groups can be recognized and minimized. This would facilitate the development of an understanding of mutual circumstances, needs, and goals which in turn would reverse some of the divisiveness that exists among various tribes and reservations. That divisiveness is often fostered by the bureaucracies in order to maintain powerlessness among Indians. Reservation schools might begin reducing ethnocentrism by engaging students in studies of other tribes for whom there has been traditional mistrust and by opening communication between traditional "enemies." Likewise, direct communication between Native Americans and Euroamericans may lead to mutual respect through the positive intervention of multicultural education. Too often superficial and stereotypical differences are stressed. Both groups will probably discover that there are more similarities than previously assumed, and that many differences follow lines of "traditional" versus "modern" cultural adaptations. For example, it is important to recognize that the traditional European roots of many Euroamericans indicate a value for and a practice of extended family arrangements in ways similar to those of

many traditional Native Americans. The European descendants who are members of the modern American mainstream have had to adopt other, less extended forms of "family." This has also happened to Native Americans who have become members of the modern mainstream American culture.

"Racism" is, of course, a prejudice based on the concept race, the belief that one race is superior to another in ways related to biological inheritance, innately determined. An objective of multicultural education is to eliminate racism completely. Racism makes open communication impossible, and it is considered to be ultimately self-destructive as well. Many social scientists would argue that the American racial classification system is in itself racist. Implicit in the system is the notion that in order to be classified as "white," one must be pure "white." Racism also reaches into designations between "full-bloods" and "mixed bloods" among Native Americans. Schools should explore the use of more constructive forms of group classifications. Within reservation schools which have mixed populations, there is often a specific denial of racism. At the same time, there are individual reports of occasional incidents of racial strife, and there are observable patterns of in-school segregation. This tension can exist between the so-called "full-bloods" and "mixed-bloods" as well as between Indians and non-Indians. Tensions based upon racial categories will not disappear by ignoring or denying them. "Racial" issues can be confronted in schools without increasing tension by dealing with "racism" in the abstract and involving students in creating means for eliminating it.

Enculturation, acculturation, and assimilation

Understanding processes such as those involving cultural transmission is critical in multicultural education. Cultural transmission refers to education generally and more broadly than just schooling. One specific process is enculturation, the lifelong learning of one's own culture beginning in infancy. For Indians this may include learning aspects of their groups' traditional culture as well as the ever-changing modern culture of the reservation. Most of this learning occurs through contact with the family, peers, and community members. Until recently, little of this enculturation process was reinforced in the reservation classroom. In contrast, American mainstream students are firmly enculturated through schooling because the formal school is designed for and represents the mainstream culture. Potentially, multicultural education could alter this rigid model of American

schools.

Another type of cultural transmission process which affects Indians so profoundly that understanding its complexities may be fundamental for cultural survival is acculturation. It is the process of cultural change which occurs when two or more cultures are in persistent contact. In this process, change may occur in each of the cultures in varying degrees, and sometimes new, hybrid cultures evolve. A particular kind of acculturation which involves one culture changing significantly more to resemble the other culture is the process of assimilation. This process is often established deliberately through force to maintain control over conquered peoples, but it can occur voluntarily as well. Although Native Americans are certainly familiar with this process, multicultural education can provide the means of acquiring greater insights in regard to the process. Reservation schools can provide for the study of assimilation through learning about other indigenous cultures of the world which have experienced similar colonial take-overs. Anthropological resources about the Bushman of South Africa, the Maories of New Zealand, and the Australian aborigines would contribute invaluable comparisons. Awareness that the world colonists themselves have been conquered and colonized in the distant past might be enlightening as well: the Roman conquests of the Middle East and Europe, the Saxon and Norman conquests of England, the British conquest of Ireland, the Spanish conquests in the Americas, Japanese conquests in Asia, to list only a few. Cross-cultural knowledge will enhance, not detract from, cultural self-understanding for Native Americans; it will arm students with power to gain more control over their own destinies.

In spite of McKenna's (1981) dire assertion concerning the insidious intentions of multicultural education to further assimilate Native Americans, it has numerous benefits and it is already becoming a reality in reservation schools. Employing awareness workshops will hopefully convince those reservation teachers and parents with existing negative attitudes of those benefits. With community support and control of multicultural education, it will be impossible for anyone to subvert its goals. An anthropological foundation for multicultural education which is well-integrated into the reservation school curriculum will better enable the attainment of both major goals. As suggested by Goodenough (1976, p. 6), cultural knowledge is associated with power relationships, and multicultural education in reservation

schools can offer knowledge of the kind that represents power for those who experience powerlessness.

Suggested activities

- 1. Plan to introduce students to a positive cultural contact experience by involving them in the simulation game BaFaBaFa (secondary level) or RaFaRaFa (elementary level) by R. Garry Shirts, Simile II, P.O. Box 910, DelMar, CA 92014.**
- 2. Involve the class in an Exchange/Correspondence Project (developed by Mary Lou Fuller & Janet G. Ahler) in which each class or grade chooses another class at the same grade level in a different town, city, or state with which to correspond and exchange cultural information. For example, a reservation class could choose to conduct this project with a class on another reservation with whom there has been past fighting. This project could be followed by another with a nearby Euroamerican ethnic community. Other possibilities include inner-city schools with Afro-American, Asian American, or Hispanic populations.**

Objectives: Students will learn about another group of young people by exchanging cultural and community information, and students will integrate learning in the different subject areas through their exchange project.

Activities:

Student level -

- a. Establish individual/personal "pen pal" exchanges (letters, photos, etc.)**

Class level -

- a. Have students generate questions about the other community which can be submitted to the "exchange" class for them to answer.**
- b. Have students locate the other community on maps.**
- c. Exchange cultural arts and crafts with the other class.**
- d. Exchange recipes of favorite cultural foods in each of the communities.**
- e. Have students collect stories and oral history about their community and then have the students tape record the stories and histories to exchange with the other class.**
- f. Develop classroom and hall bulletin boards for displaying the material received from the "exchange" class.**
- g. Take students on a field trip to visit the "exchange" class.**
- h. At the end of the semester or year, students could**

share the "exchange" materials and information with other classes, parents, school board members, and the community at a gathering. They could serve food prepared from the recipes supplied by the "exchange" class.

Teacher level -

a. Exchange printed materials about the culture(s) represented in each of the communities.

b. Trade videotapes and/or still photographs of students in their classrooms, in school activities, and in community activities.

Suggested readings

Early childhood and elementary

Kendall, F. E. (1983). *Diversity in the classroom: A multicultural approach to the education of young children*. New York: Teachers College.

King, E. W. (1980). *Teaching ethnic awareness: Methods and materials for the elementary schools*. Santa Monica: Goodyear.

Ramsey, P. G. (1987). *Teaching and learning in a diverse world: Multicultural education for young children*. New York: Teachers College.

Tiedt, P. L., & Tiedt, I. M. (1986). *Multicultural teaching: A handbook of activities, information and resources* (2nd ed.). Boston: Allyn & Bacon.

Middle school/junior high

Pasternak, M. G. (1977). *Helping kids learn multi-cultural concepts: A handbook of strategies*. Nashville: Nashville Consortium Teacher Corps.

General and secondary

Banks, J. A. (1987). *Teaching strategies for ethnic studies* (4th ed.). Boston: Allyn & Bacon.

Bennett, C. I. (1986). *Comprehensive multicultural education: Theory and practice*. Boston: Allyn & Bacon.

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Oral Language Development for Indian Students

T. L. McCarty

The myth that Indian children are by nature quiet and withdrawn is quickly dispelled by the simple observation of their language behavior at play. Why then, do teachers often complain that their Indian students refuse to "speak up" in class? What discourages the lively verbal interaction so readily apparent on the playground when children enter the classroom? The answer, in part, lies in the assumptions we make about language and language development, and how those assumptions inform teaching practice.

In the history of schooling for Indian children, one "common sense" assumption has prevailed: if children come to school without a background in English, the best way to "remedy" that situation is to maximize their exposure to English. Underlying this assumption is another, that the child's native language is a deficit — an obstacle to be overcome or ameliorated in the classroom.

This original essay appears here in print for the first time. All rights reserved. Permission to reprint must be obtained from the author. Dr. McCarty is an Education Program Specialist for the Arizona Department of Education, Indian Education Unit, Phoenix, AZ 85007 and Faculty Associate at Arizona State University, Division of Educational Leadership and Policy Studies, Tempe, AZ 85287. Some research for this paper was undertaken in conjunction with the author's work on a larger project sponsored by the Arizona Department of Education, Indian Education Unit. The author thanks Kathryn Stevens Begaye, Jim Cummins, Juana Clare Jose, Nancy Mendoza, Lucille J. Watahomigie, and Akira Yamamoto for their helpful suggestions on that project.

This set of assumptions informs what can be called a more exposure/less exposure approach: the more exposure Indian children have to English — and the less they have to their native language — the faster they will develop proficiency in English. Reyhner and others (this volume) refer to this as subtractive bilingual education (see also Lambert, 1980). In its extreme form, this approach becomes "sink-or-swim."

The acronym "S.O.S." should send a potent message, for sink-or-swim has failed to produce either the linguistic or the social-educational benefits its advocates predict. Indeed, abundant research points out the devastating psychological, cognitive, and academic outcomes of this approach (see Eder & Reyhner, this volume).

Recent research in bilingual education and applied linguistics supplies some reasons for these negative outcomes, demonstrating that patterns of school success and failure hinge on much more complex variables than language or pedagogy alone (e.g., Cummins, 1985; 1986). By looking at what this research says about language and language development, we can, however, begin to arrive at more effective teaching practices.

This chapter focuses on the implications of this body of research for oral language development in both the native and second language, whether the latter is English or the tribal-ancestral language. To understand these implications, we must first know something about the structure of language itself, and this is where the discussion here begins. We can then look at how children acquire that structure. As will be seen, many of the principles underlying first language acquisition also hold for second language development. These parallels — as well as some important differences — ultimately tell us a great deal about how teachers, schools, and tribes can transform historical patterns of academic failure into success.

The Structure of Language

The anthropologist Roger Keesing calls language a "common-place miracle" (1976, p. 146). The achievement of language, unique to human beings, allows us to interpret and symbolically represent our experience, to come to know through our experience and especially, through our interactions with others. The miracle to which Keesing refers, though, is not so much that we are able to do all of this, but that we grasp the complex, powerful system of language so naturally. Virtually all normal children acquire

language. Moreover, they do most of their acquiring by the time they reach school age.

This tremendous ability stems from what the linguist Noam Chomsky calls the Language Acquisition Device or LAD. Deeply seated in our cognition, this is an innate ability to process human language. All normal children have this ability. It is elemental to human nature.

What is it that we acquire? While particular languages vary, all languages share a universal structure. We can envision that structure as a system of interconnected, interacting, subparts. Like the human body depends on the synchronic operation of all its vital organs, human language relies on the interdependent operation of all its subparts. None of the subparts alone constitutes language, but each is essential to full, effective language use.

Language is made up of sounds, called phonemes. No language uses all the sounds which humans can distinguish and utter, but all languages select a number of sounds that are heard as distinct. The English /p/ and /b/, as in *pill* and *bill* are examples. These sounds can be "combined and recombined in distinctive ways" (Bolinger, 1974, p. 70).

Language is made up of basic units of meaning, called morphemes. Morphemes are words or parts of words that retain their meaning in different contexts, and cannot be divided into smaller units. In English, *s* at the end of a noun (as in *dogs*), is a morpheme signifying plural; *ed* at the end of a verb (as in *talked*), is a morpheme signifying the regular past tense.

Language is made up of rules for arranging words into sentences, called grammar or syntax. Every language has rules specifying the possible organizations of sentence parts. In English, "She the store" is not a sentence, and without some additional information, we can only guess at what the three words mean. "She walked to the store," however, is an intelligible, grammatically correct English sentence. Underlying this sentence is a fundamental rule of English grammar: sentences combine a noun phrase ("She") with a verb phrase ("walked to the store"). Knowing such rules allows speakers to use language creatively, constructing and interpreting sentences they have never before encountered.

Language is made up of rules for interpreting words and sentences. If one English speaker asks another, "Did the pilot bank there?", the person being addressed might have difficulty

responding. The question is grammatically correct, but ambiguous. Whether the pilot was tilting an aircraft, dealing with a financial institution or shooting a billiard ball is open to interpretation. All languages have such ambiguities, and these highlight the often subtle rules for connecting the grammatical and phonological form of language, with meaning.

Language has rules for what constitutes appropriate language use. If we know that the speaker in the example above is a banker, and that the banker is addressing a colleague, we can better interpret the question. Language is always embedded in the social-cultural context in which it is used, and how we use language depends on our relationships with others in that context. We usually do not, for instance, address elders in the same way we talk to children. Depending on these social-cultural, contextual variables, we may use language for such distinct purposes as amusing or intimidating, comforting or condemning, persuading or acquiescing, revering or rejecting, celebrating or grieving. In addition, we sometimes communicate by what we *don't* say — by the position of our eyes, our facial expressions, our gestures and how we hold our body. In using language for varying purposes in different contexts, we rely on rules which are, for the most part, as invisible to us as is our knowledge of what makes a grammatically correct sentence.

In summary so far, we can say that language has a linguistic *form* — a pattern of sound and principles for combining sounds to create meaningful words and sentences — and that it has social *uses* reflecting the relationships and interactions of its users. For full, effective language use we need to know both the form of a language, and how to use it appropriately in given social situations. Both kinds of knowledge are rooted in the context of the language community(ies) in which we participate.

The significant point is that *children come to school with both kinds of knowledge, acquired in the context of their language community.* By age five or six, most children have mastered the basic structure of their language, including its form and how to use it. This tacit, largely unconscious knowledge is called *communicative competence*. It is "what every child has," says linguistic anthropologist Courtney Cazden (1972, p. 3). Importantly, it is the foundation upon which to build teaching, not knowledge to be subtracted away.

Acquiring Language

We have so far examined the structure of language. In this sec-

tion will explore the process by which children acquire that structure and in particular, how they develop the ability to comprehend and produce spoken language.

Try to recall your first experiences with language. How did you make sense of the language around you? How and why did you begin to use language, and to develop competence in using it?

One answer to these questions assumes that language is overtly taught by adult models, whom the child imitates. Child language specialist Judith Lindfors (1980, p. 96), cites an example of this rationale from her conversation with a university professor, the father of three children:

Lindfors: It's interesting, isn't it, that we don't really "teach" a child his language. He learns it for himself.

Dr. X: (annoyed) What do you mean he learns it for himself? I taught my children their language, and that's how they learned it.

Lindfors: Oh? And how did you do that?

Dr. X: What do you mean, "how did I do it?" I pointed to a book and said, "Book, Book, Book. Say it. Book." And he said it. That's how my kids learned English.

Lindfors: Oh.

As Lindfors points out, this professor vastly underestimates the complexity of language, confusing verbal labels with the infinite creativity of language derived from a "finite set of structural principles" (1980, p. 96). The professor also underestimates his contributions to his children's English acquisition: while he may "have taught his children some labels," Lindfors says, "how minor that contribution is in comparison to his role as a rich language provider and constant interactant in communication with his children" (1980, p. 96).

Language acquisition, then, is a much more complex and subconscious process than repeating, imitating, and practicing. Through language, children reflect on their experiences. Through language, they interpret and symbolically present their experiences to themselves and others (Smith et al., 1976, p. 85). Language development is thus integrally tied to the development of children's thinking (cognition), and to the accumulation of their experiences in a given environment.

As children's experiences expand, and as they are able to reflect on their experiences in a more abstract way, their language sophistication and effectiveness grows. Reciprocally, as

their language effectiveness increases, children have even more efficient tools with which to interpret, conceptualize, and represent their experiences.

Children do all of this in the primary context of their communicative interactions, focusing on the meanings being communicated rather than on the surface form of communication. Building on their knowledge from past experience, and adding to that environmental cues — visual images, caretakers' gestures and other sensory experiences — children construct meaning from the language input they receive.

Stephen Krashen describes this as "i + 1" process: in both first and second language settings, language is acquired by understanding input (i) "containing structures that are a bit beyond" (+1) our current level of understanding (Krashen, 1981a, p. 58). Krashen calls this theory of language acquisition the *comprehensible input hypothesis*. What is important is that the natural, subconscious process of understanding messages — not conscious learning about the correct form of language — accounts for nearly all a child's ability in a language (Krashen, 1981a; Chamot, 1981, p. 4).

Language input is comprehensible when it has a purpose and is meaningful. Both factors derive from children's experiences. The word "horse," for example, is an arbitrary representation of the thing to which it refers. There is nothing characteristic of the animal itself which demands that it be represented as h-o-r-s-e. For a one-year-old child, "horse" becomes meaningful when he or she sees a horse or some image of it, and connects the symbolic representation to the experienced reality.

In making language meaningful, children's caretakers — parents, elders, siblings, and others — play primary roles. Caretakers "speak in a simplified register or code to get children to understand," Krashen says; they "talk about the 'here and now,' because that is the sphere of mutual interest" (1982, p. 21). Caretakers, in short, do everything they can to make language input comprehensible.

But children also influence caretakers' talk by indicating, for instance, comprehension or non-comprehension, interest or disinterest. "This is what is meant by interaction," Lindfors states (1980, p. 109), and meaningful interaction is a second necessary ingredient in language acquisition. "Young children rarely focus on language itself in the process of acquisition," Jim Cummins says; "instead, they focus on the meaning that is being com-

municated," and the way they and others use language to discover, request, express — in short, to interact (Cummins, 1985, p. 12). Cummins calls this the *principle of communicative interaction*.

A third ingredient in children's language acquisition is implied by both the concepts of comprehensible input and communicative interaction. If we return to the questions with which this section began, we are reminded that affective factors can also work for or against the acquisition process. Affective factors are the feelings, attitudes, motivations, and interests present in children and those with whom they interact. Optimally, children's first language experiences occur in an accepting, nurturing environment with loving caretakers who positively reinforce the child's responses to language input. This is a non-threatening, low-anxiety situation, one aimed at enhancing the child's confidence and competence in using language. Moreover, it is a situation in which communication is purposeful and relevant, and where children therefore are motivated to make sense of language input. Many researchers have observed that this type of communicative environment promotes language development (Saville-Troike, 1973, pp. 30-31; Modiano, 1974; Jacobvits, 1974).

Conversely, in high-anxiety situations where children's self-confidence is threatened, where they are expected to perform correctly without complete linguistic knowledge, or where messages lack relevance and purpose, as in memorized dialog, an *affective filter* arises which prevents the full intake and use of language input (Krashen, 1981a; see also Reyhner and Schaffer, this volume). In a sense, the affective filter "screens out" language input, making it meaningless or incomprehensible. "We used to speak of a mental block," Krashen remarks; "(f)ilter is another word for a mental block...There can't be a filter keeping the input out" (1982, p. 25).

Affective variables play an especially critical role in Indian bilingual classrooms, where the second language — English — represents the cumulative experience and values of the national culture. When the language children bring to school — and the experiences it represents — are devalued as deficits or treated as inadequate for the task of English acquisition, the classroom can become a hostile and threatening environment. It is only a small step for children to see rejection of their language and experience as rejection of themselves. Ultimately, says Smith et al., children can "retreat to the safety of silence," blocking language input

from being received and used, and blocking the process of acquisition (1976, pp. 51-52; p. 48).

In summary, we can say that language acquisition, in both first and second language settings, is a largely subconscious process that:

- (1) is rooted in children's experience, occurring in the context of meaningful, purposeful communication;
- (2) involves children in applying whatever cognitive strategies and abilities they have developed, to process input "just beyond" their current level of understanding;
- (3) is facilitated or debilitated by, respectively, the absence or presence of an affective filter; and
- (4) is most responsible for all of children's abilities in a language.

Language Learning

The distinction between acquiring and learning a language is significant; it is essentially a distinction between *meaning* and *surface form*. Conscious learning is the formal study *about* language — the study of grammar and pronunciation, for example. In contrast to communicative situations in which children subconsciously construct meaning from language input, in conscious learning situations they are involved in "getting it right" — in using linguistically correct communicative forms. Conscious learning, says Krashen, "is not at all responsible for our fluency in a language," but it acts as an "editor or monitor" on language output (1981a, p. 57).

In other words, by repeating and practicing language specifics — such as the word "book" in Lindfors' illustration of the university professor — children receive feedback on their speech and, if given enough time, are able to correct their speech. This is an important function, for it helps children become more precise and effective in speaking. Nevertheless, it is also important to recognize that *speech emerges from active listening*, or from comprehending input in communicative interaction (Krashen, 1981a; 1981b; 1982; 1984; see also Reyhner, this volume).

This says something valuable about the primacy of subconscious acquisition over conscious learning in promoting children's oral language abilities. The subconscious process of making sense of language input, in purposeful communication, most influences oral language development in both first and second language situations. Conscious learning, on the other hand,

has a more limited role: it helps children refine the tacit language knowledge they already have as a result of subconscious acquisition.

Stages of Oral Language Development

Children do not begin the process of acquiring their first language by discussing highly abstract, theoretical constructs. Instead, they begin with the "here and now," because their thinking in the early stages of language development is based on concrete, direct experience.

Language, thinking and experience grow together, in a continuously expanding process. This growth is not haphazard; it follows a *natural order* or sequence that is remarkably similar for children from all linguistic and cultural backgrounds (Dulay et al., 1982, pp. 200-209; Lindfors, 1980, p. 112).

This means that in any language, children acquire some language structures earlier or later than others. Native English-speaking children, for instance, typically use the morphemic marker for the present progressive tense (*-ing*), before they create the regular past tense (*-ed*). Such developmental regularities are litt' influenced by adults' attempts to get children to produce "late" structures early, or to correct children's language hypotheses (Dulay et al., 1982, p. 201). Omissions such as "He gone," overgeneralizations like "He goed," and other "errors" are, in fact, essential stages in children's language development, during which they test their theories about how their language "works" (Smith et al., 1976, p. 15).

An additional implication of the natural order is that in both first and second language situations, children typically experience a period of delayed oral practice or silence (Postovsky, 1982; Krashen, 1982, pp. 28-29; see also Schaffer, this volume). This is not a passive stage, but a time when children are actively taking in and processing input (Krashen, 1982, p. 29). Thus listening is a prerequisite for speaking. In fact, research shows that second language acquirers who are not forced to "speak up" or respond in the target language before they are ready, in the long run outperform those who are (Postovsky, 1974).

We will return to the significance of these points in drawing some conclusions about language teaching. For the present, we can explore how the natural order is realized in the process of oral language development.

Much of our information on the stages of oral language

development comes from research on non-Indi . languages. While there is therefore little documentation on the order of acquisition for Native American languages, what research exists indicates significant cross-cultural similarities in that order. Individual differences also exist, but it is nonetheless useful to examine these generally observed patterns of childrens' cognitive and linguistic growth, as they afford a point of reference for observations in Indian bilingual settings [Sources for stages of oral language development have been summarized and adapted from Bolinger (1974), de Villiers & de Villiers (1978), Lindfors (1980), McCarthy (1971), Saville-Troike (1973), and Smith et al. (1976)].

Birth to age 2. In his classic text on child language and thought, Jean Piaget (1959) describes this period as the *sensori-motor stage*. It is a time when children build their knowledge by "acting on" the world physically. As they do this, children simultaneously build their image of self, coming to perceive reality as composed of distinct objects, actions and people. The stage is complete when children achieve object permanence, understanding that objects continue to exist even when they cannot be seen.

In the early part of this period, children engage in prelinguistic interaction, distinguishing people and things, and tailoring their responses to each (Lindfors, 1980, p. 156). Their language develops from random, vocalic play or babbling, to intentional and sometimes fanciful speech that, by about age two, expands to approximate adult speech.

Children develop the fundamentals of purposeful communication in their first year, signaling, responding, engaging, initiating and focusing attention (Lindfors, 1980, p. 158). By the end of their first year, most children have uttered their first words. Their language by this time reaches the holophrastic or unitary stage, when a single word ("mama") connotes a host of meanings. By about 1½ years, longer utterances emerge ("mama go"), and by age 2, children's vocabulary — reflecting the things "acted on" in their environment — ranges from 100 to 200 words.

Age 2 to 5. In Piaget's framework, this is the *preoperational or perceptual stage*. Children come to understand reality through their active explorations of it and thereby develop a basis for imagery. They associate concepts with objects ("juice goes with breakfast time"), reasoning from one concrete, particular event or thing to another particular event or thing.

Children also come to know that language is made up of

discrete wholes, and that words can stand for images. Constantly inquiring "What is it?", they find patterns and associations, deducing common linguistic principles. They construct their speech according to these principles or hypotheses, many of which may be only partially formed according to adult models ("I goed"). By the end of this period, most children's speech is intelligible, and words have precise lexical and contextual meanings. Vocabulary may include up to 2,000 words.

Ages 5 to 7. Piaget calls this the *stage of preoperational intuitive thought*. Children can classify objects on the basis of their attributes, distinguishing similarities and differences among object categories. They are better able to view things from perspectives other than their own, and their attention span is greatly increased.

Language development reaches the stylistic or automatic stage, when children have automatic control over grammar and phonology, and are confident in using language. They have at this point achieved basic communicative competence. Children begin producing elaborated sentences, using a vocabulary of up to 20,000 words.

Age 7 to 11. Children's logic at this age is "action-bound," operating in terms of concrete, direct experiences. Piaget refers to this as the *stage of concrete operations*. Children can classify and conserve, holding one idea while considering another.

Children at this age use language in new, creative ways, testing their rules in different contexts. They have a growing awareness of what kinds of language behaviors are acceptable, more prestigious or valuable in specific situations.

Ongoing language development. Children's language growth is a continuous process, expanding as they increase their experiences, their ability to conceptualize through language, their need to communicate in different contexts, and their communicative effectiveness (Smith et al., 1976, p. 17). Throughout this process, children's consciousness of the structure of language also expands, and they use language to represent increasingly abstract ideas, independent of context or concrete experience (Lindfors, 1980, p. 149).

The Role of the Native Language in Second Language Development

We have seen that there are many cross-cultural parallels in how children acquire language. Many of these parallels cross-cut

first and second language situations. There also are some differences between first and second language development. These revolve around the *age* and the *rate* at which a second language is acquired.

"Learning a new language is always in some measure repeating an old experience," the linguist Dwight Bolinger reminds us (1974, p. 70). Native-speaking American Indian children come to the English as a Second Language (ESL) classroom with a storehouse of language knowledge and experience, acquired in the context of their language community. While the specifics of this knowledge pertain to their language and culture, there is a great transferability of that knowledge from one language to another.

Cummins (1981; 1985; 1986) refers to this as *language interdependence*. It is a concept that is applicable to ESL settings as well as to instruction designed to maintain or revive the native/tribal language. Language interdependence is the ability to use what is known in one language to acquire and reinforce knowledge of the structure of another. The interdependence of language stems from our innate ability to acquire language, which provides what Cummins calls a *common underlying language proficiency* (1981, pp. 24-25). Instead of starting "from scratch" when we acquire a new language, we tap the same underlying ability and knowledge used to acquire our first language. With sufficient opportunities for meaningful language input and communicative interaction in both languages, children can strengthen and even accelerate the development of their abilities in a second language by exercising their first language skills. The reverse also holds (Cummins 1981, pp. 22-25; 1985, pp. 9-13 & 30).

Evidence supporting the applicability of these principles to Indian settings comes from a growing body of research. In a national study of effective instruction in Navajo and non-Indian classrooms, "successful" teachers — those whose students showed gains in linguistic and academic achievement — incorporated the native language as well as children's cultural-experiential background into instruction. (Tikunoff, 1984). In doing this, teachers not only ensured that their instruction was comprehensible, but also generated and sustained students' active engagement in learning.

Similar strategies have been successfully used in the nationally recognized Hualapai Bilingual Program in Peach Springs, Arizona. There, a child-centered, environmentally-based curriculum is integrated throughout all courses of study in kinder-

garten through grade 8, and instruction relies on the concurrent use of Hualapai and English (Watahomigie, 1985; Watahomigie & Yamamoto, 1987). The positive impact of related approaches has likewise been demonstrated for Native Hawaiian children in the Kamehameha Early Education Program (KEEP), at Rock Point on the Navajo Reservation, and in other Indian education programs throughout the U.S. and Mexico (Au, 1979; Au & Jordan, 1980; Modiano, 1974; Rosier & Holm, 1980).

One consistent finding in these and other bilingual programs is that the rate of acquisition differs for English-as-a-second-language students, because they are, in a sense, playing "catch up" to native English speakers. In general, it takes ESL students approximately two years to reach the levels of English proficiency required for "everyday, face-to-face" communication, where language use is rooted in familiar experiences and where there are environmental or contextual cues to help children make sense of unfamiliar language input (Cummins, 1981, pp. 11-16). The initial reference in this chapter to children's language behavior at play illustrates this type of language use.

As that reference suggests, proficiency in communicative situations where these contextual cues are lacking takes longer to develop. In the classroom, communicative referents are often much less familiar and more abstract. We have only to look at the images on commercial textbooks to appreciate the significance of this in Indian settings. According to Cummins, it takes from five to seven years for most ESL students to acquire native-like proficiency in these situations (1981, pp. 12-16). Notably, this is the minimum time required for students to reap the greatest benefits from bilingual education programs (Troike, 1986).

Oral Language and the Development of Literacy

The more we learn about language and the relationship between language and cognition, the more reasons we find for making bilingual education a biliterate process as well. Many tribes, recognizing the power of their language in representing and expressing thought and experience, are now developing or implementing policies that formalize bilingual-biliterate educational goals (see Reyhner, this volume).

What we know about the development of literacy — that is, reading and writing — indicates it is grounded in oral communicative competence. Children acquire written language in

much the same way that they acquire oral language: by taking in and making sense of language through positive, meaningful interaction with speakers of the target language, and with print (Krashen, 1984; Cummins, 1985). Reading (input) is to writing (output) as listening is to speaking; to become good writers, children must first become actively engaged in taking in comprehensible written language.

This process occurs through the interdependent operation of reading, writing, listening, and speaking. By talking about text in light of their experiences, children build relevant background, making new input from text more meaningful. By writing about what they discuss, they see that spoken language can be written and more importantly, that they can be writers. Through listening and reading, children add to their storehouse of knowledge, developing more sophisticated and effective cognitive strategies with which to interpret new spoken and written language (cf. Krashen, 1984). The processes of reading, writing, listening and speaking are thus reciprocal: when children build their abilities in one area of language use, they simultaneously enhance and reinforce other, complementary cognitive-linguistic skills.

Practical Implications

When students withdraw from verbal engagement in the classroom — when they “retreat to the safety of silence” — teachers lose their primary form of feedback. Indeed, this absence of feedback may account for the continued use of more exposure/less exposure, “S.O.S.” and similar approaches, despite the overwhelming evidence of their negative impacts, and of the potential effectiveness of alternative approaches.

We have here very briefly examined some of the principles reflected in that body of evidence. We can conclude by elaborating some of the practical implications of those research-based principles for teaching in Indian bilingual settings.

Indian children come to the classroom with cognitive, linguistic, affective, and experiential resources. These are their greatest assets in learning. By the time they reach school age, Indian children have largely mastered the structure of their language, including its linguistic form and rules for using it in social discourse. Depending on the situation, this can mean they have acquired English, a variety of English, or their tribal language. This linguistic structure encodes their knowledge of the world. Indian children need to effectively marshal the resources this knowledge represents in their classroom-based

learning, particularly when that involves a second language. To strip them of those resources is to miss the point entirely and to impoverish the process of education.

Indian teachers who share with children similar linguistic-cognitive-affective resources, and who also have competence in English, are ideal facilitators of their students' learning. They best know children's first language resources and can make use of these to build children's knowledge of the second language. A recent comparative study clearly demonstrates this: Indian children who experience the greatest school success are those whose teachers are native speakers, regardless of the type of school students attend (Hirst, 1986).

But educators who do not speak the child's first language can also tap children's linguistic resources to improve instruction. The widely acclaimed KEEP project, for instance, borrows the format for oral and written English lessons from a traditional Hawaiian speech event called "talk story" (Au & Jordan, 1980; Jordan, 1985). Adaptations of KEEP methods used with Navajo students at the Rough Rock Demonstration School simultaneously illustrate the need to modify materials and methods to reflect the specific backgrounds of individual groups of students.

Language is an integrated, whole system, acquired as a whole system in the context of meaningful communicative interaction. Language both reflects and promotes children's cognitive-academic and affective growth. Language, then, is the heart of subject-area teaching and learning, not a "necessary evil" to be relegated to a single daily class period (Smith et al., 1976, pp. 84-85).

Classroom-based language development activities, especially those in some commercial ESL programs, frequently ignore what is known about the structure and acquisition of language, separating out discrete linguistic tasks to be "taught" as isolated skills. Such approaches disembodify language, depriving Indian children of the opportunity to use their language or languages in real communication.

Like the university professor who confuses verbal labels with infinitely creative language rules acquired in purposeful interaction (Lindfors, 1980, p. 96), language drill and memorized dialog confuse practice of discrete linguistic tasks with the rich dynamics of human communication. To be genuinely empowered by their language experiences — to be able to use language as a tool for coming to know — children need meaningful communica-

tive engagement. They need to be involved as active participants in their own learning (cf. Cummins, 1985; 1986).

Teachers in Indian classrooms face a unique set of challenges in facilitating this kind of communicative engagement. On the one hand, they must recognize that in natural communication, silence or delayed oral practice represent typical stages of language growth. On the other hand, when children have a message to communicate, that is the point at which they are most motivated to express their ideas through language (Smith et al., 1976, p. 67). Teachers must respond to this, becoming active listeners themselves (even silence has a message) and providing opportunities for children to discuss concepts and to express their ideas and experiences.

Considerations for Change

We have focused here on children's language development, noting the implications of recent research in this area for teaching in Indian bilingual-bicultural settings. For Indian children to systematically realize the kind of academic success that will enable them to select from and take advantage of a wide range of life opportunities, real social-educational change must occur. This involves more than the substitution of one pedagogy for another.

Research by Cummins and others suggests that, minimally, such change involves restructuring educators' roles as well as the relations between schools and Indian communities and Indian communities and the broader society (cf. Cummins, 1985; Ogbu, 1974; McCarty, 1987). This includes prioritizing the role of tribes in formulating their educational policies, as well as training teachers to implement pedagogical principles that build upon, rather than subtract away, the resources Indian children bring to school.

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Practical Suggestions for Oral Language Development

Edwina Hoffman

Many Indian students still speak their native language while many others who no longer use their tribal language do not speak standard English. A growing body of studies document the variation between "Indian English" and standard English, the English that measures success in school (Leap, 1978). Since these children are taught from the time they enter the educational system using materials based on standard American academic English there is clearly a disparity between the language many Indian children speak socially and the language they are expected to control in the academic environment of a school. The "English as a Second Language" (ESL) techniques described in this chapter can be utilized with both non-standard speakers of English and limited English proficient (LEP) students who come to school speaking their tribal language.

Using ESL approaches with Indian children

With very young children as well as older learners it helps to use a multisensory approach to language teaching. The more "input" channels that are accessed, the more likely the youngsters will retain the language information being shared. The different sensory channels provide alternative memory anchors on which children can fix vocabulary and syntax. Multisensory activities

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require more planning and collection of materials and realia than standard textbook based instruction, but the retention-rate among students justifies the extra effort. Crayons, clay, cooking or building activities, as well as action songs, puppetry, and drama, enhance the students' total physical and mental involvement in the language learning process. The current emphasis on James Asher's (1982) "Total Physical Response" (TPR) method is consistent with the multisensory approaches found successful with second language learners. Children respond naturally to the energy levels required of such an active instructional/learning model.

Teachers need to develop a collection of language games, real world objects (realia), and hands-on learning activities which they can use in their classroom to teach ESL. Excellent examples of such classroom activities can be found in Cohen and Cohen's *Games and Activities for Teaching English as a Second Language* (1982) and Christopher Sion's *Recipes for Tired Teachers* (1985). Teachers can identify other resources and avail themselves of the books that match their students' ages and interest levels.

In collecting real world objects or play facsimiles, instructors may want to categorize the objects and store them in colorfully decorated shoe boxes for use during related lessons. It should be recognized that any hands-on activities whether cooking, clay, or finger painting have a built-in potential for pandemonium; any organizational strategies which reduce the chaos enhances learning. Teachers should plan accordingly keeping in mind that such experiences create concrete memory anchors for children to attach the meaning of such words as *measuring cup, spoon, stove, or comb* to real objects. The effectiveness of having realia handy can be illustrated by the example of a teacher trying to explain the word "fuzzy" in comparison to having something fuzzy at hand for students to handle and pass around as they anchor in their memory the meaning of the word "fuzzy."

Where storage space is an issue for itinerant teachers, one very successful idea tried on the Navajo Reservation involved developing a picture file for use with students. In this case, the teacher collected over a period of time relevant pictures related to her secondary level social studies program. When she had to explain certain events or concepts, she relied on her picture file to enliven the discussion. As in the collection of realia, the compilation of the picture file would be an on-going, never-ending project with

the children possibly contributing to the accumulation of the pictures and objects.

Using storytelling to teach English

Children world-wide respond to storytelling. Indian children are no less enthusiastic in their environment of narrative tales. Storytelling is quite consistent with Indian oral traditions. For centuries Indian elders have woven history, culture, and ethics into compelling tales.

Teachers exposing native children to forms of standard/academic English should tell stories or read extensively to the youngsters using picture books which contain clear, relevant illustrations. These illustrations then serve as referents for new vocabulary and help the teacher to teach words and concepts in context. Teachers who read to their youngsters might limit the selections of stories to a few favorite titles. By keeping the content focus narrow, the teacher creates an atmosphere of familiarity which promotes confidence in the student through the repetitions. It also shortens the so-called "silent period" when speakers of a new language are reluctant to try the unfamiliar tongue. Depending on the age group, teachers can quickly identify favorite stories to read or tell to the children. Where time is short, they can tape record the books or stories during the storytelling activity and then make the recordings available through a listening center where the youngsters can re-listen to the stories again and again. By using a bell, the teacher can signal on the recordings when the child should turn the pages.

The students develop through this activity a heightened awareness of the sounds, rhythms, and patterns of English as well as a comfort with picking up books as a means for relaxing or entertaining themselves. Story-reading as opposed to storytelling serves to emphasize the non-Indian's stress on *print* as a means of preserving information and culture as well as a means of extending the self.

As with the storytelling/story-reading activities which encourage reading for pleasure, teachers should collect comics for older students to pick up and enjoy during leisure periods as described in the chapter on reading comprehension. Particularly helpful to ESL students are comics which come with tape cassettes or records. The ones having narrative and dialogue to match the pictures allow students to hear the sounds of English while they read along. In teaching with such materials, I often loaned students the comics without the recording to encourage

interaction with the printed portions of the text. When students are familiar with a story line, a teacher could even white-out the words in the speech balloons and let students develop their own dialogue which then involves writing in English. Intermediate and advanced students might enjoy this activity with totally unfamiliar cartoon strips or narrative comic books.

Since many young people, not just Indian students, do not read much for pleasure, it is important to encourage any meaningful interplay with the written forms of English. This builds the students' knowledge of polysyllabic words which have a higher frequency in print than in speech. What surprised me in analyzing the text in many comic books was the formal levels of the vocabulary. The syntax is not that complex, but the words are often 5th, 6th, or 7th grade reading level. Most people develop their control over polysyllabic, academic vocabulary through reading. Often it takes multiple contextual readings of a given word "to own it" in terms of incorporating the word into the reader's vocabulary. Comics with recordings provide an ideal integration of speech, print, and referent to enhance the acquisition of new words. The recording provides the correct pronunciation, the print a reading opportunity, and the cartoon illustrations a referent for the vocabulary word's meaning. Stephen Krashen, after carefully researching the effects of comic book reading on student's reading skills and habits concluded that comics at worst have no effect and under the best of circumstances enhance reading skills and the love of reading (in press).

Laughing it up together

Rhymes, limericks, tongue twisters, and jokes provide other useful pronunciation opportunities. Children can refine their production of difficult or new sounds in a fun way. The sensitive teacher would have already apprised him/herself of the new or problem English sounds for the students through contrastive analysis information available on the child's native Indian language. By concentrating on familiar sounds in new positions, the teacher slowly progresses through the activities to entirely new articulatory combinations in all three word positions — initial, final, and medial (for example *share*, *push*, then *washing*). Personal experience indicates that it is easiest to teach a *new* sound when it occurs in initial position. The second most difficult position is final, followed by medial. Small pocket mirrors for students to compare the positions of their mouths as they pro-

duce the sound or the cupping of the ears and pulling them forward as the new sound is being produced helps in the isolation of the production of these unfamiliar sounds.

I would have students first produce sounds in rhymes. Then we would play a game where the children would draw a slip of paper and read tongue twisters to the group. (I store the strips in a small woven Miccosukee Indian basket.) Students were told to work in pairs and to memorize the tongue twisters. Then they would come back to the larger group and say them correctly. Variations on the tongue twister games are equally enjoyed. They include timed activities where speed of pronunciation and correctness count.

Another enjoyable repetition activity involves telling *Knock-Knock* jokes using the same format of drawing a slip of paper to read to the group. The patterns are predictable except for the punch line ("Knock! Knock!...Who's there?...Dewey....Dewey, Who? Dewey have to listen to all this knocking?") Intermediate ESL students respond better to the double meaning in punch lines. Most Indians thoroughly enjoy humor, so many of these activities based on jokes will be much appreciated by the youngsters.

Humor and joking with the children helps to lower the anxiety levels often associated with learning a new language or operating in an unfamiliar environment, in this case school. Lowering of the 'affective filter' through humor enhances the atmosphere in which the children must learn (Krashen, 1983).

Games

Along with the love of humor which characterizes many Indian communities is a distinct enjoyment of all types of games and competition — particularly those involving some physical prowess. Where teachers can set up teams to demonstrate mastery of multiplication tables or spelling words through a game format (particularly a game involving physical activity), the children will respond with enthusiasm to an otherwise onerous memorization task.

Hot Potato. A game that served my students well to teach third person singular pronouns for males and females was called "Hot Potato." Many Indian languages do not mark third person singular pronouns with a separate category for males and females. In the southeastern part of the United States, this often means that Indians will interchange 'he' and 'she' much to the chagrin of both speaker and listener. To sensitize youngsters to

the distinction, the game of "Hot Potato" calls for the students to sit around a smooth-topped, preferably round, table. The object of the game is to quickly slide a bean bag ('hot potato') to another student while saying "I pass it to him" or "I pass it to her." The bean bag is considered a "hot potato," so students will get rid of it quickly. I like to tell the children to release the "hot potato" right away so that it will not "burn" their fingers. The speed of the game requires the students to think quickly of the appropriate pronoun. When a student incorrectly uses a pronoun by passing the bean bag to a girl while saying "I pass it to him," play halts and a point is placed on the chalkboard next to the errant speaker's name. The student with the *least* points at the end of the game is the winner. To speed up the game, the phrase said while passing the bean bag can be changed to "It's his" or "It's hers." Another variation would be to say "She's a girl" or "He's a boy" as the bean bag is passed.

Other Games. There are many high interest board games and card games involving speaking patterns. Teachers should develop game centers to encourage such play. Some games that elicit spoken English include the card game "Go Fish," the board game *Sea of Vowels*, and any Twenty Questions type oral game. Skip rope and ball and jacks activities are also fun for children to practice the new sounds of English through the accompanying rhymes.

Music

Students, both young and old, respond to learning English through music. Since most songs are sung with the singers holding the notes on the vowels, the extra split-second of vowel lengthening allows the listener time to hear the distinct quality of the vowels. Vowels are exceptionally difficult to master in English. Many Indian languages contain fewer vowel sounds than the English language. Frequently those native vowel sounds do not have precisely the same vowel quality as the English versions. Even native speakers of English have difficulty learning to read aloud English vowels. Imagine the difficulties of American Indian unfamiliar with even the production of the new sounds!

In using music, teachers sensitize the students to the vowel sounds through the natural hyperaccentuation of the holding of the notes. I developed a series of dictation activities based on pop music and pop culture for my secondary students. Although the intention was to develop 'ear training' activities for the patterns of English, it also helped students to 'chunk' the language into

meaningful units and was an excellent vehicle for teaching vocabulary within context. Noting the appeal of the music activities for the secondary students, I next used pop posters culled from teen magazines to teach descriptions and to develop language experience-type reading activities.

Active ESL teaching in the content areas

Content-area instruction is clearly the 'meat' of school work. Unlike the high-interest, fun activities discussed previously which lower the affective filter, content area work is the essence and purpose of school. To enhance the language development of the students, teachers should rely more on the use of visuals, hands-on activities, demonstrations, realia, and the conscious repetition in a meaningful context of new vocabulary and syntax. 'Active teaching' is a perfect label for such interactive multisensory content instruction.

My version of active teaching involves the following steps:

1. **Introduction of the subject through a "Grabber"** - A 'grabber' is some personally related anecdote or question that pulls the student's experiences into the discussion of the topic which might be dental health. Example: "Has anyone ever had a toothache?" The teacher provides the students with an opportunity to share personal experiences with having a toothache. As children volunteer to describe their experiences, the teacher consciously weaves in the specific vocabulary related to the health unit by repeating information such as "So you could feel the hole in your tooth...you could feel the *cavity* in your tooth." Discussion is the key to the aural/oral introduction of vocabulary.
2. **Use visuals to relate information** - The prepared teacher has a wall chart or plastic model handy to describe to the students the parts of a tooth and why a toothache hurts.
3. **Drawing (Homework or seatwork assignments)** - The instructor can then assign students to trace or draw a picture identifying the parts of the tooth.
4. **Experiment/demonstration** - The teacher may also want to initiate an experiment to illustrate the result of tooth decay. A tooth dropped in a glass of cola will disappear after several days much to the amazement of the students.
5. **Highlight key information in the text** - Prior to assigning the students to read the text, the teacher should take one or two texts and, using a marker, highlight critical information for

the slow reader or limited English speaker.

The children are free to read all the information if they are proficient readers, but if they are not good readers, they know where to focus their efforts. The highlighted material signals what is important.

6. **Workbook assignment** - Teachers should screen items and highlight those items within a student's linguistic competency.
7. **Evaluation of students** - Teachers may need to be creative in their evaluation of students. Paper and pencil tests invariably test knowledge of the English language as well as knowledge of the content area being studied. If a student is not yet a particularly proficient user of academic English, then teachers should be creative in their evaluation strategies and use projects, dioramas, or oral interviews as a means of evaluating student understanding.
8. **Reteach** - Where key points have not been mastered, the teacher should reteach using different or modified strategies.

Content area teachers should at all times stress multi-sensory approaches and avoid such non-teaching activities as assignments on the chalkboard for youngsters to "Read pp. 39-45 and do the questions at the end of the chapter." For limited English proficient students it is important that material be previewed and introduced with as much care and attention to vocabulary and language development as is given to the content area objectives. Vocabulary should be introduced using realia, visuals, or demonstrations. It should be repeated and reinforced contextually, and any evaluation or testing should be designed at the levels of language competency of the students. In so testing, teachers reduce the interference of limited language proficiency as a factor in the testing of content objectives.

Within the content-areas, teachers should organize their classes to encourage cooperative learning. Most traditional Indian societies are characterized by a high degree of cooperation. Children raised in such environments respond enthusiastically to problem-solving through small group activities. Teachers can develop a series of problems or questions for students to resolve. Even projects such as making a diorama involve language and hands-on efforts to effect resolution of a task. Initially teachers may have to develop a reward system to keep youngsters on task, but once the students become accustomed to the independent small group activity, they usually prefer it. For teachers, there is an obvious positive effect in having more youngsters use

academic English in a meaningful, communicative context related to the context. Students practice content vocabulary as they discuss concepts in personally meaningful ways.

Discipline strategy for peer activities

Teachers tempted to use peer-tutoring or other peer-related cooperative activities to enhance classroom management are often concerned about misbehavior and the use of non-English languages during the cooperative activity. Teachers can incorporate a temporary reward system in order to condition children to the responsibilities of any new instructional management activities. There will be situations, particularly when related to difficult content area material, where peers might appropriately use their home language to give an explanation. But in paired pattern practice games or problem solving activities, teachers would probably prefer use of English and as little tomfoolery as possible. Students can be told that you want them to speak only in English in order to practice their "School English." The key is to set up a non-threatening reward system that stimulates students to follow the rules.

Several variations are possible of the following ideas. Create an attractive bulletin board where pockets or envelopes represent groups that will be working together. Depending on the children's ages the bulletin board might depict a large fish tank where the envelopes represent the sharks, the manta rays, the barracudas, the dolphins, and so forth. The board can be designed to show rodeo riders, NFL teams, Indian tribes, rock stars, cartoon characters, popular race cars, or circus animals. Protruding from each envelope are the rewards - play money, smaller fish, make-believe game tickets, pennants, and balloons for example. At the beginning of the activity, the teacher explains that each group has already *earned* ten balloons or ten pennants, etc. However, if during the activity there is misconduct or excessive use of the home language, the students are forewarned they will lose one fish for horse-play or a pennant for using the non-English language. Since the children's group already *has* these coveted objects, group members will work at maintaining the rules in order to keep the objects. Teachers will find it is easier to catch *misbehavior* than to reward good behavior. The play money, fish, balloons, and so forth that are earned at the end of the activity can be used later to buy privileges (no homework over the weekend, extra time for art or crafts, and so forth) or school supplies such as pencils or erasers.

Teachers not attracted by this strategy are encouraged nevertheless to develop a reward system appropriate for their students. Some teachers use stickers to reward positive behavior; others, a noisy gong—a la the Gong Show—to catch naughtiness or broken rules. Depending on a teacher's philosophy for rewards, the activity should be tailored to both teacher and student comfort. For example, I do not favor rewards of candy, but I do like the envelopes/take-away strategy. Suffice to say that a temporary introduction of a reward system serves to condition youngsters to the new behavior.

In concluding this discussion on ESL for Indian children, I would reiterate the importance of using existing learning strategies of the students. The strategies we have suggested tap into some of the shared characteristics of traditional groups such as cooperative learning and visual and auditory learning style. Whether a teacher's task is to teach English or to add a standard English to the child's Indian English dialect, ESL strategies are a humane and pedagogically sound means for achieving that goal.

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English as a Second Language for the Indian Student

Rachel Schaffer

"The first people on this continent to be taught English as a Second Language were probably the American Indians."

James E. Alatis, 1973, p. 41

Teaching English to students whose first language is not English involves different assumptions about language learning and student needs than does teaching English to native English speakers. The two groups differ in size of English vocabulary, in familiarity with the pronunciation and grammar rules of English, and in knowledge of the finer points of speaking and writing English, such as style and tone. There will probably also be cultural differences between native English and speakers to whom English is a second language which will affect how students learn and how they behave in the classroom and, therefore, how effective particular teaching methods will be.

This chapter concentrate on issues and considerations which teachers of minority, English as a Second Language (ESL) students should be aware of, especially teachers of Native American students. These considerations apply to students in all grades, even to college students. While I discuss practical recommendations first, the studies and theory which follow and on which the practical ideas are based are equally important and

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helpful in providing useful teaching ideas.

Practical Considerations and Specific Recommendations

Learn English linguistics

To be an effective teacher of English, a thorough knowledge of the structure and uses of the language is helpful and necessary regardless of the type of students taught. This knowledge includes much more than the "grammar" of English, normally considered to include only the sentence structure (syntax) and word endings (morphology). It also includes the sound system of English with its rules of pronunciation (phonology and phonetics), and ways in which the language is used to accomplish a wide variety of social goals, such as requesting, promising, ordering, etc. (pragmatics). The best source of this kind of knowledge is an introductory linguistics course, which will provide a great many facts not only about English, but also about how languages in general are organized and how they can be analyzed and studied. Teachers who understand the patterns of English organization and the variety of patterns possible in other languages will be in a much better position to explain English structure to Native American students, using what students know about their first language to clarify and compare differences and problem areas.

An introductory linguistics course will also help instill in teachers an objective, nonjudgmental, *descriptive* attitude toward all varieties of language, whether Standard American English (SAE) or a nonstandard (regional, rural, ethnic) variety. Too many people, including some educators, feel that any deviation a speaker or writer makes from the so-called "standard" indicates a lack of intelligence, education, or willingness to learn the "right" way. Heatherington (1980) describes this kind of *prescriptive* attitude:

A child who uses correct language is presumably neat, polite, well groomed, and a paragon of virtue, whereas a child who uses incorrect language probably falls asleep in church, plays hooky from school, dissects cats, and takes dope. (p. 216)

In reality, all varieties of language are *rule-governed*; each has its own system which may differ from the standard but still has its own rules of grammaticality. Teachers knowledgeable in the facts of language variation can appreciate language differences without condemning them, and this attitude can make a classroom a far more open, accepting, and constructive place to learn. Such teachers will also be prepared to accept some grammatical mistakes for the sake of furthering communication and language use. Rather than dwelling on outdated points of grammar (such as the *who/whom* distinction), this kind of teacher will have more time to spend helping students tackle areas of grammar that may seriously interfere with communication with native English speakers.

Learn about students' first language and native culture

It is clearly impossible for every teacher of Native American students to learn students' first language fluently, or even well enough to carry on a conversation, but it is possible to learn something about the linguistic structure of the language, either by reading about it or by asking explanations from speakers who have some formal knowledge of their language. Acquiring some knowledge of the native language will help teachers recognize areas of interference from that language which appear in students' English pronunciation, sentence structure, or word endings, and will help teachers discuss and clarify with students those areas of difference. Such knowledge can also help teachers plan lessons that will concentrate on areas of greatest difference, confusion, and interference in spoken or written English, and will even help them plan content lessons *about* the students' first language as a way of teaching analytical language skills using a topic of inherent interest to the students (see, for example, Hale, 1973).

Understanding the students' home culture is also vital for understanding basic aspects of their behavior both in and out of the classroom, including language-related behaviors. Different cultures have varying standards of what is and is not acceptable or respectful behavior. Silence versus talking, touching, smiling, eye contact, competition versus cooperation, leadership roles, and expectations of a teacher's role can all differ depending on standards of a culture. Differences between a teacher's culture and that of students can create conflicts and misunderstandings.

One area of behavior that has a strong influence on the amount and nature of speech produced in the classroom is the use of silence. Silence among students can be used as a weapon against teachers and as a learning tool. Dumont, Jr. (1972) describes the first use in a Sioux and Cherokee classroom in which students used silence as a signal of cultural clash with a white teacher who used methods of teaching and interaction very different from those used by members of the community. In another class, where a teacher had greater concern and respect for students' opinions, students talked freely. Obviously, in a language classroom, it is vitally important to encourage students to speak and try to express themselves. This can be done best by creating a supportive, low-anxiety atmosphere, as Krashen (1981) recommends, where students feel free to make mistakes and experiment with language, and by avoiding cultural conflict in the classroom wherever possible. It is, of course, also important to show students the kinds of non-native classroom interactions they may face later on in high school or college, such as being called on to answer questions, but it is most useful to do so by explaining differences in behaviors and how they are interpreted, and by continuing to be noncoercive in encouraging students to experiment with alternative kinds of interactions.

Silence as a learning tool is described by Terrell (1981) as a time when students are gathering enough "comprehensible input" to feel confident about performing some task (see the "Approaches to Teaching ESL" section which follows). Given traditional learning styles of many Native American cultures, this may be the most familiar and comfortable learning behavior for these students. Teachers should not be too eager to impose more rigid European teaching techniques on Native American students: answers on demand or by turns, highly-structured activities where each student has a specific, unchanging role, etc. This is not to say that students should never be called on to demonstrate knowledge or ability, but they should be encouraged to participate in culturally-familiar ways, rather than be put on the spot in front of the whole class.

Use a variety of teaching techniques

Once teachers know something about their students' culture, learning styles, and language, they will have a better idea of the most effective teaching techniques. But every class and every student is different, so using a variety of methods and approaches will ensure that every student will get involved at some

time, and teachers will quickly develop a feeling for the most enjoyable and effective techniques. Teachers should feel free to experiment and to let students know they are trying something new.

Teaching techniques that I have found to be effective for Native American students in composition classes (and for most of my students, in fact) involve the use of written and spoken models, culturally relevant examples and topics, group work, and individual tutorials outside of class.

Most people feel more comfortable learning by example, rather than being asked to try something totally new with no model to follow. For many native cultures, especially, this is one of the primary learning strategies. I therefore give my composition students several written models of each kind of assignment I ask them to write, whether grammar exercises, one-paragraph essays, or full-length essays. We do written examples on the blackboard; for oral exercises, I do some examples first or ask for a group response from the entire class so that students who are not quite sure what is expected can see others do the task. We discuss the models in terms of both strong and weak points, avoiding excessively negative terms like "bad" or "wrong," and I make a special effort to make my expectations for each task very clear before we begin.

Many of my Native American students have been surprised that they can actually write an acceptable essay about topics from their everyday lives and cultural backgrounds. They sometimes seem to think that they should write about only suitably academic (technological? mainstream American?) topics, and are pleased when I tell them that family, hometown life, and cultural events are suitably academic topics, as are differences they have noticed between Indians and non-Indians, and the problems or benefits of being Indian. If students have trouble thinking of topics, I help them focus on possible areas by asking them about home, friends, family, hobbies, interests, knowledge of their culture and first language, and other personal topics. Students who write about subjects they know and like will write longer, more interesting compositions. T. D. Allen, who taught Emerson Blackhorse Mitchell when he was writing his autobiography, *Miracle Hill* (1967), has a number of techniques for showing students how to write their life stories in her book, *Writing to Create Ourselves* (1982).

I also try to use culturally-relevant topics in my writing examples and grammar exercises. I use student essays as much as

possible, including ones on differences between Indian and white lifestyles and values (comparison/contrast), on the meaning of a special word in Assiniboine (definition), and on the main street of one student's hometown (description). I have made up a sentence-combining exercise based on a Navajo short story ("Chee's Daughter," by Juanita Platero and Siyowin Miller), a part-of-speech exercise taken from a biography of a Sioux warrior (*Crazy Horse, the Strange Man of the Oglalas*, by Mari Sandoz), and sentences used as examples of various grammar points or even as test questions that describe activities familiar to my students (riding horses, tanning hides, going to school) and that use their names.

For students whose cultures encourage cooperation over individual competition, class activities and assignments that use group work may be especially effective and enjoyable learning experiences. In my grammar and writing classes, I have students work in pairs to help each other edit and proofread work, and in groups of three or four to produce short pieces of writing or to do exercises, sometimes with the same grade assigned to each member of a group. In my research writing class, I use group activities to prepare and practice various skills, such as paraphrasing or quoting, and follow class activities with individual take-home assignments. Most of my students have liked the variety in activities and have appreciated the extra feedback from another person. Students weak in one area receive help from someone other than the teacher and usually are able to help their partners in a different area, a good way to build confidence and self-esteem. Strong students who don't need help still receive valuable experience in teaching others and in clarifying knowledge in their own minds.

Group work is also valuable in encouraging participation from otherwise quiet or passive students. Shy or insecure students usually feel more comfortable speaking in small groups than in front of the whole class; lazy students are usually forced to contribute something by other group members or by their own pride, and teachers can thus rely on peer pressure to spare them from the role of manager and heavy. If the group is assigned one grade for all members, cooperation is further encouraged, since all members then work towards a common reward.

Rodgers (1978) discusses a number of activities and strategies for individualized language teaching in the classroom. He describes group work as one of these strategies, along with eight other types of activities, including playing and designing games,

simulations and role-playing of different social and professional situations (for example, business-related or political problem-solving situations, also called "sociodrama"), and student contracts drawn up for study projects. Rodgers points out that use of these individualized teaching methods can accommodate differences between students and teachers in learning and teaching needs, styles, and interests.

Many college-level ESL programs have tutorials as part of course requirements. These are individualized weekly meetings between students and teacher, lasting anywhere from 15 minutes to an hour, during which teachers have a chance to discuss particular problem areas with students, find out how students feel about the class and their progress in it, and explain comments on papers in more detail. The individualized feedback, I believe, is very important, but practical only for teachers who have no more than two or three small classes (10-15 students apiece). Students can be paired for slightly longer tutorials, each listening to the other's session, but for large, multiple classes, scheduling occasional individual conferences is the best teachers can do. Even meeting with students only once, just before midterm, can establish a better rapport with students, clarify problems and misunderstandings, and give teachers ideas for improving the atmosphere and direction of the class.

Make expectations clear

For some students (and not just minority students, by any means), each new class or new teacher is a mystery. What the teacher considers good or bad writing or speaking, satisfactory progress, appropriate behavior, how assignments or progress will be evaluated—in general what the teacher expects from the students—will vary from teacher to teacher and class to class. Teachers who treat students as partners in the learning process instead of adversaries can help to diminish the mystery and the anxiety that can accompany it, by making their expectations very clear at the beginning of the course and remaining consistent from then on. This includes explaining the usefulness of course requirements, whether content-related or grade-related, and explaining the methods of evaluation to be used—letter grades versus point values versus checkmarks, and criteria for evaluation—what is considered to be a serious problem (in writing or participation, for example) and what doesn't matter. As much as possible, students need to know how a teacher's mind works so they know what will be expected from them.

Students also need feedback on their performances in the form of honest but diplomatic comments, written or oral, from teachers. Comments should be positive and negative, with emphasis on the former. It is easy to see mistakes and correct them, but it seems harder for people in general to realize that good points also can and should be noticed and praised. When I write comments on students' papers, I use two columns, one marked + and one marked -, and I try to make the + column as long as I can. It may never be as long as the minus column (it usually takes longer to explain how to fix a problem than to explain why something is done well), but it should always have several items and words of encouragement.

Encourage communication with native English speakers

D'Anglejan (1978) asserts that second language learning is most effectively accomplished where the process is as natural as possible, much like the process children go through when learning their first language. For this condition to be met, contact with native English speakers is necessary, not just casually, but involving input "directed to [them] by a concerned native speaker" (p. 234). Of particular concern to Native ESL students is D'Anglejan's belief that the common assumption that learners "remain culturally isolated...because of their inadequate second language skills" is in fact opposite to the truth: "cultural isolation is the cause of the failure to acquire the second language" (p. 233). It is, therefore, vitally important for teachers to arrange regular social contacts with native English speakers, perhaps through field trips, regular social events, or guests for one-on-one conversations in the classroom.

Approaching specific problems

ESL students most often have problems with those second language areas that differ most from their first language structure—and differences between languages can be extreme. The temptation is for teachers to spend most of their time on areas of greatest difference, which is frequently the best approach to take, but if an area is not a commonly-used part of the language, then spending a lot of time on it will not help students' fluency very much (George, 1972, p. 162). Problem areas should be covered in detail only when they impair students' communication of ideas or when they appear often enough in students' speech or writing to be distracting (which can impair communication).

Two major areas of English that cause problems for second-language learners are idioms and word endings, especially inflectional (grammatical) endings. Idioms are difficult because they are essentially multi-word vocabulary items: phrases of two or more words that have a completely arbitrary meaning rather than the literal meaning found by combining the meanings of each word in them. Thus, the idiom "you're *pulling my leg*" has nothing whatsoever to do with pulling legs but, instead, has the special idiomatic meaning, "You're *joking*." Students, therefore, have to memorize sometimes very long strings of words with only one short, arbitrary meaning; moreover, when they desire to use an idiom from their first language, they often will translate it *literally*, word for word, into English. Since most languages have completely different idioms for the same idea (where they *have* idioms for the same ideas), the results may be unsatisfactory and frustrating (and frequently humorous, but at the speaker's expense).

Idioms must therefore be taught in the same way as single-word vocabulary items, with teachers' explanations that *all* words in the expressions go to make up one completely different meaning. Using vocabulary-building exercises, working idioms into class and informal discussions, and giving examples of appropriate use of idioms can help students become familiar with the most common English idioms.

Word endings in English also cause a great many problems for speakers of other languages because morphology (which deals with words, affixes—prefixes and suffixes—and how they are arranged) is the most variable level of language structure, differing tremendously from language to language in terms of what grammatical features are marked with morphemes (affixes of some kind) and which are ignored. English affixes mark nouns as plural or possessive (-s, -'s); verbs as singular, past tense, perfect or progressive (-s, -ed, -ed or -en, -ing); and adjectives as comparative or superlative (-er, -est), and otherwise change the meaning and/or part of speech of a word (pre-, un-, -ive, -ment, to mention a very few). Indian languages handle verbs and nouns entirely differently, so that distinctions marked in English are not at all natural or intuitive to second language learners and the arrangement of word endings is strange for them. These endings therefore require careful explanation and practice before their usage becomes clear, and probably many years before the frequency of errors is reduced. Furthermore, English has many words that take irregular endings that must be memorized separately as special

One area of grammatical difference from English is illustrated by Crow, a Montana Indian language, which has one ending for singular verbs (with singular subjects) and another for plural verbs (Kates & Matthews, 1980, pp. 30-31); English marks singular verbs only in the present tense and only for third person verbs, as in *she walks, he sleeps, it looks rainy*; there are no separate singular/plural endings for any other tenses or persons. Teachers of Crow students could, therefore, expect them to frequently omit the -s ending on third-person singular verbs in the present tense, in an effort to make English verb forms more regular. Crow also does not mark verbs for tense (past, present, future), as English does, and Crow speakers frequently shift tense in writing or omit the -ed, -en, or -ing endings. Other Indian languages also mark different grammatical distinctions than English does. Hopi has different forms of the plural marker for concrete concepts such as "10 men" than for cyclical concepts (repetitions of the same event) such as "10 days" or "10 strokes on a bell" (Whorf, 1956, p. 139). Navajo has verb stems which differ depending on physical shape (flat sheet, cylinder, wire-shaped, etc.) of the subject or object (Hale, 1973, pp. 207-208).

Speakers trying to learn a second language do not usually try to impose their first language's distinctions on the second language, adding markers where there are none, but they do omit markers in the second language for which their first language lacks distinctions. These areas, in particular, will require much discussion, much practice, many examples, and where possible, direct comparison to the students' first language.

Research in English as a Second Language

Approaches to Teaching ESL

Early approaches to teaching ESL used *grammar-based methods*, treating language as an object to be analyzed and manipulated by both students and teachers (Schooling, 1981, p. 216). The *grammar-translation approach*, for example, required students to memorize lists of vocabulary, verb conjugations, and grammar rules, with the result that students could state rules, recite conjugations, and say words in isolation, but were limited in their ability to communicate fluently in either speech or writing in a natural setting.

A second grammar-based method, the *audiolingual approach*, was an application to language learning of *behaviorism*, a psychological approach to the study of human behavior. Behaviorism says, in general, that behavior is the result of learned habits reinforced (through rewards or punishment) by the situation surrounding the learner. In applying this approach to language learning, teachers presented a language model to students—a particular grammar rule (such as use of the plural marker -s) or sentence structure (such as the passive construction)—and had students practice that rule or structure through spoken or written drills until they had developed a new habit and could use the structures automatically. Teachers reinforced students through encouragement and correction. But, again, creative language learning was limited.

Eventually, limitations of the grammar-based approaches led to an increased emphasis on communication over purely formalized grammar knowledge. Using a language to communicate involves far more than knowing lists of vocabulary, being able to state grammar rules, or following drilled patterns; otherwise, a student interested in learning another language could memorize a dictionary and a grammar book and get along splendidly—an impossible task, as the young son of one of my Hebrew professors was once sadly disappointed to discover when he tried to do this with Hebrew. As Veit (1986) nicely puts it, "Learning about grammar has about the same effect on the ability to read and write as learning about leg muscles has on the ability to run" (p. 252).

To linguists, who study language as a science, first language learning involves far more than a set of learned habits or a collection of technical terms: there is an active, creative process going on as language learners construct rules unconsciously from the language heard around them. Communicative-based approaches to teaching ESL therefore treat second language learning more like first language acquisition by a child, stressing the importance of learning a language to be able to communicate in it (*Schooling*, 1981, p. 216).

Where grammar-based ESL approaches emphasize language structure and conscious knowledge of grammar rules, *communicative-based approaches* emphasize the ability "to communicate messages in the target language" (*Schooling*, 1981, p. 216), and to understand language function and language use. Many recent approaches take this view: the *cognitive (cognitive-*

code) approach, Gattegno's *Silent Way* (Gattegno, 1972), Asher's *Total Physical Response* (Asher, 1977), Losanov's *Suggestology (Suggestopedia)* (Losanov, 1973), and Terrell and Krashen's *Natural Approach* (Terrell, 1981; Krashen & Terrell, 1983) all emphasize successful communication and a tolerance for errors in grammar and pronunciation as a necessary part of the learning process.

Krashen and Terrell (1983) describe the theoretical basis for communicative-based ESL approaches as resting on two major hypotheses concerning what a language learner most needs: sufficient *comprehensible input* in a *low-anxiety* learning environment. The first point concerns the necessity of providing students with enough understandable language data so they have a chance to learn vocabulary and sentence patterns, but at an advanced enough level so they continue to learn new aspects of the second language. This approach stresses that students need a silent period at first to gather input until they feel ready to speak.

The second hypothesis concerns the greater success experienced by second language learners who feel little or no anxiety and possess a good deal of motivation and self-confidence. Learners who face negative emotions, in essence, face a mental block for language input, "preventing them from utilizing input fully for further language acquisition" (Krashen, 1981, p. 62). For this reason, language teachers should be supportive and not worry unduly about ungrammatical utterances, since with additional language input, an increase in grammaticality will gradually appear.

A communicative-based approach grounded in these assumptions has certain advantages. It allows students at different levels of fluency all to get something out of a lesson in the same ESL class, since the emphasis is on comprehensible input and stretching understanding through new language forms and contextual cues. Many Native American cultures employ a silent learning period as part of teaching children (Philips, 1972), so this approach might provide a familiar beginning for new English speakers. It also encourages use of a wide variety of teaching methods and materials, both linguistic (speech, writing, songs) and nonlinguistic (pictures, visual aids, models, actions), so that a great many contextual cues based on what students already know are provided to help them learn new material. This may also help a class whose students use different learning strategies, whether because of cultural differences or simply individual preferences (see next section).

Mohan (1986) takes the communicative-based argument a step further, emphasizing the need to include content in language lessons and actually communicate about an academic area. He points out that most second language learners study the language only because they will be taught in that language alone at some point; furthermore, "many scholars now believe that a second language is learned not so much by direct instruction in the rules of language, but by using the language in meaningful contexts" (p. 1). Cummins (1984) argues that students need cognitive and academic skills as well as fluency in a language to do well in school, and these skills can be taught best through content lessons in the second language. Mohan gives as an example of content-based language instruction an elementary school ESL teacher who used cocoons, photographs, charts, a film, and student-drawn pictures in a series of lessons on insects. She did not claim to be an expert on insects, but served as a guide for helping students answer questions on their own.

Rather than build lessons around particular grammar points, the teachers Mohan describes concentrated on content information, but they took advantage of the material and nature of the tasks involved to foster language learning. In addition, Hale (1973) points out that students' native language provides worthwhile content for study and offers the opportunity to teach specific linguistic skills that can be carried over to the analysis of English. Hale mentions several language games that increase linguistic competence and provide enjoyment through learning: making generalizations about word classes through a fill-in-the-blank game, figuring out what is wrong with sentences, taking words apart, and so forth. Such lessons using students' first language require a teacher who is a fluent speaker of the language and is also familiar with linguistic analysis. Where such a person can be found or trained, methods of analyzing language taught to students will be invaluable when transferred to learning English. Where no native speaker is available, a linguistic analysis of English that goes beyond purely traditional grammatical rules normally covered in school is also a worthwhile source of content lectures and can help clarify differences between first and second languages.

Most modern ESL researchers agree that communicative-based approaches to teaching ESL are more effective than older grammar-based approaches. Which particular approaches work best will depend on many factors, ranging from which approach a teacher likes best to the age, number, and fluency of students in

the class. Teaching English through content lessons may work very well for older (junior high or high school) students with greater fluency in English or more experience with curriculum materials in their first language, but for younger students just beginning to learn English, the structure of the language almost always needs explicit explanation. Then, too, some students, especially older ones, need to have formal statements and descriptions of English grammar because of their individual learning styles and preferences. The information presented here is intended to give teachers ideas for different approaches to try— teachers and their school board will be the best judges of which approaches will work best to meet the needs of students.

Learning styles and strategies

A great deal of attention has been paid in recent years to learning styles and learning strategies among students. Students develop their own approaches to acquiring knowledge, in this case linguistic knowledge, based on cultural influence or purely personal preference. Philips (1972) gives an example of culturally-specific teaching methods used in raising children in the Warm Springs Indian community in Oregon. Adults use two main methods: *silent observation*, as when children are present at storytelling sessions but do not speak, or when children observe an adult performing a task such as weaving; and *supervised participation*, as when children who have observed some task long enough to feel capable of successfully performing it participate in some part of the task under an adult's supervision. Both methods involve very few verbal instructions; in fact, "the use of speech in the process (of teaching) is notably minimal" (p. 387).

An area of potential conflict in teaching English to Indian children is the clash between learning styles to which students have been exposed at home and those used in the ESL classroom. Philips characterizes one basic teacher-student classroom interaction as involving the teacher calling on individual students, forcing them to respond instantly, on demand and in front of the other students. Another kind of interaction involves students working in groups, with one student as group leader. Both teaching methods. Philips points out, conflict with traditional Warm Springs methods, where children are given as much time as they need before demonstrating ability to perform, test their ability in private before performing publicly, and avoid competitive roles with other Indian students.

It was no wonder, then, that Philips observed differences in the behavior of Indian and non-Indian students in a variety of school situations. Indian students, compared to non-Indian students, appeared reluctant to answer questions when called on, to volunteer information, or to take on leadership roles in small group exercises, behavior which could be interpreted as shyness, unresponsiveness, boredom, or sullenness by teachers unfamiliar with students' cultural backgrounds. On the other hand, Indian students were more cooperative and active than non-Indian students in small groups where they directed the activities themselves. Thus, Philips says, "...the differences in readiness to participate in interaction are related to the way in which the interaction is organized and controlled" (p. 379).

Another approach to learning styles has dealt with cultural differences in the emphasis placed on certain skills or approaches to analyzing information. The European educational tradition, on which mainstream American education is modeled, values objective, scientific approaches to reality, in particular, verbal skills, math, and symbol manipulation. Many Native American cultures place more emphasis on a subjective, artistic view of the world interpreted through drawing and other visual and spatial skills. Regardless of cultural background, children will have individual strengths and preferences for one approach over the other, so it is important that teachers try to discover students' strengths and weaknesses and present material in a variety of ways, using a variety of auditory, visual, and tactile modes, including spoken and written language (with frequent paraphrasing of ideas); visual aids such as pictures, charts, and tables; hands-on experience; and so forth. The greater the variety of ways used to present information, the greater the likelihood students will receive a sufficient amount of "comprehensible input."

More specific learning strategies address the academic needs students will face. Cummins (1984) discusses the roles of context and cognitive involvement in the communication tasks required of students. Some language activities are *cognitively undemanding*, requiring little thinking by students, for example, language drills; others are *cognitively demanding*, for example, giving oral reports or writing compositions. Crosscutting this dimension is the role of context: *context-embedded* language tasks provide clues to meaning beyond the language itself, for example lessons using illustrations or audio-visual aids; others are *context-reduced*, demanding full understanding of the language itself with no nonlinguistic cues; for example, listening to lectures

without visual aids.

Chamot and O'Malley (1986) use this classification in their Cognitive Academic Language Learning Approach (CALLA), which combines content lessons for ESL students in math, science, and social studies with the teaching of learning strategies, defined as "operations or steps used by a learner that will assist in the acquisition, storage, or retrieval of information" (p. 16). They emphasize the importance of teaching students how to become *active* learners and to use strategies to make connections between items of information, to transfer strategies to new activities, and to understand material more thoroughly than rote memorization alone allows. They describe three types of learning strategies: metacognitive, cognitive, and social-affective (p. 17), and they include an extensive bibliography of further readings in this area. *Metacognitive strategies* are procedures used by students to think about and plan for learning. *Cognitive strategies* are procedures used by students to manipulate, understand, and retain information. *Social-affective strategies* are procedures used by students to assist learning through the help of another person.

Chamot and O'Malley describe specific learning strategies for each of these three categories (pp. 19-20). Metacognitive strategies include *advance organization*, making an effort to understand the basic organizing principles of the material before it is taught or read, as in reviewing notes before a class or skimming a chapter before reading it; *selective attention*, concentrating on specific words or types of information presented in class; and *self-evaluation*, determining how successful a learning effort has been. Cognitive strategies include *notetaking* from lectures or reading; *resourcing*, using any kind of reference materials; and *elaboration*, making connections between new and old information. Social-affective strategies include *cooperation*, working with other students or family members; and *asking questions* to elicit additional explanation or examples.

Stewner-Manzanares, et al. (1985), describe additional strategies in these categories and present 13 activities that combine metacognitive with cognitive and social-affective strategies to facilitate and enhance language learning. One activity described by Stewner-Manzanares, et al. provides practice with the metacognitive strategy of advance organization and the social-affective strategy of cooperation in a vocabulary building exercise. Students are requested to find similarities between English and their first language(s) for language functions such as

greetings, requests, or apologies. The teacher provides background information about the various types of language functions, using some English examples, and students work in groups to share their knowledge of how English expresses a single language function, such as apologizing.

Stewner-Manzanares, et al., and Oxford-Carpenter (1985) stress the importance of using any or all of these learning strategies for facilitating language learning. Oxford-Carpenter reports that researchers have found that "successful language learners tend to use 'good' strategies more often than unsuccessful language learners" (p. 1), and Stewner-Manzanares, et al., agree that "students who have a varied repertoire of strategies to apply to a wide range of learning tasks are far more likely to be effective language learners" (p. 17). Since "studies show that learning strategies can be improved or modified through training" (Oxford-Carpenter, p. 1), ESL teachers should become familiar with the literature discussing the various types and offering suggestions on how to help students develop them. The advantage, of course, is that not only will language learning skills be sharpened, but learning skills in all subjects will be improved.

Conclusion

This chapter has discussed a number of specific recommendations for teaching ESL to Native American students, and in addition, some very general issues involved in teaching Native students in any subject area. Because the classroom environment and interaction with the teacher have such a strong effect on students' willingness to speak and write, they can play a major role in the success and progress of students' language learning. The more teachers know about sources of influence on their students' learning process, the better prepared they will be to meet their students' needs. Students will learn under virtually any circumstances *if the motivation is there*, and a true understanding of the students' culture, language, and learning styles will help teachers to encourage and bring out their students' natural love of learning.

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Other Resources for Further Information

Organizations and Journals

Teachers of English to Speakers of Other Languages (TESOL), TESOL Central Office, 201 D.C. Transit Building, Georgetown University, Washington, D.C. 20057. Has an annual meeting and Summer Institute. Publishes the *TESOL Quarterly* and *TESOL Newsletter*.

National Council of Teachers of English (NCTE), 1111 Kenyon Road, Urbana, Illinois 61801. Has regional and national meetings annually. Publishes *College Composition and Communication*, *College English*, *English Journal* (secondary level), and *Language Arts* (primary level), and offers special member discounts on books and other publications.

Clearinghouses:

Educational Resources Information Center/Clearinghouse on Languages and Linguistics (ERIC/CLL), Center for Applied Linguistics, 3520 Prospect St. NW, Washington, DC 20007. Publishes *ERIC/CLL News Bulletin* and a wide variety of monographs and specialized bibliographies.

Reading Comprehension and Indian Students

Daniel L. Pearce

A question frequently asked by teachers of Indian children is, "What can be done to improve my students' reading comprehension?" Owing to the nature of "reading comprehension," the answer to this question is neither easy nor simple because reading comprehension is not a single skill. Instead, comprehension is an interaction between various factors, during which a reader constructs meaning. Some of the factors which affect comprehension include the reader's prior knowledge about the topic, motivation, language facility (similarity to the author's language), and familiarity with how to read different kinds of print materials.

The areas of reading comprehension and comprehension instruction for Native Americans are large and complex topics. Rather than attempting to cover these in depth, this chapter will present background information on reading comprehension, some instructional guidelines, and some classroom examples of ways teachers of Indian children can help improve their students' comprehension. For a general discussion, including a historical overview, of teaching reading to Native Americans see Lankford and Riley (1986).

Background

Different authors (Cooper, 1986; McNeil, 1987; and Pearson,

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1985) have noted that what is meant by "reading" and "reading comprehension" have changed in the last twenty-five years. One of the reasons for this change has been an interdisciplinary investigation into reading. Beginning in the 1960s, researchers from a variety of areas, such as psychology, reading education, sociology, and linguistics, started looking at reading and comprehension. As a result of this attention, the reading act has come to be perceived as being inseparable from comprehension. Comprehension is not just the result of decoding; they are intertwined with comprehension facilitating decoding. Comprehension, in turn, has come to be seen as a process during which a reader creates meaning through actively interacting with the ideas in the text.

In the early 1960s, reading was viewed by some educators as a product of decoding (Fries, 1962). While appealing, this notion is both simplistic and inaccurate. An example will illustrate these points for you. Below are three simple sentences, read them.

Matched Latin Squares are a variation that avoids the confounding of fractional factorial and confounded factorial designs. The ambiguity of treatment, and the resulting aliases, are controlled. Temporal order becomes less of a factor in variable interaction.

Do you "know" what you read? The above lines were probably meaningless for you, despite your ability to "decode and say" each of the words, unless you knew some Spanish and something about research designs. Without this prerequisite knowledge, understanding and "reading" did not take place. Reading means comprehension and reading comprehension involves more than successful decoding or fluent oral reading.

As a result of investigations into reading, specifically investigations into comprehension, a distinction has been made about what is meant by comprehension. When most people speak of reading comprehension they are really referring to two different aspects, process and product. The distinction between process and product is the difference between the act of comprehension (process) and the end result (product).

Up until the late 1970s, comprehension was frequently viewed as the ability to recall information from a passage in either differing degrees of abstractness, such as word meanings, recognizing explicit facts, and drawing inferences (Davis, 1968) or by different levels of thought, such as literal, inferential, evaluation,

and application (Barrett, 1972). These, and similar efforts, approached comprehension in terms of the product produced. While ability to recall information is an important aspect of comprehension, it is the end result and tells us little about how a reader arrived at answers.

In comprehending a passage, or arriving at a product, a reader's mind does not just record the information in the passage and then give it back. The human mind doesn't work that way. A reader is not a passive recipient of knowledge. Instead a reader constructs meaning by taking ideas from the page and relating them to ideas already in his or her mind (schemata). The text serves as a sort of 'blueprint' that guides the reader in building a mental model of what is meant through supplying clues to what the author intended (or what the reader thinks the author intended). During this "building" a reader fills in points and makes inferences; after all, no text can explicitly give all of the information, underlying concepts, and relationships necessary to understand what the author is talking about. Consequently, comprehension requires a reader to play a very active role in constructing meaning. The act of constructing meaning is referred to as the comprehension process.

Comprehension, then, is the result of several factors which interact within the mind, while a reader goes through the processes necessary to arrive at a product. Good comprehension (having an acceptable answer or product) is dependent on several factors: Having the necessary background information; being able to relate that background information to what is being read; being familiar enough with the text's structure so that meaningful predictions can be made about what is likely to occur next (this makes it easier to form new understandings); being able to vary strategies used during reading; and being able to monitor one's own comprehension (knowing when something is not making sense and switching to another strategy).

The act of comprehension, or the process by which a reader constructs meaning through interacting with the text, is not inherently different for Indian readers than it is for other readers. Irregardless of race, color, or creed good comprehenders approach reading as a meaningful activity and interact with the ideas within the text in an active manner. What is different for Indian children is the kinds of background knowledge they bring to the reading task, their command of the language structures the texts use, and their experience with being active readers. The purpose

of reading comprehension instruction for Indian children is to facilitate those things good readers do when comprehending. This means helping them become active readers on their own.

Necessary elements for reading comprehension

Improving the reading comprehension of Indian children, or for that matter any children, is achievable through balanced instruction within the school program. Before presenting some classroom examples, six aspects necessary for effective comprehension instruction will be presented.

1. Recreational and independent reading. Children need to relate to reading. Reading must be seen by a child as being more than decoding words, reading out loud, or answering questions after reading a selection. Children must have an opportunity to read for pleasure, see teachers and others reading, talk about and share what they have read, and achieve some success in reading. At all levels of education, from the primary grades through the high school years, students must have a variety of books in their rooms and be given an opportunity to read them. For some suggestions on selecting books which Indian children will relate to see the chapter in this book on what students should read.

There are various ways to promote recreational reading within a class. Both sustained silent reading programs and "self selection" programs have been effective with second language and limited English students (Krashen, 1985). Efta (1984) presents a good overview of one teacher's silent reading program.

Not only must children have an opportunity to read books which they select. They must also have the opportunity to share and discuss those books. By sharing and discussing I do not mean a formal written or oral book report. I mean a chance to talk to another person or small group of people about what had been read. One way of encouraging sharing is periodic individual conferences between the student and the teacher where they talk about books read. Other suggestions are to have students make a commercial to convince others to read a book or story or having students keep a "book kite" listing books read independently. Veatch (1978) has several excellent suggestions regarding both individual conferences and book sharings.

2. Background knowledge. Students must be "prepared" to read a selection. In several places the importance of background know-

ledge has been mentioned as a prerequisite for comprehension. Prior knowledge is important in helping a student come up with an "acceptable" comprehension product. The more a person knows about a subject in a text, the easier that text will be to read. Whether one is talking about reading a basal selection or a chapter in a history book, in order for comprehension to occur, students must have some knowledge about the topic they are going to read about. Not only must the students have some knowledge about this topic, they must also be able to identify the right memories (schema) and be able to relate what is being read to what they know.

While Indian students have background knowledge, it may not be adequate for understanding a selection. A reality in today's schools is that textbooks are the major source of instructional reading material and textbooks are aimed at middle class audiences. Textbook authors make assumptions about what is known. These assumptions, which may be valid in "middle" class students will, in all probability, be invalid with students who are not from the main stream. Indian students may not have had the varied experiences necessary to understand the concepts presented in a selection. Consequently, it is important that students are introduced to key concepts before reading a selection through prereading activities.

Various prereading activities exist which have proven successful with Native American students. Most of these involve variations of having teachers identify a major concept within a passage, introducing that topic, and allowing an opportunity for students to tell what they know about that topic before actually reading it. Successful prereading techniques include brainstorming (Vacca & Vacca, 1986), categorizing major concepts from a selection before reading that selection (Moore, Readence, & Rickelman, 1982), and teachers identifying a major concept within the story or passage to be read, introducing that topic to the children, and then allowing students a chance to tell what they knew about that topic.

3. Exposure to different active reading strategies. Children need help in becoming active readers. Helping students improve their comprehension involves more than practice answering questions over what has been read. While no two people will read a passage exactly the same (after all, no two minds are identical), active reading involves some common traits. These include: Previewing difficult material before reading; using cues within the text while

reading to make predictions about what is likely to occur next (and reading to confirm those predictions); and switching the rate of reading to fit the material and the task.

In order for students to become active readers, they need to be exposed to and have an opportunity to practice different strategies. This is achieved through a combination of teacher modeling (the teacher demonstrating different strategies for the students) and students practicing using those strategies with both print and non-print materials, such as films.

Teachers will discover that the strategies needed to help a student read actively will vary depending on the difficulty of the text and the sophistication of the reader. Ideas and strategies which have been used successfully with Indian children include: The Directed Reading Thinking Activity (Stauffer, 1976), Request or Reciprocal Questioning (Manzo, 1969), and The Guided Reading Procedure (Manzo, 1975). For additional ideas on ways to develop active readers see Cooper (1986) and McNeil (1987).

4. Integrate reading with language arts. Reading must not be taught as an isolated subject. Comprehension development is tied to the other language arts. Through talking about and writing about what they read, students develop background knowledge, gain a deeper understanding over material read, and begin to become active readers.

Probably the easiest way to accomplish this is through language experience activities. The success of the language experience approach with Indian students is fairly well documented (Feeley, 1979; Mallett, 1977). My experience is that while language experience is used with Indian students, it needs to be used much more frequently, especially in reservation schools. For information on language experience see the chapter on Whole Language in this book.

Language experience is not the only way to integrate reading with speaking and writing. Having students write about what they read is also beneficial. Writing does not mean formal report writing, it means putting ideas, such as a letter to a character in a story, down on paper after students have read that story. This kind of activity can help students actively work with the ideas in a story. However, in order for these kinds of writing activities to be useful a student must be willing to put their ideas down on paper. Students will not be as free to express themselves if a teacher goes through and grades each writing activity for aspects of form (spelling, grammar, and complete sentences). For ideas on

how reading and writing can be integrated, see Dionisio (1983), Gambrell (1985), and Smith (1982).

5. Vocabulary instruction. Children need help enlarging their vocabularies. Vocabulary knowledge plays an important role in comprehension (Anderson & Freebody, 1981). This is especially true with Indian children because of their limited backgrounds, limited in the sense that they frequently have not been exposed to certain concepts and words.

Vocabulary instruction includes efforts to develop both oral and reading vocabulary. Reading vocabulary instruction means exposure to and practice using the meanings of new specialized vocabulary and "old words" in different ways. It does not mean memorizing definitions, doing numerous work sheets, and taking periodic vocabulary quizzes. Students need to identify and practice using words in different settings and formats. For some examples of useful vocabulary activities and ideas on how to develop a student's vocabulary see Johnson and Pearson (1984) and the April 1986 issue of *Journal of Reading*, which is a special issue on vocabulary.

6. Questions. Answering questions over what has been read is a time honored practice within schools. It is also a practice which will continue because of the nature of schooling. Questions are not in and of themselves bad. They are a way for teachers to assess students' comprehension; however, in order for questions to be of assistance in increasing comprehension ability (the process of comprehension) they must clarify and not just assess the recall of information within the text. As Herber and Nelson (1975) have noted, a student's answer to a recall (or product) question is either right or wrong and practice answering questions will not necessarily result in an increase in a student's ability to arrive at an answer independently. That is because questions over what one has read usually focus on information within the text and the answers to those questions are products of comprehension.

In order for questions to be of any value for comprehension instruction, they must do more than assess students' abilities to recall detail, identify main idea, or draw conclusions over material read. Which is one reason most commercial "comprehension" kits do little to actually improve students' reading comprehension. Teacher questions, in addition to clarifying information, should also focus in on the process of comprehension.

The following are adaptations of process oriented questions developed by Dr. Sandra Rietz of Eastern Montana College over a passage from a biology textbook on principles underlying absorption. These questions can be adapted for use with any reading selection.

1. If you had to organize the ideas in this selection to study them for a test, which idea would you have to understand **FIRST**—before you could understand any of the others?
2. In which order would you study the ideas?
3. Which idea or ideas is/are the hardest ones to understand? Why do you think these ideas are harder than the others?
4. Which ideas are the easiest to understand? Why are they easy?
5. Are there ideas that the author explains more clearly than others? Which are they?
6. Which new words were hard to understand?
7. Which new words do you still not understand?
8. Which words or ideas do you think are the most critical for getting the meaning intended in the passage?
9. If you were to break the passage up into a few **MOST IMPORTANT** ideas, what would these be?
10. Was the passage put together in a logical order, or would the author have made the meaning clearer if some of the ideas were rearranged into a different order? What ideas do you think might have been out of order?
11. What parts of the passage did you have to read over? Did you have to read any part of the passage more than twice? What part(s)?
12. Were there any places in the passage that were frustrating to read—where you ready to give up? What were these?
13. Were there any places in the passage where you knew you would not be able to read and understand? What did you do?
14. If you had to develop a reason for reading this passage (a purpose for reading—a set up to know what you are looking for) what would it be?
15. What would you say might be the most important sub purposes for reading? (If you had to direct a reader through this passage, what would you tell this reader to make him or her aware of what to look for?)
16. How did you prepare or set up for reading this passage? What else could you have done?

These and similar questions help students become aware of

how to comprehend text through helping the students monitor their own reading. These questions also can give a teacher an opportunity to model comprehension techniques by answering a question himself and demonstrating what he did during the reading of a passage. This has proved to be a very effective technique with Indian children. For additional information on using questions to improve students' comprehension, see Herber and Nelson (1975) and Pearson (1982).

Content area reading

Children need comprehension "instruction" during reading class and in their other subjects. Simply put, in order for comprehension to develop teachers must expose students to reading in the content areas. Children need exposure to different text styles, author styles, and language patterns. All text is not the same. In order for students to be able to comprehend different material, they must have an opportunity to practice different instructional strategies on this material.

The importance of content area reading for comprehension development cannot be over stressed. In my work in reservation schools I have observed a common phenomenon. A teacher presents a good basal reading lesson in which he or she develops the students' background knowledge and then involves the students in an active reading of the story. Then, this same teacher will have the students read a content assignment independently with little or no instructional assistance. Students need to use active reading techniques in their content textbooks in order to comprehend what they read. For more examples of content area reading see Vacca and Vacca (1986).

Examples

Prereading. The importance of prereading activities was mentioned earlier in the section on "Background Knowledge." One instance of using prereading activities to build background and motivate students involved a fifth grade teacher whose students were Arapahos. The children were going to read a selection on Greek myths (a subject most of the students were not really knowledgeable about or interested in). The day before beginning reading, the teacher introduced the topic of myths in a general way and Arapaho myths were brought up. The teacher had the students ask parents, friends, and anyone they wanted about any stories they might know that explained things (especially Arapaho stories). Each student had to come in with at least one

story or myth.

The next day, the class had a discussion in which the students' examples were introduced. The teacher then asked the class whether any of the students had ever heard certain terms (all of which were common terms derived from Greek myths, such as "Atlas" or "Mercury"). These terms were introduced and the students brainstormed what they thought each of the common terms might mean. Then, terms from the story were introduced and related to the terms the students knew.

By doing the activities given above the teacher helped her students relate to the reading topic in a general way, introduced key words and concepts, and also gave the teacher a natural "hook" for the children's curiosity ("Let's read this and see if your ideas are right and what else you can learn.")

Integrating writing with reading. One fourth grade teacher whose students were predominantly Crows incorporated oral language and writing into a basal reading lesson through using a form of substitution. Substitution involves students substituting their own characters or events for those that are in the story.

An overhead transparency of two paragraphs from a story was shown to the class. They were told to read this to themselves. Then the teacher told the class that it was possible to invent a new story by changing some things in the story. She then read the two paragraphs out loud, changing the sex of every character.

Following her reading of the "new" story, the class was asked what other things could be changed. The students' suggestions (animals, places, etc.) were written on the board. Students by this time were anxious to read their own version aloud. Each student "read" his or her version to a partner (this helped more students be involved than if only a few volunteers read theirs).

The next step involved using a story from the basal reader. The students were reminded of what they had done and were referred to the list on the board. The students were told to substitute anything they wanted for what was in the first two paragraphs of the basal story (just like they had done before) and write their new story out.

The students retellings varied in creativity and in degree of thoroughness (some did not change everything throughout the "story"). After writing, the students were given a chance to read each others' stories. Not only did the children enjoy this activity, they caught each other's inconsistencies.

This activity allowed the students to become actively involved

in manipulating the events and characters in the story; they were involved in being active readers. Furthermore, it can be easily adopted for use in other content areas. For instance, a music teacher working with Crow students identified a song her students knew, "Jingle Bells," and wrote it on the board. The students substituted words appropriate for Valentine's day. The students' songs were put up in the hallway where other students read them.

Practicing with films. In the section on "Exposure to Different Reading Strategies" the suggestion was made to let students practice using strategies with non-print materials such as films. One sixth grade teacher of Northern Cheyennes did just that. She had a video tape of a movie about Chief Joseph, *I Will Fight No More Forever*, and used some "active participation" techniques with her students while they were watching the movie.

The class watched the movie and the teacher stopped the video tape periodically. During the first pause, the class was asked to tell what had happened up to that point in time. An important character in the film was selected by the teacher and the students were asked to come up with a list of everything they could remember or guess about this person. This list was written on the board. The class was asked to choose which things in the list they thought would be most important in the story and why. The class was then asked to guess what would happen in the movie. These predictions were also written on the board and later confirmed or rejected.

A variation of the above was repeated every time the video tape was stopped. Students made predictions about what would occur based on "clues" from the film and their own knowledge of Chief Joseph. At the end of the movie the teacher held a short class discussion on how the students had used what they were watching to predict what would happen.

Afterwards, with a reading assignment, the class was reminded of what they had done while watching the movie and told they were going to do the same thing while reading. The advantage of using non-print materials is that children can be introduced to and practice using strategies with materials which are easier for them to process.

Using ReQuest. ReQuest (Manzo, 1969) is a form of reciprocal questioning which helps students ask questions about what is being read. This strategy involves students and teachers taking turns asking each other questions about the material being read.

A fifth grade teacher of the Northern Cheyenne used this technique successfully in her social studies class. A passage in the textbook dealt with the geography and people in Peru. The teacher introduced the lesson with an announcement that today the students were going to have an opportunity to "be the teacher" by having a chance to ask her questions about what was in the book.

The students and the teacher read the first paragraph silently. Then the teacher closed her book and asked for questions about what had been read. She tried to answer all questions honestly. After the questions stopped, the teacher asked the students questions over the first paragraph. This helped assure that important facts were brought to the students' attention.

This process was repeated with the next paragraph. When the teacher was asked a question which could not be specifically answered just by the information in the text, she told the class what she thought the answer might be and how she had reached that conclusion, "I have to guess since the book does not tell me that. My guess is this because the book does tell me the following things."

Periodically, the teacher would ask the students a "higher" level question, which was not explicitly answered in the text, and ask for an explanation of the answer (the same thing the teacher had modeled for the students). The entire lesson seemed almost a game. The students enjoyed it, practiced being active readers, had active reading modeled for them, and remembered the content in the chapter.

In follow up lessons, once the students became more proficient at asking questions, some modifications were tried. For example, a contest between the teacher and the students in which a point was offered for every question which could not be answered. Two rules were set down, questions had to be about the chapter and no "petty" questions (what is the fifth word in the paragraph) could be asked. Another time students "played" each other. Teams were formed by the teacher and students had a short period of time to read a passage. (Would you believe that some students read more than the assigned passage?) Then the students' teams played each other.

If ReQuest, as presented above, seems like a game to you, it is. However, it is a game that involves the students in the reading material through offering instructional assistance. Not only does this instructional assistance aid in the development of compre-

hension, it also helps the students remember what is in the book.

ReQuest also works very well with resource room students, one Chapter 2 teacher used ReQuest with her elementary students (Crow, Caeyenne) over their classroom reading assignments. She found that it worked very well in ways she had not expected in different subject areas. Among the places she found it most effective were in mathematics, after all most students have a great deal of difficulty with story problems.

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The Whole Language Approach to Language Arts for the Indian Student

Sandra Fox

The communication skills of listening, speaking, reading, and writing are learned best together as, for example, reading can be learned from writing and writing from reading. Thus, all communication skills should be combined in a teaching approach called "whole language." The instructional philosophy or methodology of a "whole language" approach incorporates oral language practice, the use of culturally relevant materials, and language experience activities. The principles of the whole language approach are:

1. Much of the content of instruction comes from the student's own language and experience.
2. Aspects of language are learned from a "whole" language perspective rather than as isolated parts. For example, words are learned in the context of meaningful language experiences. Sound/symbol correspondence (phonics) is learned from the sounds within words which students know and use. Aspects of grammar are learned from practical application.
3. Instruction is based upon active learning strategies.

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4. Communication skills are not taught in isolation. Students learn to read from writing, and vice versa. Programs should, therefore, include reading, writing, speaking, and listening activities.

5. Students are taught to enjoy and appreciate the written works of others, including Indian and non-Indian literature.

Whole language programs usually include:

1. Writing language experience stories.
2. Bringing familiar language to the classroom (words from kid culture, television, radio, songs, sports, and so forth).
3. Reading strategy instruction (decoding, comprehending, and critical thinking activities).
4. Reading to students.
5. Having students read to themselves for enjoyment.
6. Sharing of literature.
7. Having students write every day.
8. Practicing oral language.

Whole language programs include units which incorporate reading (see chapter on reading comprehension), listening, speaking, and writing. The various components of a whole language program are described below followed by a sample unit.

Listening

Listening is an important language arts skill. It is estimated that people spend forty-five percent of their daily language-use time in some listening activity. Listening is especially important for Indian students who need to expand their vocabularies to gain command of words they may want to use in speaking, reading, and writing.

In a whole language program, students practice listening when they are read to, a regular activity of the approach. They practice listening as they hear other students contribute to language experience stories. They practice listening as they hear other students bring familiar words for word lists and as they hear other students share literature.

In addition, other opportunities must be made for listening practice. Early primary students should have practice in just listening to and identifying sounds and their features. Primary students must have practice in listening to directions, recognizing rhyme, listening for sounds in words, listening for meanings of words, and listening for main ideas, sequence, and details. Rules for good listening must be stressed.

In intermediate and upper grades, the same kinds of listening practice need to take place; and, in addition, students need to practice listening to understand and learn, listening for pleasure, and listening critically. Specific activities must be planned with these purposes in mind. These are also the purposes for reading, and instruction in reading and writing for each purpose can be correlated. However, it is essential that listening not be neglected. For Indian students, especially, more time must be devoted to it.

Speaking

Speaking, like listening, is not given enough emphasis in most classrooms. One of three major recommendations for improving language skills of Indian students is to provide more oral language practice for them. Indian students must spend more time mastering spoken language before they are expected to read and write it.

In a whole language program, speaking (oral language practice) comes into play when students discuss an experience they have had which then provides the teacher with the content for a story based upon that experience. This type of story is called a language experience story. For young students, the teacher writes the story down on a chalkboard or chart paper while older students can do their own writing. Speaking is practiced when students bring familiar language to the classroom to suggest words or phrases to make lists of sports terms, names of toothpastes, or words with the same meaning such as awesome, humungous, and other synonyms for large. When students share literature they have enjoyed by telling a story or reading out loud a book or poem they liked, they are practicing oral language.

Other opportunities for practicing oral language by students include reciting poetry and individual or choral readings. Students should regularly participate in skits or plays, give short oral reports, speak into tape recorders, share experiences, and be involved in discussions. Any activities in which students have the opportunity to converse with each other can make good oral language practice. Stress the utility of speaking effectively.

Oral language activities should be meaningful. The setting should be as natural as possible and the focus should be on the activity and not on the language itself. Much of the source for oral language practice can come from the fact that Indians have always told stories. Students can tell traditional stories, make

original speeches, or recite the speeches of other Indians (for examples of Indian oratory see Virginia Armstrong's *I have spoken*). They can turn legends into plays. Speaking should be made an important skill for Indian students.

If your school has a bilingual program in which both the native and the English language are being strengthened, the inclusion of speaking activities is even more important. Only when students speak and get reinforcement for speaking do they learn a language. The classroom environment created for language learning should include concrete objects and situations as much as possible. The bilingual program should aim for conversational language through immersion.

Writing

Students should write every day. Writing should be made an important activity. Students should have writing folders or large envelopes in which to keep written work. Classroom rules should emphasize that it must be quiet when people are writing. The "editing" (correcting) process must be made an important ingredient in the writing process. As part of it, students should regularly get the opinions of other students about their own writing and may sometimes work in pairs.

Two kinds of writing need to be practiced in school: controlled writing and independent writing. These lead to the two kinds of writing necessary for life's communication needs: exact writing and imaginative writing.

Controlled writing. In controlled writing the instructor controls the topic and form. This is useful for beginning writers and for older students who need to improve their exact writing skills. One form of controlled writing is to have students copy written works. In early grades, students can copy poetry, songs, language experience stories, and other short works. It is best if they copy poems, songs, and stories with which they are already familiar.

A second form of controlled writing is to have students write word lists from their experiences and surroundings (not from a spelling book!). For example, students can write names of things in a picture or in their classroom, school building, school yard, town, or home. The students suggest the "things" for the lists and then write them. They may have to ask for the names of some things. These can be written down by the teacher and their spellings discussed one at a time; or students can make their own lists and on the topic and exchange them for correction by their

peers. The teacher should be on hand to explain and confirm spellings. After a word list is complete and correct, more advanced students can write descriptive paragraphs of their classroom, school yard, living room, and so forth. Students can do specialized word lists such as things on a Christmas tree or things having to do with other holidays or special days. They also can do rhyming words after the first word is given. They could then write poetry with the rhyming words. Word lists can be done by groups of students or used by tutors with individual students.

A third form of controlled writing is the dictation of sentences for students to write. Length and number of sentences depend upon the level of the students. Sentences can include students' spelling or vocabulary words, or they can be from an experience which the class or a student has had. After each sentence is written by the students, the teacher should write it correctly on the chalkboard for students to compare with theirs. This provides immediate feedback as to their success at writing, correct spelling, punctuation, and capitalization. The teacher or tutor directs students to check to make sure they have capitalized, put a period, and so forth—one aspect at a time, stressing things with which students are having difficulty.

More advanced students may have short paragraphs dictated to them. No hints are given, such as "end of sentence;" only the words are dictated. Students then have to check to see if they have divided the paragraph into sentences correctly, if they have properly indented the first line, and if they have correct spelling, capitalization, and punctuation. Short papers can be dictated to see if students can divide ideas into paragraphs as well as checking on other skills.

A fourth form of controlled writing is to convert questions into statements. The instructor should explain or review the difference between questions and statements. Students should then be directed to write a paragraph of statements in which they answer questions such as: What is your name? What school do you attend? What grade are you in? What is your teacher's name? How many students are in your class? Is your school work easy or hard? The length of sentences and the paragraph will depend, of course, upon the level of the student or group. Questions can also be given individually and students' statements checked after each is written. Questions could be on the same topic or on unrelated topics.

A fifth form of controlled writing is to have students write a set number of sentences each week from spelling or vocabulary

words. The teacher can count the number of errors and put it at the top of the page. Students should work toward having fewer and fewer errors. They become confident when they see they are eliminating errors. Students at higher grade levels will have more sentences to write. However, there should be few enough so the teacher can look them over quickly, maybe even correct them in front of the students as they are handed in. Otherwise, the instructor should arrange a time to talk with the students about their errors. A simple record of types of errors being made should be kept for each student. Students soon discover that many of the errors they make are from carelessness.

Controlled writing should be done as long as needed; the content should depend upon the types of errors made by students.

Independent writing. In the second writing category, independent writing, students are encouraged to put their thoughts and ideas on paper. Writing should be viewed as the ability to write one's own ideas and present them in a form for others to read. It should be stressed that one's own ideas are important. Ideas can provide real or imaginary information—fiction or non-fiction.

Independent writing should be stressed from the first day of school. Children want to write, as shown by their crayon marks and scribbles on paper and walls. Therefore, they are to be encouraged to write in kindergarten, because, from the beginning, they must believe they can write. Allow them to scribble, draw pictures, or write alphabet letters, if they know them. Ask what they have written and praise them for what they have done.

Early writers in kindergarten and first grade can also draw or paint pictures to put their ideas on paper. Each artist can tell about his or her pictures, and the teacher can extract two or three sentences that will describe the picture or tell the story. By the next day, the teacher can have attached a story strip to the bottom of the child's picture with the two or three sentence description on it. The students share the pictures again and read the "stories" that go with them. Later on, students can write their own stories to go with their pictures.

First grade children often have limited spelling-usage vocabularies. If their flow of thought is interrupted by idea gaps and spelling problems, students may feel frustrated about putting their own ideas down on paper. In initial writing lessons an imaginative set of completion blanks sometimes enables students to see completed selections more quickly. One might be:

MY PET

I have a pet and its name is _____.

It has _____ fur.

It likes to _____.

It sleeps in the _____.

After students fill in the blanks, they can copy the entire paragraph to make it their writing. For older students who need this kind of motivation to get anything written, leave out every fifth word of a work so they can fill it in.

Selecting a topic

Independent writing requires selection of topics. Selecting topics is difficult for children at first, so, at first, teachers may have to provide topics from which students can choose. Later students should be encouraged to select their own topics. The topics should be relevant to the students' experiences, happenings in their lives, or things they know about. Sometimes teachers can provide the beginning of incomplete sentences or the ending of sentences in order to get students started. However, teachers and tutors should help students learn to select their own topics. A teacher may show how he or she selects topics. The teacher and students need paper and pencil. On one of the pieces of paper they number from 1 to 4. Behind numbers 1 and 2, students are instructed to list topics about which they may want to write. The teacher tells them it can be something that happened to them, something they are interested in, or just something they want to write about. The teacher writes down two topics and then tells the class what they are and his or her reasons for selecting them. Then the teacher has the students write two more and does the same, explaining his or her choice of the last two. (Four topics help students expand their thinking.) Then, students are asked to select one topic from the four. They can confer with writing partners, if they wish.

Teachers should "model" writing for their students. After the teacher chooses a topic or the class helps choose a topic, the teacher shows how he or she thinks about and organizes the writing. The teacher should actually write short papers on the chalkboard, making corrections and reorganizing ideas while doing so. When teachers write language experience stories, they are also modeling writing.

At this point students are ready to begin. Once they have selected topics, they need to work quietly so all can think. Music may be played if teacher and students desire it. If students come

to a word they want to use but cannot spell, they are instructed to put the first sound down and leave a blank or to use creative spelling so they can ask the teacher or writing partner later. For the time being, they should not disturb anyone.

As a regular practice, students should be encouraged to illustrate written works. This reinforces the ideas used in the writing as well as the skills practiced. Students can also write captions for cartoons.

Editing

Making corrections on independent writing should be viewed as "editing." Editing should start out simply, with all students turned into editors after being writers. They can edit their own work or each other's work. At first, they should simply read the work to see if it makes sense. Later, they can check for correct capitalization, punctuation, spelling, and paragraphing. Older students might have a checklist of things to look for.

The teacher can be available to help students edit. Some papers may be edited by a teacher as examples of how to edit. Copies can be made of one paper for all to see as a teacher points out things to be changed, or sentences from many papers can be extracted for a teacher to use as examples. The teacher should be careful to choose papers written by students who are better writers so as not to discourage the creativity of those less confident about their writing.

Publishing

Some materials should be "published." Sometimes students' works are displayed on bulletin boards or compiled and actually put into book form to be read by others. Students can also write individual books. The teacher is the "senior editor" in these cases and reviews "drafts" with students before final copies are made. Final drafts do not have to be perfect. The amount of perfection expected depends upon the level of the students and the teacher's expectations.

A project for older students is the "Foxfire" concept of gathering and writing down information about the local community for inclusion in a book. Students can also write articles on any topic for local and school newspapers. Poetry adds spice to the writing program. For early writers rhyming words, after the first one, can be left out of poetry so that students can fill in the blanks. Later, students can write their own poetry. They get to feel and use a lot of language when they write poetry.

The classroom should have many opportunities for writing. Students can keep journals and write in them every day. In early grades, a teacher can provide the topics. Journal notes are not corrected or edited. A teacher may, however, review them and make comments such as "me too," "I agree," or "nice." Older students, who should keep journals more like diaries and write what is on their minds, may not want teachers to review their journals.

The classroom should have a message box where students can answer and send messages to the teacher. Stress the utility of writing.

Organizing a whole language program

The examples in this chapter are just some of many activities that can be used in a whole language program. There are many others. However, most teachers are used to structured programs outlined in textbooks. There seems to be too many things to do in a whole language approach and no set way to do them. To provide some structure to a whole language program, use a thematic approach. If a topic, book, or special happening is of interest to your students, organize a whole language unit based on it with related whole language activities based upon that theme.

For example, you might choose the theme "pets" for Native American students at about the third grade level. Actual projects might include:

1. Oral language practice. Have students tell about their pets or pets they know. They can tell the kind of pet, describe the pet and tell something funny the pet does.

2. Reading to students. Read the book *Dog Story* by Oren Lyons (1973) to the group. It is culturally relevant for some tribes and is by an Onondaga author.

3. Reading strategy. The teacher picks out words encountered in reading *Dog Story* for meaning analysis or word attack instruction. Students do a concept mapping of the story.

4. Language experience story. Have students summarize *Dog Story* in a language experience story format.

5. Students reading to themselves. At their independent reading levels, have students read stories about pets.

6. Sharing literature. Have some students tell about stories of pets they read and especially enjoyed.

7. Students bringing familiar language to the classroom. Have students tell about dog foods or dog food commercials they know about. Write and discuss the words in dog food brands or words

commercials.

8. Writing every day. Have students write papers on "Why Pets are Important." Papers can be edited. Students should write in their journals every day. They may have some controlled writing also.

The various activities of the whole language approach do not have to be in any particular order. Concepts from other academic areas, such as math or science, should be included if they relate to the topic. The whole language classroom should be full of stimuli for reading, writing, speaking, and listening. Some whole language classrooms have reading, writing, speaking, and listening centers.

The whole language approach is a much more exciting way to teach than to just follow textbooks, and its procedures also can be used in content areas such as science and social studies. The teacher would plan reading, writing, speaking, and listening activities on the topic being studied. The whole language approach also can be used with Indian languages as well as the English language. If micro-computers are available, students can use simple word processing programs to write, edit, publish, and even check the spelling of their stories.

More examples for use in the classroom can be found in books such as those in the section For Further Reading which follows.

For further reading

- Allen, R. V., & Allen C. (1982). *Language experience activities*. Boston, MA: Houghton Mifflin.
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What Should Indian Students Read?

Jon Reyhner

Whether they attend Public, Bureau of Indian Affairs, Tribal Contract, or Mission Schools, most Indian children, like other children in the United States, are taught reading using basal reading textbooks (Austin & Morrison, 1963, p. 54). In the past, there have been two major problems with using basal readers with Native American students. They, along with other minorities, were largely absent from basal reading textbooks (Klineberg, 1963), and all the stories tended to be boring, bland, and unrealistic (Bettelheim & Zelan, 1982; Bowler, 1978; Henry, 1961; Yarrington, 1978).

Despite an increased number of minority characters in recent editions of basal reading textbooks, teachers still need to use the many trade books with Indian characters which are available to supplement their basal reading program, or they need to implement a Whole Language Reading Program which starts with reading material from their students' home culture. The reason for this is that basal reading textbooks do not provide enough reading material to allow students the practice they need to become fluent readers. According to Frank Smith (1978, p. 187) "The primary function of reading teachers ... [is] to ensure that children have adequate opportunity to read." Children learn to

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read well by reading a lot of books which they find interesting (Krashen, 1985, pp. 89-113; Smith, 1983, p. 5; U.S. Dept. of Education, 1986, p. 11).

Research also indicates the importance of books with Native American themes and characters in schools with Native American students. Simpson-Tyson (1978) concluded from a review of research and a study of Crow Indian children that reading and language activities for Indian students in the first grade "should be laden with Native American cultural experiences" (p. 801). Cummins (1981) reviewing recent research on bilingual education concluded that schools need to build on the entry level characteristics of students and to "validate" their "cultural identity" in order to give them the best chance for success (p. 42). In *What Works: Research About Teaching and Learning* the U.S. Department of Education states, "students read passages more deftly when the passages describe events, people, and places of which the students have some prior knowledge" (1986, p. 53). The conclusion of recent research are not that much different from the conclusion of the 1928 *Meriam Report* that educational material, especially for the primary grades, "must come from local Indian life, or at least be written within the scope of the child's early experience" (Meriam, p. 33).

Gilliland (1982) found "an adequate supply of interesting, true-to-life children's fiction and nonfiction [trade books] about the Native American" with a disproportionate number of stories set in the past. He felt that Native American children with reading problems, which is the majority, would be more likely to relate to stories about Indians set in the present (p. 914). Indian students, to have equal educational opportunities, must be given "books, materials, and methods that were developed for use in the Indian society" or are relevant to the students' background and culture in order to reinforce positive self concept, motivate reading, and develop reading comprehension skills (Gilliland, 1983, pp. 1-2).

A short history of reading textbooks

The criticism of the adequacy of basal readers for providing beginning reading material has a history as long as the readers themselves. Charles Eliot, President of Harvard University for forty years, criticized late nineteenth century reading textbooks for being at best "mere scraps of literature" and at worse "ineffable trash" (Hardy, 1891, pp. 146-146). A few years later Edmund Burk Huey commented on how the illustrations in reading textbooks "had far more attention" than the story content (1908,

p. 276).

William S. Gray who was the senior editor of Scott, Foresman's "Dick and Jane" reading series consciously left out the "sordid surroundings" and "family conflict" found in the lives of "deprived children" so that in school these children could "live vicariously in a pleasant, attractive [white middle-class] home" (Gray et al., 1951, pp. 23-24). Psychologists have disagreed with Gray's escapist philosophy. Bruno Bettelheim found a lack of significant content in reading textbooks and that the readers lead children to have unrealistic expectations as to how families lived. Parents never argued, mother was always ready to play with the children, father was never tired after work, and there was never any sibling rivalry. He felt the content of basal stories aggravated rather than alleviated emotional problems children might have by making them abnormal in terms of the world the textbook stories portray (1961, pp. 386-387).

The effect of these stories on one Indian child from Cochiti Pueblo has been described by Joseph H. Suina:

The Dick and Jane reading series in the primary grades presented me with pictures of a home with a pitched roof, straight walls, and sidewalks. I could not identify with these from my Pueblo world. However, it was clear I didn't have these things and what I did have did not measure up. At night, long after grandmother went to sleep, I would lay awake staring at our crooked adobe walls casting uneven shadows from the light of the fireplace. The walls were no longer just right for me. My life was no longer just right. I was ashamed of being who I was and I wanted to change right then and there. Somehow it became so important to have straight walls, clean hair and teeth, a spotted dog to chase after. I even became critical and hateful toward my bony, fleabag of a dog. I loved the familiar and cozy surroundings of my grandmother's house but now I imagined it could be a heck of a lot better if only I had a white man's house with a bed, a nice couch, and a clock. In school books, all the child characters ever did was run around chasing their dog or a kite. They were always happy. As for me, all I seemed to do at home was go back and forth with buckets of water and cut up sticks for a lousy fire. "Didn't the teacher say that drinking coffee would stunt my growth?" "Why couldn't I have nice tall glasses of milk so I could have strong bones and white teeth like those kids in the books?"

“Did my grandmother really care about my well-being?” (in press)

Psychologists have criticized basal stories for lacking a variety of content which can be labeled under the general category of realism. Child, Potter, and Levine (1946, p. 45) found an “unrealistic optimism” in 913 third grade level basal stories they studied while Bettelheim (1961, p. 388) found “unrealistic images of life and people.” Klineberg (1963) found a white middle-class world of abundance and fun with no non-white Americans while Blom, Waite, and Zimet (1968, p. 318) found a predominance of “neutral ‘Polyanna’ stories.”

More recently Bettelheim and Zelan (1982) have found first grade reading textbooks to be “boring,” an “insult to the child’s intelligence,” “uninteresting,” and “without merit.” They felt,

If, rather than concentrating on developing reading skills, educational efforts from the very beginning were concentrated on developing the desire to become literate — essentially an inner attitude to reading — then the final result might be that a larger segment of the adult population would be literate. (p. 21)

Reading textbooks and the real world

In recent years many changes have taken place in basal reader stories. Reading specialists such as Aukerman (1981) have found more realism in recent basal reading textbooks. However, there are economic forces inhibiting the amount of realism in basal readers. Textbook publishers, with millions of dollars riding on the success of their reading textbooks, find it hard to deal with unpleasant truth in textbook stories (Yarrington, 1978). They do not want to offend any special interest group which might oppose the adoption of their textbook in any part of the United States. Cronback in a study of school textbooks found their “latent function” to be “to transmit the myths and the mores, the traditions and the legends, and the folkways and the superstitions” of the middle-class culture that produced them (1955, p. 105).

Goldhammer felt that children after reading their primers which described an idealized middle-class family that never was and never will be would learn that “the school is attempting to perpetrate a hoax, and that, consequently, the teacher, who is a liar, and the school, which promulgates the lie, are not to be trusted” (1969). Children can misdoubt their own perceptions of

rather than doubt authority in the name of the text, the

teacher, and the school. Children can learn in this hidden curriculum to depend on authority. This learned reliance on authority has been given as a reason why older students have trouble understanding the scientific method of discovering reality (Child et al., 1946).

It is the child who mistrusts the world and has a poor self concept who is often not only a poor reader but is also not well socialized. Jahoda found a steadily growing body of empirical evidence to show that "inadequate reality testing is characteristic of many who feel hostile to racial out-groups" (1960, p. 13). Hiding the faults of the dominant, Indian, or other ethnic groups does not lead to a healthier attitude towards life or to out-groups. The research on adolescent prejudice indicates,

The answer to the instructional dilemma is not, as is frequently thought and practiced, to deny or to overlook the existence of group differences, especially differences that appear to reflect negatively on one group in comparison to another. Such instruction is undoubtedly well motivated and practiced because it is thought that the acknowledgement of group differences may breed prejudice, but its more likely consequence is to compromise the integrity of the teacher [or textbook] and, in the process, either mute his or her potential or produce a boomerang effect by making it seem to the discerning youngster that there is some justification after all for prejudice.

The pedagogical solution pointed to by the research is for the existence of group differences to be forthrightly acknowledged and discussed, whether they appear to reflect on a group positively, negatively, or neutrally. If anything, negative attributions are especially to be acknowledged to ensure that there are no grounds for a youngster to feel deceived. (Glock et al., 1975, p. 175)

In sum, the research on story content leads to the conclusion that censorship should be avoided and that stories should realistically mirror the world that is being written about. Even unrealistic folk tales should not be watered down as they contain symbolic truths (Livingston, 1974; Bettelheim, 1977).

Indians in basal readers

Despite tremendous gains in the last twenty years in introducing minority characters into previously all-white basal reading series, basals still are predominantly white and even stories with

minority characters often do not reflect minority cultures. For example, stories with Black major characters often lack distinctively Black cultural features. Only one percent of the stories in first grade basal readers have Native American characters. At the third grade level, seven percent of the stories have major characters who are Native American, and at the fifth grade level fifteen percent of the stories have major characters who are Native American (Reyhner, 1986). In a twenty-five percent random sample of basal reader stories from eight basal reading series, of the 16 stories with identifiable Native American characters only two dealt with urban Indians even though half of Native Americans in the United States live in metropolitan areas, including 21 percent in central cities, according to the 1980 census.

Native American stories in basal reading textbooks are set for the most part in the rural American South-west. A few themes such as pottery making, rug weaving, sheep herding, silver-smithing, and basket-making are over emphasized in these Indian stories. The proportion of rural settings for all basal reading stories increased with grade level. Blom, Waite, and Zimet in 1968 reported a lack of urban settings in basal stories in proportion to the number of children living in urban settings. The fact that only a third of all Indians live on reservations and that many live in urban areas would indicate that teachers need to make a point of seeking out Indian stories with urban settings.

A few figures like Sacajawea and the ballerina, Maria Tall Chief, reoccur frequently in basal readers and trade book about Indians. Stories continue to be found that focus on the Native American as the white man's helper who sides with the whites against their own people sometimes to save the life of one of their children or a white person. An example in a recent fifth grade reader is the Puerto Rican story of Iviahoca who gains the freedom of her son by carrying a letter 'through enemy lines' which helps the Spaniards defeat the Indians.

Traditional folk stories, both Indian and non-Indian, in basals have by and large been transformed. Traditional Indian stories had "realism" represented by Old Man Coyote and other archetypes. The European and Native American folk stories with good and evil characters have mostly been replaced in modern basal reading textbooks with stuffed animal fairy tales with no evil and little conflict in them. In a time when we fingerprint our children in shopping malls so that they can be traced if they are abducted

and when the threat of total nuclear destruction lies buried in missile silos in our wheat fields, it is understandable why we provide escapist literature about stuffed animals and children playing for our young in our basal readers, but it is not defensible.

The greatest weakness with the Native American content in current basal reading textbooks is the striking lack of Native Americans in the primary level stories. The lack of first grade Native American content in basal readers is especially critical since the early school years not only give students the basics they need for later school achievement but are also the period in which they form their attitudes towards school. The greatest strengths are the realistic and well written contemporary stories in the intermediate level readers.

The intermediate grade stories would go a long way towards meeting the needs that Gilliland (1983) identified for Indian children who are reluctant readers. However, the two or three stories at any grade level in any given reading series are too few to create sustained interest. Teachers need to search out additional reading material which portray Native Americans in a non-stereotyped manner, especially material from the student's particular tribal background, to supplement the basal reading textbook if they are to take full advantage of the interests of their students in stories about their own and other tribal cultures.

While more material needs to be developed, a considerable amount of material is available and is not used to the extent it could be. Gilliland (1980) listed with evaluations 1,650 Indian children's books. Teachers responsive to their Indian students' needs will seek out culturally appropriate reading material for their students. Some of the many sources of Native American Reading materials are given in the "For Further Information" section and the selected reading list at the end of this chapter.

Dealing with stereotyping in other stories

Basal reading textbooks, since they are frequently updated, do not contain the more objectionable minority-group stereotypes. However, school libraries often contain many older books which do. In *The Adventures of Tom Sawyer*, the villain is "Injun Joe" a "murderin half-breed" who tortures women (Clemens, 1958, pp. 87 & 148). In Laura Ingalls Wilder's *Little House on the Prairie*, first published in 1935, "two naked, wild [Indian] men" who are "tall, thin, fierce-looking" with eyes that "were black and still and glittering, like snake's eyes" visit the Ingall's homestead (1971, pp. 134-139). The fact that these men just visit and do no

harm does not take away from the negative description given in the book! Walter D. Edmond's 1941 award winning book *The Matchlock Gun* has attacking Indians that "hardly looked like men...trotting, stooped over...like dogs" (p. 39). At the end of the book a "crippled" Indian is killed without elaboration (p. 50). In Betsy Byler's *Trouble River* (1969), a small party of Indians with "oily skin" who move "with the silent ease of an animal" force a young boy and his grandmother to flee their homestead (1969, pp. 33 & 35).

Movies, particularly "Westerns" also tend to portray Indians negatively and all in the Plains Indian image. Students exposed to typical Westerns should also be exposed to some of the more recent movies that portray Indians with three dimensional characters such as *I Will Fight No More Forever* (Congress, 1985).

Mary Byler (1973) found stereotyping, depersonalization, ridicule, derision, and inauthenticity in children's books with Indian characters. Many books for young children portray non-Indian children or animals dressing up and playing Indian. The Council on Interracial Books for children describes some of the problems associated with this activity:

"Playing Indian" is a common play activity for children — in the United States as well as other countries... Undoubtedly most, if not all, of us have seen children hopping up and down, patting a hand against their mouths and yelling "woo-woo-woo," or raising one hand shoulder high and saying "how" or "ugh." The perpetuation of these and similar white-created "Indian" behaviors reflects the influence of peer socialization, schooling and movies. They mock Native cultural practices and demean Native people as subhumans, incapable of verbal communication. (1981, p. 12)

Stereotyped characters cannot be avoided in stories because stereotypes represent a very visible portion of reality. The danger to students is not the stereotypes themselves, but the possibility students will come away from them with the impression that the stereotypes accurately represent a whole group. Teachers can avoid this danger by making students aware of stereotyping and giving students a variety of literature to read.

Students who read books or view movies with stereotyped characters such as those described above need to have an ex-

planation of Indian culture, of frontier attitudes of settlers towards Indians, and of how Indians felt towards settlers who moved in on Indian lands sometimes in defiance of treaties with the United States Government and with no attempt to buy them. For example in the Caldecott Medal winning book *They Were Strong and Good*, the pioneer grandmother did not like Indians because,

they would stalk into the kitchen without knocking and sit on the floor. They would rub their stomachs and point to their mouths to show that they were hungry. They would not leave until my mother's mother gave them something to eat. (Lawson, 1940)

An explanation of Indian customs would help students put such descriptions in perspective. For example, teaching about Indian expectations of mutual hospitality would explain the reason for their wanting food from strangers. A lesson on sign language as a method of communication with people who speak another language could also help. American tourists in Europe can be seen every day using "primitive" sign language

Ethnocentrism in stories

Negative stereotypes are a symptom of a larger problem of ethnocentrism. There is a natural tendency for each culture to perceive itself as superior to all other cultures. This tendency to see other cultures as barbaric and savage, called ethnocentrism, has led to much inhuman treatment of minorities, such as the American Indians, by dominant cultures. Ethnocentrism comes naturally because children are usually brought up to believe that the way of life of their parent's culture is the only way to live. Villains and fools in the stories the children hear are often portrayed as coming from another culture. When these children grow up and communicate with persons from another culture, they hear and see those persons exhibiting behavior which is not just different but wrong. Since the children know the proper way to live and these persons are acting wrong, they naturally feel superior to the ignorant outsiders.

Ethnocentrism lies at the heart of the problem of Indian education because attempts at communication between the white and Indian cultures rather than being communication between equals, have tended to be a matter of the dominant white society trying to use the Indians or, at best, trying to assimilate them. Military, political, and economic power lies with the domi-

nant culture. The original ideal of Indian education was to "civilize" and assimilate the Indians into the dominant culture that the emigrants from Europe imported to America.

Indian children are no different from children from the dominant culture. They have a right like all children to be educated in such a way that the culture of their homes is reinforced by the school. The curriculum of the school should utilize as much as possible local (tribal) stories and history to teach reading, language arts, and social studies. As Indian students get older they need to be introduced to the wider non-Indian world in such a way that they do not feel that their own world is automatically inferior or superior.

New problems and promises

Ethnocentrism becomes resurgent when the dominant group feels threatened. In 1985, more people immigrated legally to the United States than to all other nations in the world, and the number of illegal immigrants is even larger. White non-Hispanic Americans will in a few years be minorities in California and Texas (Bouvier & Gardner, 1986). The fear of becoming a minority has led to the formation of groups wishing to enforce assimilation on all U.S. minorities. "English Only" groups which advocate adopting English as the official language of the United States jeopardize the use of culturally appropriate curriculum for minority group children and the early education of non-English speaking American children. Similarly, the "cultural literacy" movement that has received a lot of media attention with E. D. Hirsch, Jr.'s new book *Cultural Literacy: What Every American Needs to Know* (1987) jeopardizes the teaching of non-European and non-Judean-Christian heritages in our schools.

The results of the Kamehameha Early Education Program (Project KEEP) indicate the importance of understanding and using minority cultures in schools. Project KEEP was set up to find ways to improve the educational attainment of native Hawaiian children. Hawaiian native children even though they come to school speaking only English have done poorly in school. Initially, a phonics oriented program was tried, but it failed to bring students to the level of the non-native students. After an ethnographic study of the students' homes, a culturally compatible curriculum was designed which emphasized reading comprehension with the result that the average student reading scores rose from the 27th to above the 50th percentile (Jordan, 1984, p. 61).

Classroom organization was changed from large group to small group instruction which emphasized active student participation in learning including peer tutoring and a monitoring of student progress using criterion referenced tests. Teachers worked with small groups of students in reading lessons which began with relating the material to be read with the students' prior experiences, the reading lesson then focused on comprehension of the material read, and was followed up with activities that related the material read back to the students' lives. Students not receiving direct instruction from the teacher work in small groups at learning centers (Jordan, 1984; Tharp, 1982).

Building on the strengths of Indian students

Rather than recognizing the cultural and linguistic strengths of children from ethnic and racial minorities, schools and school textbooks often ignore students' home culture and language, and the students are considered underprivileged, culturally deprived, or educationally-at-risk. The native language or dialect and values the children have learned at home are considered handicaps to be overcome as quickly as possible rather than positive assets to be built on. Native American students, often taught at home to be independent and cooperative, are often expected at school to be dependent on the teacher and to compete with other students. Many Native American students, instead of receiving initial instruction in their native language, are submersed in English and are expected in the words of William Bennett, Secretary of Education, "to speak, read, and write English as soon as possible" (1986, p. 62).

There is also a tendency for teachers to assume that their minority students with reading problems can be successfully diagnosed using English language tests and treated in a prescriptive fashion through a Special Education or Chapter 1 type remedial reading program. In those programs the reading process is segmented into a series of discrete, "basic," skills which are taught in a very mechanical way (Cummins, 1984, pp. 222-263; Savage, 1987, p. 583).

Treating poor reading skills as a student centered problem is a "blame the victim" mentality which focuses a teacher's efforts on testing and remediation the student rather than on finding meaningful reading materials and culturally appropriate ways to teach and motivate students. Scripted, mechanical reading programs lack intrinsically motivating elements to encourage students to succeed.

Native language literacy is avoided because the average non-Indian teacher is handicapped by not being able to speak a tribal language. Students cannot read in a language they cannot speak. Reading programs for non-English speaking student groups should start with reading in the language of their homes for the best prospect of success while the students participate in an oral language development program to become fluent in English. Bilingual stories such as those developed by the Hays/Lodge Pole Bilingual Program in Montana are one example of the local materials that can be used to develop both native language and English literacy simultaneously (Allen, 1986).

The responsive teacher

The problem of teachers whose students do not respond to the standard curriculum is not new. Teachers responsive to the needs of their students have always sought ways to better fit their teaching in such situations to the needs of their students. Sylvia Ashton-Warner's experience teaching the Maori in New Zealand as described in her book *Teacher* (1963) is just one example of a teacher adapting to meet the needs of minority students.

Responsive teachers work with students rather than just make students work. Their role is that of guides and facilitators rather than just authoritative sources of knowledge or unreflective disseminators of textbook material. They view their work as going beyond the classroom when necessary to encourage literacy in the home and community. Family literacy supports school literacy. Programs such as Reading is FUNDamental (RIF) which provides free books for children to take home, encourage reading in the home. In Chinle, Arizona, on the Navajo Reservation, parents have contracted with responsive teachers to listen to their children read at home.

Students who are extrinsically motivated to learn at school, usually by their parents, and who know the language and culture of the teacher and the textbook can survive academically in a classroom of a non-responsive teacher. Non-responsive teachers assume that they know what the child needs to learn and are not troubled by students' feelings in the matter or often by what prior knowledge, if any, about the subject students bring to class.

Responsive teachers are especially important with cultural and language minority students since they are willing to respond to students needs and to shape the present curriculum to meet those needs. They are more likely to adapt curriculum based on discus-

sions with students, to focus lessons on topics meaningful to the students, and to allow students to practice language and thinking skills in real interactive situations. In group discussions and by allowing student talk in group work, responsive teachers allow students to use language and to develop their competencies in communication.

Scripted curriculum materials like DISTAR and the teaching guides to many popular basal reading series give the teacher questions to ask students and provide the "right" responses expected of the students. These scripted teaching guides inhibit the real dialogue between the teacher and student which was found extremely effective in the Kamehameha Early Education Program. They also implicitly limit the teacher from discussing how story words, characters, and situations in the reading assignment are similar or different from those of the children's native language, culture, and experiences.

The subtle message to the student of non-responsive teachers is that the school's curriculum is more important than the students and that the culture of the school is more important than that of the home. The students are being educated to live in the dominant culture even though in reality they often live as adults in an environment closer to their native culture than the dominant culture. Also, the students are ill prepared by the non-responsive teacher to participate in a democratic society as they learn in school to listen to the directions of authority figures and to memorize information without expressing their personal opinions or reflecting on what they are learning.

A Heritage Reading Program

Responsive teachers work to produce a curriculum suited to the needs of their students. Arthur Gates indicated over 20 years ago that basal readers should only be a "small fraction" of the total reading program (1962, p. 445). It is up to the teacher to introduce students to literature beyond the bits and pieces that appear in basal readers. Children from the dominant culture can often learn to read well in spite of the school because their parents recognize the need for providing reading material in the home and encourage their children to utilize city, county, tribal, and school libraries. For Native American students, whose parents may be less familiar with books and libraries, the teacher's role in providing interesting literature for their students is especially critical if the students are to learn to read fluently and be suc-

cessful in school.

Indian students need a "Heritage Reading Program." Students from minority cultures should first be introduced to their own cultural heritage and then the Western European heritage which much of the governmental system of the United States was built on. A global, multi-cultural, curriculum should be built on the preceding foundation of the students' family and national (dominant) cultural knowledge.

Teachers at the classroom level are in a position to get to know their students' background and to encourage their schools' librarians, administrators, and boards to acquire supplemental literature appropriate to their students' background. Under our economic system such literature will only be produced in large quantities if a market is created through such requests.

Teachers can model learning to their students by becoming familiar, through ethnographic literature and home visits, with their students' home culture(s). Then they can adapt their teaching methods through trial and error to see what kinds and forms of classroom activities motivate their students to become literate. Teachers need to learn as much as they can about the particular community in which they work. Taking an interest in their students' lives in itself can make a difference in students' academic performance (Kleinfeld, 1979). When reading material about the community is not available, the language experience approach to reading (Allen & Allen, 1982) can be used to have students produce their own reading material. To give more meaning to the various exercises that students do in school, the Whole Language Approach (as described in this book and in Goodman, 1986) can utilize culturally appropriate stories to integrate the various subjects taught in school into a more comprehensible whole.

Reading textbooks need to be supplemented with classroom libraries. These libraries need to have paperback books and other reading materials with a variety of levels and topics (fiction and non-fiction) represented so that students can select books and magazines that interest them. Minority group students need some stories that relate to their lives as well as stories through which they can learn about the outside world. Stephen Krashen examined ten studies which compared students using Sustained Silent Reading (SSR) as part or all of their reading programs to programs not receiving SSR. He found that students who practice and refine their reading skills using self selected, free reading

in SSR programs did equal or better on tests of reading comprehension than students receiving no SSR in their reading program in eight out of the ten studies including one study where SSR was the exclusive language arts program (Krashen, 1985, pp. 90-94).

Conclusion

To answer the question, "What Should Indian Students Read?," the research cited in this chapter points in the direction of having the community, school, and teacher provide a variety of reading material from which the students, parents, and teacher can select. From this reading material the teacher can structure lessons as described in the chapters on reading comprehension and Whole Language in this book, and the student can through exploration find out the variety of information and entertainment which is available through reading.

Colin Scott (1908, pp. 212-213) wrote almost eighty years ago, "If the schools do no more for reading than to teach people to read, it may be said paradoxically that they are not even teaching them to read." Students who find in school that reading is boring and uninteresting work learn to avoid reading, and they never get the practice needed to become fluent readers that reading for enjoyment provides.

If Indian students are to become productive tribal members, informed citizens, and problem solvers of the future, they need to start reading with meaningful, realistic literature about which they can think and hold discussions. Reading textbooks can, at best, only provide an appetizer to encourage students to utilize classroom libraries, school libraries, community libraries, and bookstores. If meaningful and interesting stories are too difficult for beginning readers to read, then teachers need to read them out loud to their students.

For further information

The Council for Indian Education (P.O. Box 31215, Billings, MT 59107) has over 50 children's books in print representing more than 11 different tribes.

Council on Interracial Books for Children (1841 Broadway, New York, NY 10023) publishes a number of booklets on stereotyping, racism, and sexism. Of special interest is *Unlearning "Indian" Stereotypes: A Teaching Unit for Elementary Teachers and Children's Libraries* (1981). An associated sound filmstrip is available narrated by New York City Indian children and suitable for use in the intermediate grades. Another useful booklet is *Guidelines for Selecting Bias-Free*

Textbooks and Storybooks (1980?). Native Americans stereotypes are dealt with on pages 56-58. They also publish a bulletin.

Garrard Publishing Company (1607 North Market St., Champaign, IL 61820) publishes with a 2nd grade basic vocabulary *Navaho, Pueblo, Tepee, and Wigwam Stories*. At the third grade level they have ten biographies of Indian heroes and at the 3-4 grade level two books, *Indian Patriots of the Eastern Woodlands* and *Indian Patriots of the Great West*.

National Council of Teachers of English (1111 Kenyan Road, Urbana, IL 61801) publishes an annotated bibliography *Literature by and about the American Indian* (1979) by Anna Lee Stensland with nearly 800 titles.

Navajo Community College Press [Tsaile, AZ 86556 (Phone 602 724-3311)] publishes *Navajo Stories of the Long Walk Period, Stories of Traditional Navajo Life and Culture*, and many other books. A catalog is available.

Navajo Curriculum Center [Rough Rock Demonstration School, Rough Rock, AZ 86503 (Phone 602 728-3311)] publishes a number of Navajo stories for children including *Grandfather Stories of the Navajo People* (Also in Navajo language edition), *Coyote Stories of the Navajo People* and a two-volume *Teaching Guide for Indian Literature* that provides chapter by chapter questions and activities for 21 Native American books, mostly novels, at both the elementary and secondary level. A catalog is available.

Northwest Regional Educational Laboratory (101 Main St., Suite 500., Portland, OR 97204) developed the Indian Reading Series with stories from tribes all over the Northwest, contains approximately 20 stories per grade for grades one through six. All of the stories in the Indian Reading Series have been approved for authenticity of content by editorial committees of Native Americans. Also publishes *Effective Practices in Indian Education* which includes Teacher's, Administration, and Curriculum Monographs.

Random House School Division [Dept. 9282, 400 Hahn Road, Westminster, MD 21157 (800 638-6460)] has videotapes and/or sound filmstrips to go with Jean Craighead George's *Julie of the Wolves* (Eskimo), Jamake Highwater's *Anpao: An American Indian Odyssey*, Eloise Jarvis McGraw's *Moccasin Trail* (Crow), Miska Miles' *Annie and the Old One* (Navajo), Scott O'Dell's *Sing Down the Moon* (Navajo), Olaf Baker's *Where the Buffaloes Begin* (Plains), and Paul Goble's *The Girl Who Loved Wild Horses* (Plains). Also has filmstrips with cassettes of "Tales of the Plains Indians" (Grs. 3-5), "Read-Along American Indian Legends" (Grs. 2-4), "American Indian Folk Legends" (Grs. 3-6), and "American Indian Legends" (Grs. 3-5). A catalog is available.

Reading is FUNDamental (RIF), 600 Maryland Avenue S.W., Room 500, Smithsonian Institution, Washington, D.C. 20560, Phone (202)

287-3220. The RIF program provides assistance including some matching funds to groups wishing to give books away to children to promote literacy in the home. Membership is free and allows groups to purchase books at discount for free distribution to children and receive the *RIF Newsletter*.

San Juan District Media Center (28 West 200 North, Blanding, UT 84511) publishes 2' Navajo Experience Stories, 12 Cultural Readers, and 10 Navajo Cultural Movies among other materials. Many of these materials have both Navajo and English versions and many of the booklets come with cassettes.

Selected Indian children's books

The list below was compiled from books rated by teachers as excellent. Stories were selected on the basis of how much they might motivate Indian students to read more than on their cultural authenticity. All appear in the 1986-87 edition of *Books in Print*.

Primary books

Behrens, June. (1983). *Powwow*. Chicago: Children's Press.

Benchley, Nathaniel. (1972). *Small Wolf*. New York: Harper & Row. A story of Indian-White contact. Other books by the same author include the primary story *Running Owl the Hunter* and the junior high novel *Only the Earth and Sky Last Forever* (Southern Cheyenne/Sioux).

Goble, Paul. (1984). *Buffalo Woman*. New York: Bradbury Press. Retelling of a Plains Indian traditional story. Other stories by the same author include *Star Boy*, *The Gift of Sacred Dog*, and *The Girl who Loved Wild Horses*. All are beautifully illustrated.

Payne, Elizabeth. (1965). *Meet the North American Indian*. New York: Random House. (Nonfiction)

Intermediate/junior high books (Many of these books are suitable for reading to younger students)

Houston, James. (1973). *Kiviok's Magic Journey*. Hartford, CN: Atheneum. (Traditional Eskimo Story)

Luling, Virginia. (1978). *Indians of the North American Plains*. Morristown, NJ: Silver Burdette. (Nonfiction)

Morris, Neil and Ting. (1984). *Feather Boy and the Buffalo*. Morristown, NJ: Silver Burdette. Also by the same authors *Little Bear and the White Horse*, *Moving Sun and the Lost Girl*, and *TAKU and the fishing canoe*.

O'Dell, Scott. (1970). *Singing on the Moon*. New York: Dell. A story of the Navajo Long Walk. Also by the same author *Streams to the River*, *River to the Sea: A Novel of Sagawewa*, *Island of the Blue Dolphins*, and *Zia*.

Robinson, Gail. (1981). *Raven the Trickster: Legends of the North American Indians*. New York: Macmillan.

Top, Peter. (1984). *Little Blaze and the Buffalo Jump*. Billings, MT:

- Council for Indian Education. Also by the same author *Sik-ki-mi* and *Natosi: Strong Medicine*. All are stories about the Blackfeet.
- Rudolph, Stormy. (1984). *Quest for Courage*. Billings, MT: Council for Indian Education. (Blackfeet)
- Ryniker, Alice. (1980). *Eagle Feather for a Crow*. Oklahoma City: National Cowboy Hall of Fame.
- Siegel, Beatrice. (1972). *Indians of the Woodlands: Before and After the Pilgrims*. New York: Walker.
- Seve, Virginia Driving Hawk. (1972). *High Elk's Treasure*. New York: Holiday House. Also by the same author *Jimmy Yellow Hawk*.
- Thomasma, K. (1983). *Naya Nuki: girl who ran*. Grand Rapids, MI: Baker Book House. (Shoshoni) Also by the same author *Soun Tatoken: Nez Perce Boy* and *Om-kas-toe of the Blackfeet*.

High school books

- Borland, Hal. (1972). *When the Legends Die*. New York: Bantam. (Ute)
- Hillerman, Tony. (1975). *Dance Hall of the Dead*. Also by the same author *The Blessing Way*, *The Ghostway*, *Listening Woman*, and *Skinwalkers*. All are murder mysteries which are solved by Navajo tribal policemen.
- Kinsella, W.P. (1977). *Dance Me Outside: More Tales from the Ermineskin Reserve*. Boston: Godine. Also by the same author *The Moccasin Telegraph and other stories*. Humorous short stories of living on an Alberta Indian Reserve. Some stories might not be considered suitable for classroom use.
- L'Amour, Louis. (1986). *The Last of the Breed*. New York: Bantam. Sioux test pilot is captured by the USSR and escapes.
- Erdoes, Richard & Alfonso Ortiz. (1984). *American Indian Myths and Legends*. New York: Pantheon.
- Van Etten, Teresa. (1986). *Dead Kachina Man*. Santa Fe, NM: SunStone. (Murder mystery)

References

- Allen, M. (Ed.) Assiniboine/English Bilingual Reading Series. Hays, MT: Hays/Lodge Pole Schools. (Series of first grade reading booklets)
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11

USING ORAL LITERATURE IN THE CLASSROOM

Sandra A. Rietz

Except for an introduction to selected works transcribed as they were told and an occasional (usually rare) experience with a live storytelling, most students in contemporary schools have little exposure to oral literature—folk stories, cycles, epics—the mythologies which are the collective inventions of a people. Owning, most probably to the influence of the empirical requirement to measure, touch, see, or taste upon individual and collective thinking about what we will grant the status of “real” and what we will not (L’Engle, 1978), oral literatures of most western European cultures have fallen into disrepute. Frost (1980, p. 26) contends that “scientific lore” has effectively disposed of the mystery and metaphor of oral literature by portraying it as “a clutter of ancient foolishness.” Even the oral language medium is now most often valued and taught as a tool having limited utility, while written language is presented in today’s schools as the primary tool of literary activity and invention. This is a curious turn around, considering the history of the development and utility of written languages.

Imposition of western Europe education on nonwestern, Indian communities has resulted in the substitution of the “empirical curriculum” for community knowledge. The worldview of formal education is a new universe, which is not only different from that of the traditional culture, but is also offered as a more “correct,”

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more scientific replacement for cultural knowledge. The collective wisdom of the native culture is usually overlooked in favor of "proper" academic subject matters. Material constituting the culture's oral literature is often judged unfit for classroom use because it does not fit a scope and sequence of subskills, because it is not a "sophisticated" literature, and because it presents a supposedly fictitious cosmology.

Yet, in a cultural sense, a body of oral literature is a curriculum. It teaches (by induction) what a people knows about itself and the universe, both through story content and through structural device—the organizational and linguistic properties of stories. It is the function of an oral literature to both construct and preserve a culture's memories: its real history, its mythology, its metaphor, its allegorical accountings, and its cosmological and archetypal constructions. An oral literature enables individuals to perceive (one kind of) orderliness in the universe, to engage its great mysteries, and to capture a sense of belonging. Oral stories place people and people's experiences in a universal perspective (Hillman, 1979), and they utilize the creative capacities of the oral language medium. The oral literature of a culture is not about science or the "truths of science," but about truths which mark the significances of human existence. An oral literature "speaks the language of the mind" (Frost, 1980) and structures the collective memory of a people. The oral stories give real substance and provide a vehicle for mythic and metaphoric perception. Stories bind time, define the natural order and place people in it, and establish "sensibility" — what is "right" and "real."

"Story" as a mental model

"Story" and stories exist in memory as mental models, conventional configurations of propositions which organize information (Bower, 1976; Kintsch, 1977; Mandler & Johnson, 1977; Rumelhart, 1975). Together, the structures, contents and language of stories propose the nature of order in the universe: cause and effect chains, relationships between ideas, and origins and dispositions. Stories propose a truth or a set of truths. Tribes have understood the significances of their stories for generations, but cannot always verify or quantify the perceptions so represented when the measuring stick for "truth" is a system of thought (scientism) which values only what can be counted and which categorizes the metaphor of the stories as fiction. To those who cannot apprehend the different truth of the stories — their archetypal and metaphorical contents and structures — an oral

literature often appears to be of little real substance.

Stories represent a different kind of curriculum — a critical social and psychological curriculum (Hillman, 1975). Stories are not facts, or collections of facts, but representations of models—structures, orders, metaphorical constructions and archetypes. "Story" is a human invention—a mental model, a schema, an archetype in its own right. It is a way of organizing information and of configuring events in memory. "Story" is a reality; it is both a truth and a maker of truths. Each single story is a specific sub-configuration of the general model, reconstructing a part of a cultural cosmology, conferring significance, sensibility and meaning, and utilizing a special configuration of language, structural elements, literary devices, metaphor, imagery and archetype. Stories are dynamic, living and changing creations; they are organic.

In order to appreciate the contribution that oral literatures make to learning, one has to think differently about what is substantial. One has to think differently about educational outcomes—to look beyond the "facts" and operations so typical of curricula to a consideration of the character of human memory—to the emergence of models in learner memory as the fundamental product of learning. Learning "story" and learning "to story" involves learning a way of thinking, a way of organizing events and information, a way of knowing. An oral literature represents a cosmology, something which cannot be taught as a collection of "facts," but something that can be "known" through inductive experience with a body of stories.

An oral literature curriculum

Preserving authenticity in the oral literacy event. A preliminary but not incidental consideration related to employing an oral literature to preserve culture has to do with the manner in which the literature is used. Certainly, literature is one way in which a culture encodes its essential character, but the circumstances of literacy events—the complete situations in which a story is presented—also defines a culture's sense of propriety. The conventions of behavior and language which surround a storytelling identify the status of a particular story and cue an audience to its importance and meaning. Stories are always told within the contexts of whole (literacy) events, the natures of which are also often prescribed by the culture. Some storytellings are attended by elaborate ritual and protocol; some material is

considered to be sacred oral text and must be delivered properly. Usually, rules exist to ensure that the right story is told by the proper person at the correct time. An improperly conducted literacy event can debase a story, perhaps even cause it to lose its special powers. For instance, many Indian stories can only be told during Winter, after the first frost of Fall and before the first thunderstorm of Spring. Some native storytellers are empowered to tell stories only when snow lies on the ground. One native storyteller "lost a story" entirely; he betrayed it by telling it in an improper circumstance, and it left him. Such perceptions identify an oral literature as a powerful, perhaps a self-empowering entity. Its stories are not items to be used for incidental entertainment. Ancient and/or sacred oral text, even humorous material, delivered in frivolous contexts can become frivolous.

Preserving authenticity through story delivery. An oral literature curriculum designed to preserve cultural cosmologies does not "use" the literature secondarily for the sake of studying literary forms and genre. Experience with the literature itself, not literary explication, is the content of the curriculum. Natural (authentic) experiences with stories, in natural (authentic) cultural contexts serve the more utilitarian cultural purposes for which the literature evolved: to tell people how to behave, to bind people together in a common cultural community, and to teach and reinforce models which belong to the cultural cosmology. This cultural learning agenda is accomplished without recourse to formal study. In fact, many Native American storytellers would consider explaining a story to a group of listeners to be an impropriety, because such explanations (telling the audience what to think) would deliver an insult. Many native stories do not have morals tacked on to their conclusions, in part, for the same reason. If the literature itself, hence the cultural cosmology, is the learning agenda, then the first and primary experience should be with the literature. And, while students might want to talk about the stories after hearing them or let the experience with the stories lead to other investigations, the literature experience is not a means to some other (empirical) end, but an end in its own right.

Certainly, the classroom is an inauthentic setting for the genuine practice of an oral literature. But if the literature is to be "done" in school settings, then certain considerations relative to authenticity must be enforced, or the integrity of the stories themselves might be compromised. First, the stories must be

presented in the contexts of literacy events—whole, contextual experiences with (oral) literary works. Second, the stories themselves must be presented whole—intact. Third, the structure or organization of the story, its governing internal pattern, must not be compromised in order to make it “more sensible.” Fourth, a story should not be used as a vehicle for instruction in some other subject matter—For example, reading (Livo & Rietz, 1986). The integrity of an oral literature is diminished by grafting sets of comprehension questions (etc.) to specific stories. Using the literature for such purposes is inauthentic and unnatural, and substitutes a concocted “Educational” goal for a genuine cultural one. An oral literature does not need the addition of “school” projects to make it legitimate. Fifth, a story must be *told*. The story can only truly live in its original (oral language) medium—the medium of its invention (Livo & Rietz, 1986). Much of what constitutes the nature of “story” (oral literature) is embodied in the linguistic and paralinguistic devices of the oral language and in the live delivery. (This is not to say that students should never read or write such stories, but that the primary medium of invention of and evolution of an oral story is oral language.) Sixth, a story must be *given* to an audience. One of the criteria by which authenticity of an oral literacy event can be judged is the degree to which the audience “enters” the story. An oral literature is the product of the work of the collective consciousness of a people, hence it belongs to the people themselves, and not to a particular individual or author. The storyteller *gives* the story to its legitimate owners and creators (Livo & Rietz, 1986). Seventh, the storyteller should be the “right” person—an individual who is legitimately empowered by the culture to do the stories and/or someone who understands the cultural significance of the literature. Teachers and students can certainly take the part of storyteller, however, this last consideration suggests an opportunity to involve important members of the cultural community in the formal educations of the students and offers a context for school/community cooperation. Though a genuine, culturally authentic literacy event probably cannot be achieved in a school setting, observation of the above cautions can help to preserve a substantial proportion of the instructional power of the oral literature.

The posture of the school toward the (oral) literary heritage of the culture must be a serious and respecting one. The school, through the various vehicles it has at its disposal to confer the

status of "truth" on a body of knowledge, must recognize an oral literature as a real, legitimate, sophisticated body of literature, as the valuable creative product of a human community and as a real and good, if metaphoric, way of knowing about the universe. If, on the other hand, the school's posture suggests that the literature is somehow inferior, as a literature or as an educational experience, students could learn that their literary heritage is not particularly important, that their cultural cosmologies are not worth serious consideration, and that the metaphoric perceptions of their culture are poorly conceived.

Learning from the oral literature. Oral literatures are more than curious, historic tribal artifacts. Oral stories, though they are very old, have very contemporary functions. Our technology may have changed, but the archetypal memories which may have motivated the beginnings of human literary activity so long ago are still fresh. Oral stories are still evolving as products of human literary creativity. The human need to maintain a metaphoric universe seems to be genuine.

An oral literature is always a powerful instructional tool, and the storyteller is a very effective teaching medium. The storyteller is a vehicle, not a teacher. The storyteller *delivers* the literature. The literature itself represents cultural memory, and the culture is the teacher. What gets taught is cultural memory—the "way." The cultural cosmology organized in the form of a mental model is the sum of such educational experience. Because the literacy event is whole, and as much might be learned from the nature of the event itself as from the story embedded within it, the tellings of stories cannot be conveniently dissected into so many parts. A mechanistic approach to instruction is inappropriate. However, some of the dimensions of oral literary experiences can be mentioned in order to make note of the kinds of learning that can be effected through storytellings.

Though literacy events, and the stories told in them, must be understood as whole configurations, not to be broken into pieces for purposes of study, teachers can consider the different (not necessarily separate) aspects of learning that might occur as a result of listening to stories. In particular, educators can look at learning that is specific to the conventions of literary forms and the language of literature and learning that is specific to the content of the literature—the information organized by the conventions of "story" and stories. (The worldview of the culture is implicit in *both* the forms and contents of the stories.)

LITERARY FORMS AND THE LANGUAGE OF LITERATURE

Literary forms represent ways of organizing language into higher orders of structure—into stories, poems, chants, and songs. When a people collectively invents a literature, the literary forms which evolve are *conventional* forms—structures that people agree are good, right, and mutually recognizable structures to serve certain specific communicative purposes. Human beings have, collectively, invented a conventional form called “story,” a conventional act of making a story, called “storying,” and a variety of lesser conventional forms which can be used within stories in order to organize (“story”) information. When people attend storytellings, they learn “story,” how “to story,” and which structural features go into stories. People “induce” these ideas; they are never “told” rules for these things.

Structures: By listening to stories, people learn what stories are, how stories work, how stories organize information, and they develop a general schema for this invention called “story.” One might argue that students could learn these things from a written literature as well, but the structures of the oral literature are the prototypes for all subsequently invented written literary forms. Schemata which are developed for the forms of the oral literature will help students to better predict the organizational patterns of written materials. (Stories in basal readers are not a literature of any kind, oral or written, and should not be used as a basis for developing primary story structure schemata.)

Number Sets: A particular and interesting feature of most, if not all, oral literatures is the organization of stories into “sets” by numbers—twos, threes, fours, fives, etc. The numbers of story characters which are mandatory, the numbers of times a character must repeat a specific movement or activity, the numbers of items that must accumulate in a list, the numbers of events required per episode are formulaic. One could speculate about how and why such numerical conventions arose—perhaps number sets have symbolic ritual and sacred origins—but their metaphoric and cosmic message is still quite clear, and their power to influence other ways in which information is organized is significant. One has only to look at stories and begin counting internal items and structures to find the evidence. Russian stories are not patterned in threes by whim. Neither are the four corn mothers of the Pueblo peoples, the four worlds of the Hopi

(Waters, 1963), or the four experiences of beetle simple or incidental (Mullett, 1982). People learn the "set" of the stories by listening to stories. The "sets" themselves have a powerful cosmological significance and, once learned, intrude into many non-literary applications and circumstances.

Internal Structures: Other patterns also serve to organize information within stories: lists, cause-event chains, cumulative windings and unwindings, substitutions of names or actions within an event that happens repeatedly, or one event that does repeat again and again without a change in either its language or internal organization. Such patterns are typical of oral stories. The highly predictable and repetitious structures which occur in many stories may have evolved to aid storyteller memory when storytellers were charged with the responsibility of "remembering" for the culture. But these patterns also serve to make oral stories very manageable for listeners, and, once learned, serve as prototype frameworks for informational organization (For a thorough description of internal structural devices, see Livo & Rietz, 1986).

Language: The language of the oral literature, while it shares conventions with the common oral language of daily discourse, is also a more formal language than that of conversation. It contains stylistic features which include figurative language, descriptive phrasing, lists, chants, rhymes and repeated structures. It is the language of the visual image, and, because it is oral, it also contains aspects of intonation, breathing, pacing, and articulation which are specific to storytelling. It is the creative and inventive aspect of the oral language—a language of play and of beauty. It cannot be replaced by written language; it contains many features which cannot be encoded into print. Story language is an art form in its own right and is a special "register" which storytellers learn to control. The language of the oral literature is the language of literary composition in the oral tradition and is a powerful medium. Yet, it is learned just as oral language is learned, by listening and experimenting. But the environment in which this specially capacited language can be learned is the oral literacy event. People who listen to stories will learn to use the language of the stories.

Authorship: The capacity to compose orally in the language of the oral literature is a final and culminating learning outcome. People who have heard stories, have learned their structural and linguistic conventions, and who understand how stories "work,"

can tell stories. Much in the manner in which a child learns to speak, one learns "to story." Storylike oral compositions are not uncommon in the utterances of two to three year old children (Sutton-Smith, 1981). Story tellings or, to be very precise, oral compositions (authorings) of individuals become more and more conventional over time, with exposure to oral stories and with opportunity to practice in legitimate, meaningful and purposeful (authentic) social circumstances. Making a story is a very convenient means of conveying relationships between ideas and events, and story making does something that oral language alone cannot do. It *saves* information in human memory by "binding it" into forms that people recognize and remember. Whether or not "story" itself exists in archetypal human memory, a large portion of "storying" behavior is learned, particularly, conventional story forms and story language, through exposure to oral stories. As with the natural acquisition of a native language, no rules per se are "taught." Individuals respond to the various properties of oral stories inductively—without conscious knowledge of rules and operations, but with good understandings of the social purposes and functions of stories and storytellings within the contexts of literacy events. And, while everyone tells stories informally—it is a very human thing to do—the next generation of caretakers of the oral literature of a culture will emerge from those young people who have substantial exposure to the stories, and who are encouraged, by valuing the stories sufficiently, to learn to tell them.

LITERARY CONTENT

The content of a literature is composed of the ideas, perceptions, visions, experiences, and histories of a people. This content, while it might be organized differently if presented in a history text, is imbued with a special importance and significance simply because it is storied. Storying an event or an experience can make a common moment into something that is bigger than itself by revealing universal qualities present in otherwise trivial circumstances. Storying boils experiences and events down to their essences. Hence, the story serves as a vehicle which allows a people to look beyond mundane details to the greater principles those details represent.

Problem Solving; Literary scholars have looked at story content from several points of view: content related to how people recognize and solve problems, content related to motifs, and

archetypal content (archetypal characters and situations). Problem solving strategies in stories have not been very thoroughly examined. However, one of the features of "story" is the existence of "problem." The oral literature, in particular, presents very clearly defined problems. And the stories themselves are constructions which provide a means for characters to solve problems. Though students of literature have not presented definitive categories by which we might examine the manners in which the oral literature addresses problem solving, the stories are, without a doubt, primers to human problem solving behaviors. If the oral literature is a cultural curriculum, then one of its overall goals has to do with recognizing and solving problems in the culturally "right" and proper ways.

Motifs: The motifs which exist in the oral literature have been a topic of study for many years (Thompson, 1955-58). While a story topic or theme can be a motif, characters and character actions are also motif contents within stories. A single story can use several motifs. For instance, "*Coyote and Locust*" (Hayes, 1983) contains mythological motifs (origins of animal characteristics), animal motifs (magical animals and animals with human traits), tabu motifs (ownership of songs), wise and foolish motifs (disregard of facts, short-sightedness, bungling, literal foolishness, and an easy problem made hard), deception motifs (thefts and cheats, a deceptive bargain, escape by deception), reversal of fortune motifs (triumph of the weak, pride brought low), reward and punishment motifs (deed rewarded by punishment), traits of character motifs (unfavorable traits of character), and humor motifs (humor of lies, exaggeration, character behavior, language, physical disability, and discomfiture).

A full collection of stories belonging to a people presents a diverse and rich set of motifs which, in turn, are a form of cosmological content within the literature. Each story is a construction of a select number of the total of motifs available to a culture. Not only are story structures "generated" when one tells stories, but also specific organizations, juxtapositions and interactions of motifs. (One might almost think of motifs as "modules" from which stories are built.) The motif contents of stories represent a wealth of cultural understanding presented in the most direct and simple form—the stories themselves. Motifs alone are a powerful cultural (human) curriculum.

The Native American stories referenced below represent a very limited scope in terms of the total contents of tribal oral

literatures. The materials given are restricted to the contents of selected children's collections published up to 1990, and, further, to the three major motif categories in which a majority of these stories occur: mythological, animals, and deceptions (MacDonald, 1982). While this particular listing is reduced to minor motif, tribe, author, and publication date information for the sake of brevity, even such a simplified representation clearly indicates the wealth and breadth of materials that can be found for classroom use. Other stories and motifs can be located by referring to an appropriate index (MacDonald, 1982; Thompson, 1955-1958) or by visiting the folk literature collections of any library. Additional stories can be obtained, under the correct conditions, from tribal storytellers.

MYTHOLOGICAL MOTIFS

Gods

1. Origin of thunderbird. (Winnebago) Chafetz, 1964, pp. 3-13; & DeWit, 1979, 27-33.
2. Origin of thunderbird. (tribe unspecified) Field, 1929, pp. 40-54.
3. Disappearance of thunderbird. (Bering Strait Eskimo) Melzack, 1967, pp. 85-97.
4. Seasonal habits of Thunder. (tribe unspecified) Field, 1929, pp. 55-61.
5. Goddess of lightning. (Hawaiian) Thompson, 1966, pp. 20-27.
6. Goddess of snow. (Hawaiian) Thompson, 1966, pp. 28-32.
7. Seasonal habits of snow king. (Naskapi) Cunningham, 1939, pp. 60-65.
8. Habits of blowing and drifting snow. (California) Curry, 1965, pp. 90-100.
9. Goddess of world of dead. (Hawaiian) Berry, 1968, pp. 89-97.
10. Goddess of fire. (Hawaiian) Thompson, 1966, pp. 15-19.
11. Spider woman (Hopi) full collection: Mullett, 1982.

Demigods and culture heroes

1. Coyote as culture hero. (collective) full collections: Courlander, 1978; Curry, 1965; Fisher, 1957; Hayes, 1983; Heady, 1970; Martin, 1950.
2. Raven as culture hero. (collective) full collections: Martin, 1951; Melzack, 1970.
3. Invincible culture hero. (Oglala Sioux) Matson, 1972, pp. 42-43.
4. Culture hero overcomes monsters—Raven. (Eskimo) Melzack, 1970, pp. 82-91.

Cosmologies

1. Earth Magician creates universe. (Pima) Baker, 1978, pp. 1-6.
2. Universe created from calabash. (Hawaiian) Thompson, 1966, pp. 11-14.
3. Raven creates universe. (Eskimo) Melzack, 1970, pp. 15-24.
4. Maui pushes sky up. (Hawaiian) Colum, 1937, pp. 38-64 & Williams, 1979, p. 13.

5. All tribes raise sky together. (Snohomish) Matson, 1968, pp. 90-93.
6. Many creations. (Papago and Pima) Baker, 1978, pp. 1-6.
7. Creation of sun, moon and stars. (Greenland Eskimo) Leach, 1967 pp. 37-8.
8. Coyote creates sun and moon. (Southern Pomo) Fisher, 1957, pp. 16-23.
9. Raven rescues sun, creates stars. (tribe unspecified) Manning-Sanders, 1971, pp. 81-84.
10. Blue Jay and Ground Squirrel rescue Dawn. (California) Curry, 1965, pp. 38-47.
11. Arctic Hare and Eagle rescue Sun. (Chuckee) Newell, 1970, pp. 51-62.
12. Fox rescues Sun. (tribe unspecified) Marriott, 1947, pp. 3-12 & Haviland, 1979, pp. 60-64.
13. Coyote steals sun; brings light. (Yokuts) Curry, 1965, pp. 22-37 & Leach, 1967, p. 44.
14. Sun, moon and stars rescued. (Hawaiian) Thompson, 1966, pp. 33-39.
15. Sun rescued, returned to sky. (Snohomish) Matson, 1968, pp. 80-86.
16. Sun falls to earth, is pushed back into sky (Achomawi) Belting, 1961, pp. 51-53.
17. Cottontail shoots down sun to make it cooler. (California) Curry, 1965, pp. 48-50.
18. Animals free Sun from trap. (Algonkian) Jablow, 1969, pp. 79-80.
19. Sun caught in snare, released. (Menominee) Field, 1929, pp. 71-3 & Cunningham, 1939, pp. 66-9.
20. Sun caught and slowed down. (Hawaiian) Colum, 1937, pp. 38-64; Cathon, 1962, pp. 104-109; Thompson, 1966, pp. 60-4; & Williams, 1979, p. 17.
21. Sun is brought closer to Earth. (Cree) Belting, 1961, pp. 79-84.
22. Origins of sun and moon. (Eskimo) Field, 1973, pp. 14-16.
23. Moon's light dims, moon disappears. (Eskimo) Caswell, 1968, pp. 19-23.
24. Origin of sun, moon and stars. (Nez Perce) Heady, 1970, pp. 15-20.
25. Origin of eclipses. (Snohomish) Matson, 1968, pp. 123-7.
26. Boy becomes "man in moon." (Loucheux) Jablow, 1969, p. 21.
27. Crane carries rabbit to moon. (Cree) Belting, 1961, pp. 67-70.
28. Frogs sit on the face of the moon. (Lillooet) Jablow, 1969, p. 24 & Leach, 1967, pp. 31-33.
29. Waxing and waning of moon. (Iroquois) Jablow, 1969, p. 14. (Kutchin) Jablow, 1969, pp. 39-40.
30. Goddess in moon. (Hawaiian) Colum, 1937, p. 173-5; Colum, 1937, pp. 117-119 & Thompson, 1966, pp. 76-80.
31. Girl marries moon. (Eskimo) Maher, 1969, pp. 139-158. & Caswell, 1968, pp. 19-23.
32. Girl marries star husband. (Blackfoot) Cunningham, 1939, pp. 87-94; (Algonquin) Williams, 1963, pp. 223-230; (Cheyenne) Field, 1929, pp. 13-31; (Skagit) Matson, 1968, pp. 63-74; (plains) Mobley, 1979.

33. Girl marries "old man" in sky world. (Arapaho-Caddo) Brown, 1979, pp. 39-42.

34. Coyote makes stars. (Hopi) Courlander, 1978, pp. 25-26. (tribe unspecified) Baker, 1978.

35. Origins of specific stars and constellations. (Cheyenne) Haviland, 1979, p. 40-43; Penny, 1953. (Micmac) Leach, 1957, pp. 133-4. (Chippewa) Leekley, 1965, pp. 76-8. (Snohomish) Matson, 1968, pp. 90-3. (Eskimo) Leach, 1967, pp. 138-9. (Mono) DeWit, 1979, pp. 117-121 & Fisher, 1957, pp. 54-59. (Blackfeet & Assiniboine) Hulpach, 1965, pp. 43-45. (Cherokee) Leach, 1967, pp. 136-137. (Onondaga) Cunningham, 1939 pp. 37-40. (Luiseno) Leach, 1937, p. 112. (Hawaiian) Thompson, 1966, pp. 40-44. (tribe unspecified) Marriott, 1947, p. 83. (Seneca) DeWit, 1979, pp. 9-12. (Shoshone) Hulpach, 1965, pp. 40-1. (Achozualoi) Fisher, 1957, pp. 60-73. (Eskimo) Maher, 1969, pp. 39-54. and (Hawaiian) Thompson, 1966, pp. 65-69.

36. Origin of earth. (northwest) Martin, 1975, pp. 6-18, pp. 11-15; Haviland, 1979, pp. 46-43. (Yokuts) Leach, 1967, p. 44. (Yuchi-Creek) Leach, 1967, pp. 15-16. (tribe unspecified) Curry, 1965, pp. 9-21. (Shoshone) Heady, 1973, pp. 15-19. (Cherokee) Bell, 1955, pp. 4-7. (Chippewa) Leekley, 1965, pp. 35-49. (California) Fisher, 1957, pp. 10-15.

Earth Topography

1. Tides. (Tahltan) Leach, 1967, pp. 25-27.

2. Coyote Lake and San Francisco Bay. (California) Curry, 1965, pp. 9-21.

3. Columbia River. (Nez Perce) Matson, 1972, pp. 64-69.

4. Snake River. (Shoshone) Heady, 1973, pp. 23-26.

5. Idaho, Twin, American and Shoshone Falls—Snake River. (Shoshone) Heady, 1973, pp. 20-23.

6. Lakes and springs. (Tlingit) Hardendorff, 1969, pp. 121-126; Martin, 1951, pp. 6-18; Martin, 1975, pp. 11-15; Haviland 1979, pp. 40-43.

7. Polar Ice Cap. (Tahltan) Leach, 1967, pp. 25-27.

8. Shapes of islands. (Chippewa) Leekley, 1965, pp. 111-117.

9. Origins of islands. (Hawaiian) Courlander, 1955, pp. 14-19; Thompson, 1969, pp. 66-71; Williams, 1979, p. 21. (Eskimo) Melzack, 1970, pp. 15-24.

10. Irregularities of coastline. (Skagit/Swinomish) Matson, 1972, pp. 105-111.

11. Hills and valleys. (Yuchi/Creek) Leach, 1967, pp. 15-16. (Cherokee) Bell, 1955, pp. 4-7. (Papago/Pima) Baker, 1973, pp. 1-6.

12. Mountain ranges. (California) Curry, 1965, pp. 9-21. (Jicarilla Apache) Leach, 1967, pp. 23-24.

13. Mt. Shasta. (tribe unspecified); Fisher, 1957, pp. 24-35.

14. Gorge on Oahu. (Hawaiian) Thompson, 1969, pp. 45-52.

15. Rock formations. (Sioux) Matson, 1972, p. 55-58. (Eskimo) Field, 1973, pp. 64-66. (Chuckee) Newell, 1970, 107-118. (Nez Perce) Matson, 1972, pp. 64-69; Heady, 1970, pp. 29-34, 57-61 & 95-100.

16. Wind Cave. (Oglala Sioux) Matson, 1972, pp. 39-42.

Global Catastrophy: Punishments and Renewals

1. How the world will end. (Tahltan) Leach, 1967, p. 135. (Eskimo) Newell, 1970, pp. 81-84.
2. Floods. (Chippewa) Leekley, 1965, pp. 35-49. (Eskimo) Caswell, 1968, pp. 88-95. (Pima) Baker, 1973, pp. 8-15. (Arikara) Brown, 1979, pp. 65-70. (Eskimo) Newell, 1970, pp. 91-98.

Natural Order

1. How water is controlled. (Tlingit) Hardendorff, 1969, pp. 121-126; Martin, 1951, pp. 6-18; Martin, 1975, pp. 11-15; Haviland, 1979, pp. 40-43.
2. Winds. (Eskimo) Cothran, 1956, pp. 13-17. (Hawaiian) Thompson, 1966, pp. 70-75. (Eskimo) Newell, 1970, pp. 119-124. (Nez Perce) Heady, 1970, pp. 62-66.
3. Rains. (Lillooet) Leach, 1967, pp. 31-33.
4. Clouds and Mists. (Lakota) Yellow Robe, 1979, pp. 24-30. (Nez Perce) Heady, 1970, pp. 21-24. (Eskimo) Hardendorff, 1969, pp. 56-57; Caswell, 1968, pp. 68-71. (Cherokee) Bell, 1955, pp. 78-80; Cathon, 1962, pp. 133-134
5. Thunder and Lightning. (Eskimo) Newell, 1970, pp. 69-74; Field, 1973, pp. 18-20; Maher, 1969, pp. 99-105. (California) Curry, 1965, pp. 68-79. (Lakota) Yellow Robe, 1979, pp. 24-30.
6. Earthquakes. (California) Fisher, 1957, pp. 10-15. (Eskimo) Caswell, 1968, pp. 96-106.
7. Determination of Seasons. (Shoshone) Heady, 1973, pp. 35-38. (tribe unspecified) Field, 1929, pp. 32-39; Bleecker, 1946, pp. 153-160. (Kootenai) Cothran, 1954, pp. 76-83; DeWit, 1979, pp. 113-117. (Plains) Jones, 1974, pp. 1-3. (Micmac) Haviland, 1979, pp. 58-59; Toye, 1969; Macmillan, 1918; DeWit, 1979, pp. 39-43. (Chippewa) Brown, 1979, pp. 79-80; Cathon, 1962, pp. 130-132. (Canadian) Littledale, 1970, pp. 111-120; Macmillan, 1918.
8. Night and day/Light and dark. (Eskimo) Newell, 1970, pp. 63-68 & 85-90; Field, 1973, pp. 10-11. (Menomoni) Hardendorff, 1968, pp. 22-23. (Nez Perce) Heady, 1970, pp. 25-28. (Iroquois) Leach, 1967, pp. 75-76. (Creek) Brown, 1979, pp. 62-63. (Modoc) Cunningham, 1939, pp. 16-18. (Chuckchee) Leach, 1967, p. 41-43.

Human Origins

1. From earth. (Greenland Eskimo) Leach, 1967, pp. 37-38.
2. From blood. (Yuchi-Creek) Leach, 1967, pp. 15-16.
3. From bone. (Chuckee) Leach, 1967, pp. 41-43
4. Coyote creates. (tribe unspecified) Frost, 1943, pp. 161-164.

Ordering of Human Life

1. Origin of death. (Yokuts) Leach, 1967, p. 44. (tribe unspecified) Marriott, 1947, pp. 31-35. (Swinomish) Matson, 1972, pp. 119-123. (Greenland Eskimo) Leach, 1967, pp. 37-38. (Nez Perce) Heady, 1970, pp. 109-118. (Blackfeet) Brown, 1979, pp. 59-62.
2. Language. (Seneca) Brown, 1979, pp. 71-74.
3. Origin of disease. (Cherokee) Bell, 1955, pp. 7-12. (Pima) Baker, 1973,

- pp. 8-15. (tribe unspecified) Chafetz, 1964, pp. 15-26.
 4. Why women chatter. (Shasta) Fisher, 1957, pp. 104-110.
 5. Origin of hatred. (Nez Perce) Matson, 1972, pp. 69-75.
 6. Miscellaneous human characteristics. (Chuckchee) Leach, 1967, pp. 41-43. (Penobscot) Gruenberg, 1955, pp. 333-335.

Human Culture

1. Environment. (Eskimo) Melzak, 1967, pp. 51-59 & 1970, pp. 61-69; Cothran, 1956, pp. 3-7; Caswell, 1968, pp. 64-67; Cunningham, 1939, pp. 19-23; Maher, 1969, pp. 39-54. (Northwest) Martin, 1951, pp. 6-18; Martin, 1975, pp. 17-25; Haviland, 1979, pp. 44-51. (Haida) Robinson, 1976, pp. 35-40. (Navajo) Hulpach, 1965, pp. 12-16. (Yuchi-Creek) Leach, 1967, pp. 15-16.
2. Fire. (Luiseno) Leach, 1967, p. 108. (Chuckchee) Leach, 1967, pp. 41-43. (Cherokee) Bell, 1955, pp. 15-18 & 41-43; Leach, 1967, pp. 49-51; Parker, 1970, pp. 85-94; Scheer, 1968, pp. 25-30. (Eskimo) Newell, 1970, pp. 91-98. (Catawba) Leach, 1967, pp. 47-48. (Shoshone) Heady, 1973, pp. 30-34. (Hawaiian) Colum, 1937, pp. 38-64; Cothran, 1956, pp. 45-48; Williams, 1979, pp. 25-29. (Menominee) Cunningham, 1939, pp. 33-36. (Chippewa) Leekley, 1965, pp. 11-19. (Creek) Brown, 1979, pp. 70-71. (Hitchiti) DeWit, 1979, pp. 49-51. (Eskimo) Gillham, 1943, pp. 44-50. (Karak) Fisher, 1957, pp. 46-53. (tribe unspecified) Hardindorff, 1969, pp. 73-77; Haviland, 1979, pp. 52-56. (Wintu) Belting, 1961, pp. 34-36. (Crow) Robinson, 1976, pp. 79-84. (California) Curry, 1965, pp. 51-79. (Paiute) Hodges, 1972. (Nisqually) Matson, 1972, pp. 28-31.
3. Game. (tribe unspecified) Fisher, 1957, pp. 96-102. (Nez Perce) Heady, 1970, pp. 50-56; Martin, 1950, pp. 46-53.
4. Plants and Crops—Agriculture (California) Curry, 1965, pp. 38-47. (Shoshone) Heady, 1973, pp. 46-50. (Eskimo) Newell, 1970, pp. 99-106. (Cherokee) Bell, 1955, pp. 7-12. (Hawaiian) Thompson, 1966, pp. 53-59.
5. Weapons. (Shoshone) Heady, 1973, pp. 85-88.
6. Origin of stories. (Seneca) Cunningham, 1939, pp. 3-15; DeWit, 1979, pp. 5-9. (Iroquois) Bruchac, 1975, pp. 15-16.
7. Origin of language. (Snohomish) Matson, 1968, pp. 90-93.

Traditions—Customs, Ceremonies, Sacrifices, Families

1. Social ceremonies. (tribe unspecified) Chafetz, 1964, pp. 27-41. (Kutenia) Arnott, 1971, pp. 1-5. (Oglala Sioux) Matson, 1968, pp. 36-39. (Cheyenne) Brown, 1979, pp. 46-59.
2. Dancing. (Eskimo) Haviland, 1979, pp. 101-106. (Kwakiutl) Curtis, 1978, pp. 21-30.
3. Worship. (Skagit) Matson, 1968, pp. 114-117.
4. Clan totems. (Tsimshian) DeWit, 1979, pp. 137-142; Harris, 1963, pp. 5-30; Martin, 1951, pp. 43-46; Martin, 1975, pp. 53-60; Toye, 1969.
5. Hospitality. (Tlingit) Cothran, 1956, pp. 8-12.

Differentiation of Peoples

1. Tribal Origins. (Pima) Baker, 1973, pp. 25-32. (Nez Perce) Heady,

1970, pp. 101-108. (Eskimo) Caswell, 1968, pp. 24-25. (Swinomish, Kikiallus) Matson, 1968, pp. 31-38. (Makah) Matson, 1972, pp. 106-109. (Yokut) Fisher, 1957, pp. 36-45. (Tsimshian) Harris, 1963, pp. 115-148.

2. Origins of different peoples. (Eskimo) Caswell, 1968, pp. 24-25.

Creation of Animal Life

1. Origins of animals. (tribe unspecified) Haviland, 1979, pp. 97-100.

2. Origins of mammals. (Lakota) Yellow Robe, 1979, pp. 42-51. (Nez Perce) Heady, 1970, pp. 119-124. (Eskimo) Melzack, 1967, pp. 77-84. (tribe unspecified) Hardendorff, 1969, pp. 42-43; Field, 1929, pp. 3-12; Marriott, 1947, pp. 12-24. (Apache/Comanche) Brown, 1979, pp. 63-65. (Kond) Leach, 1967, pp. 66. (Sioux) Matson, 1972, pp. 53-55. (Blackfeet) Brown, 1979, pp. 98-101.

3. Origins of birds. (Chippewa) Leekley, 1965, pp. 92-99. (Canadian) Frost, 1943, pp. 287-294. (Hawaiian) Williams, 1979, p. 9. (Iroquois) Jones, 1972. (tribe unspecified) Haviland, 1979, pp. 97-100. (Eskimo) Gillham, 1943, pp. 35-40; Maher, 1969, pp. 79-88.

4. Origins of insects. (Northwest) Harris, 1963, pp. 89-111; Martin, 1951, pp. 38-42; Martin, 1975, pp. 45-52. (Shoshone) Heady, 1973, pp. 65-69. (Zuni) Brown, 1979, pp. 115-123.

5. Origins of fish. (Eskimo) Caswell, 1968, pp. 26-34, 41-47 & 54-56; Haviland, 1979, pp. 60-64; DeWit, 1979, pp. 39-46; Field, 1973, pp. 46-48; McDermott, 1975; Melzack, 1967, pp. 27-34; Maher, 1969, pp. 17-30 & 79-98. (Chippewa) Leekley, 1965, pp. 79-91. (Northwest) Martin, 1951, pp. 6-18 & 55-60; Martin, 1975, pp. 11-15 & 83-88; Haviland, 1979, pp. 40-43; DeWit, 1979, pp. 149-154; Robinson, 1976, pp. 103-112. (Pomo) Fisher, 1957, pp. 80-86. (Hawaiian) Thompson, 1966, pp. 45-52; Cothran, 1956, pp. 49-52. (Iroquois) Jones, 1972. (Haida) Harris, 1963, pp. 33-58.

Animal Characteristics

(NOTE: Animal characteristics are given by tribe rather than by minor motif.)

1. Acoma: Belting, 1961, pp. 93-94.

2. Assiniboin: Belting, 1961, pp. 37-38 & 85-88.

3. Caddo: Brown, 1979, pp. 26-28.

4. Cherokee: Bell, 1955, pp. 4-7, 18-21, 41-47, 51-53, 61-64, 67-69, 70-73 & 78-83. Scheer, pp. 33-36, 43-46, 55-60 & 62-74. Belting, 1961, pp. 15-25, 57-59 & 62-6. Cathon, 1962, pp. 133-4.

5. Chippewa: Leach, 1967, p. 96. Leekley, 1965, p. 27-34 & 79-91. Haviland, 1979, pp. 19-20.

6. Cree: Belting, 1961, pp. 67-70.

7. Creek: Belting, 1961, pp. 15-25, 46-50 & 54-56. Brown, 1979, pp. 62-63.

8. Eskimo: Gillham, 1943, pp. 17-50, 68-105, 117-120 & 127-134. Melzack, 1969, pp. 21-25; 1970, pp. 47-60. Gruenberg, 1948, pp. 113-118. Cathon, 1962, pp. 48-52. Caswell, 1968, pp. 33-34. Newell, 1970, pp. 75-80.

9. Hawaiian: Thompson, 1969. Cothran, 1956, pp. 45-48.

10. Hopi: Courlander, 1978, pp. 46-49 & 60-62.

11. Iroquois: Bruchac, 1975, pp. 26-29. Leach, 1967, pp. 75-76.

12. Karok: Fisher, 1957, pp. 46-53 & 74-79. Belting, 1961, pp. 76-78.
13. Kiowa: Marriott, 1947, pp. 25-35.
14. Lipan and Apache: Belting, 1961, pp. 26-28. Leach, 1967, p. 62.
15. Luiseno: Leach, 1967, p. 112.
16. Makah: Matson, 1972, pp. 106-109.
17. Navaho: DeWit, 1979, pp. 75-79.
18. Nez Perce: Heady, 1970, pp. 25-28, 50-56 & 81-85.
19. Nisqually: Matson, 1972, pp. 19-28.
20. Northwest: DeWit, 1979, pp. 142-149. Martin, 1951, pp. 27-30. Martin, 1975, pp. 37-43. Matson, 1972, pp. 115-21.
21. Passamaquoddy: Leach, 1967, p. 97.
22. Pawnee: Belting, 1961, pp. 42-45.
23. Penobscot: Leach, 1967, pp. 109-110.
24. Piegan: Hulpach, 1965, pp. 139-141.
25. Pima: Baker, 1973, pp. 43-49 & p. 146. Brown, 1979, p. 146.
26. Pueblo: Cothran, 1956, pp. 44-48. Dolch, 1956, pp. 79-85.
27. Sahaptian: Belting, 1961, pp. 74-75.
28. Seneca: Parker, 1970.
29. Shasta: Fisher, 1957, pp. 24-25.
30. Shawnee: Belting, pp. 71-73.
31. Shoshone: Heady, 1973, pp. 24-29, 39-45, 51-53, 61-64, 80-84. Hulpach, 1965, pp. 99-100.
32. Tahltan: Belting, 1961, pp. 37-8 & 85-88.
33. Tewa: Belting, 1961, pp. 89-92.
34. Upper Skagit: Matson, 1972, pp. 41-48 & 77-82.
35. Wishok and Wiyot: Leach, 1967, p. 84.
36. Yokut: Fisher, 1957, pp. 36-45.
37. Zuni: DeWit, 1979, pp. 83-87.
38. Tribes unspecified: Field, 1929, pp. 62-70. Leekley, 1965, pp. 64-68. Marriott, 1947, pp. 62-70. Martin, 1950, pp. 23-30. Bierhorst, 1969, pp. 42-46. Green, 1965, pp. 55-56.

Origins of Plants

1. Flowers. (Cherokee) Bell, 1955, pp. 78-80; Cathon, 1962, pp. 133-134. (Shoshone) Heady, 1973, pp. 42-45.
2. Trees. (Hawaiian) Cothran, 1956, pp. 49-52.
3. Moss. (Choctaw) Arbuthnot, 1961, p. 392.
4. Corn. (Iroquois) Leach, 1967, p. 100.
5. Berries. (Cherokee) Bell, 1955, pp. 23-26; Hulpach, 1965, p. 131; Cathon, 1972, pp. 19-21.
6. Lichen. (tribe unspecified) Leekley, 1965, pp. 64-68.
7. Tobacco. (Canada) Frost, 1943, pp. 283-286.

Plant Characteristics

1. Why leaves fall. (Canada) Frost, 1943, pp. 287-294. (Cherokee) Bell, 1955, pp. 4-7; Leach, 1967, p. 125. (Micmac), 1967, pp. 133-134.
2. Why conifers remain green. (Seneca) Parker, 1970, pp. 153-158.

ANIMAL MOTIFS

Mythical Animals

1. Monsters and monster animals. (Hawaiian) Thompson, 1966, pp. 65-69; Berry, 1968, pp. 13-21. (Chinook) Robinson, 1976, pp. 73-78. (Arikara) Brown, 1979, pp. 22-26. (Seneca) Parker, 1970, pp. 183-189.
2. Beast men. (Swinomish) Matson, 1968, pp. 117-119.
3. Birds. (Samish) Matson, 1968, pp. 19-27.

Magical Animals

1. Geese. (Eskimo) Gillham, 1943, pp. 1-16.
2. Dog. (Swinomish) Matson, 1968, pp. 85-90.

Animal Warfare

Games. (Cree) Brown, 1979, p. 147. (Creek, Cherokee) Belting, 1961, pp. 16-25. (Cherokee) Bell, 1955, pp. 87-91.

Animal Familiars

1. Helpful animals. (Northwest) Martin, 1951, pp. 31-37; Martin, 1975, pp. 75-82. (Navajo) Brown, 1979, pp. 28-39. (Southeast) Arnott, 1971, pp. 23-30.
2. Healing by animals. (Iroquois) Jones, 1972. (Lakota) Yellowrobe, 1979, pp. 66-85.
3. Animals saving or caring for people. (Iroquois) Bruchac, 1975, pp. 51-57 & 59-61. (Sioux) Matson, 1968, pp. 51-52. (tribe unspecified) Bierhorst, 1969, pp. 65-70.
4. Animals as paramours. (tribe unspecified) Manning-Sanders, 1963, pp. 54-58.
5. Marriage to animals. (Iroquois) Cunningham, 1939, pp. 95-97. (Eskimo) Melzack, 1970, pp. 53-60. (Caddo) Brown, 197 , pp. 123-128. (Abenaki) Crompton, 1975.

Animal Habits

Animals call the dawn. (Hopi) Courlander, 1978, pp. 126-128; Brown, 1979, pp. 14-18.

Giant Animals

Whales. (Eskimo) Maher, 1969, pp. 31-38.

DECEPTION MOTIFS

Games and Contests

Contests won by deception. (Cherokee) Bell, 1955, pp. 58-60 & 67-69; Scheer, 1968, pp. 37-42 & 55-57. (Seneca) Parker, 1970, pp. 165-186; Bruchac, 1975, pp. 20-22. (Iroquois) Bruchac, 1975, pp. 23-25. (Plains) Jones, 1974, pp. 15-22. (Yokut) Cothran, 1954, pp. 56-64. (tribe unspecified) Marriott, 1947, pp. 45-54.

Cooperative Undertakings and Bargains

1. Deceptive division of profits. (tribe unspecified) Baker, 1978. (Abenaki) DeWit, 1979, pp. 183-187. (Pueblo) Golch, 1956, pp. 17-25.
2. Deceptive bargains. (Hawaiian) Thompson, 1969, pp. 80-85.

Lies and Cheats

1. Hoodwinking to accomplish goal. (Eskimo) Caswell, 1968, pp. 41-47;

Maher, 1969, pp. 17-30 & 131-137; Gillham, 1943, pp. 51-67. (Hawaiian) Thompson, 1969, pp. 23-27; Colum, 1937, pp. 92-96; Colum, 1966, pp. 44-49; Mohan, 1964.

2. Thefts. (Seneca) Parker, 1970, pp. 109-116.

Deceptions to Control or to Escape Control of Others

1. Escape deceptions. (Eskimo) Cothran, 1956, pp. 22-24; DeWit, 1919, pp. 174-177; Gillham, 1943, pp. 121-126; Melzack, 1967, pp. 13-20; Melzack, 1970, pp. 71-78. (Sia) DeWit, 1979, pp. 127-130. (Southern Plains) Robinson, 1976, pp. 41-52. (tribe unspecified) Firehunder, 1963; Matson, 1972, pp. 103-106. (Cherokee) Bell, 1955, pp. 80-86; Scheer, 1968, pp. 31-32, 47-50 & 65-68; Belting, 1961, pp. 29-33. (Seneca) Parker, 1970, pp. 68-81. (Lakota) Yellow Robe, 1979, pp. 52-56. (Hawaiian) Thompson, 1969, pp. 14-22.

2. Capture deceptions. (Pueblo) Dolch, 1956, pp. 79-85. (Plains) Jones, 1974, pp. 15-22; Robinson, 1976, pp. 53-62. (Cherokee) Bell, 1955, pp. 54-56; Scheer, 1968, pp. 47-50. (tribe unspecified) Haviland, 1979, pp. 71-75; Marriott, 1947, pp. 47-54; Bierhorst, 1969, pp. 42-46. (Northwest) Harris, 1963, pp. 89-111. (Wintu) Cothran, 1954, pp. 65-66. (Chippewa) Leekley, 1965, pp. 50-54. (Sioux) Matson, 1972, pp. 48-50; (Seneca) Parker, 1970, 43-51. (Lakota) Yellow Robe, 1979, pp. 86-93. (Dakota) DeWit, 1979, pp. 93-98. (Comanche) Brown, 1979, pp. 111-113. (Blackfeet) Hardendorff, 1969, pp. 82-84. (Shoshone) Heady, 1973, pp. 74-79.

Injury and Murder Deceptions

1. Murder by deception. (Nez Perce) Heady, 1970, pp. 90-94.

2. Self injury by deception. (Bruchac) 1975, pp. 31-33. (Cheyenne) (Noc-taw, Micmac) Hulpach, 1965, pp. 192-197. (Seneca) Parker, 1970, pp. 23-30 & 102-108. (Loucheux) Belting, 1961, pp. 13-15. (Pueblo) Cothran, 1954, pp. 44-48. (Nez Perce) Heady, 1970, pp. 67-74. (Chuckee) Newell, 1970, pp. 51-62. (Eskimo) Melzack, 1970, pp. 25-31; Edmonds, 1966, pp. 21-29. (Creek) Brown, 1979, pp. 106-109. (Lakota) Yellow Robe, 1979, pp. 86-93. (tribe unspecified) Leekley, 1965, pp. 69-75.

Humiliations, Entrapments, Bluffs, Disguises, Impostures, Hypocrisies

1. Deception into humiliating positions. (Creek) Brown, 1979, pp. 101-109. (tribe unspecified) Haviland, 1979, pp. 71-75. (Southern Plains) Robinson, 1976, pp. 41-52.

2. Deceiver falls into own trap. (Ojibwa) Cothran, 1954, pp. 84-89. (Eskimo) Gillham, 1943, pp. 51-67.

3. Deception through bluffing. (Cherokee) Bell, 1955, pp. 80-83; Scheer, 1968, pp. 65-68.

4. Deception through disguise. (Hopi) Curtis, 1978, pp. 73-80; (Cree) Curtis, 1978, pp. 61-69.

5. Deception through imposture. (Nez Perce) Martin, 1950, pp. 23-30.

6. Deception through hypocrisy. (Comanche) Curtis, 1978, pp. 54-57.

Archetypes: More recently, Jungian psychology has introduced

the idea of the archetype—a deep, intuitive knowing or memory—which accounts for the appearance of certain structures and motifs in stories. Archetypes themselves are structures (entities) which exist and operate in subconscious memory. They are mental models which organize such basic psychic realities as *way/path/road, clown/fool, hero, eternal youth, wise oldster, trickster, great mother, terrible mother/father, demon/devil/shadow, significant animal, healer, divine child and self* (archetypal figures) and *fulfillment, longing, satisfaction, belonging, envy, jealousy, hatred, initiation, success, isolation, transformation, abandonment, and sacrifice* (archetypal situations or conditions) (Hillman, 1975). Each archetype is a "constellation" of characteristics, "a complex network of psychic organization which includes dynamism, symbolism, and sense content, and whose center and intangible unifier is the archetype itself." (Neumann, 1972, p. 4.) Archetypes, according to Jung, are law-like, "a-priori conditioning factors" (Neumann, 1972, p. 4.) which determine aspects of individual human and cultural behavior.

The dynamic action of the archetype extends beyond the unconscious instinct and continues to operate as an unconscious will that determines the personality, exerting a decisive influence on the mood, inclinations, and tendencies of the personality, and ultimately, on its conceptions, intentions, interests, on consciousness and the specific direction of the mind. (Neumann, 1972, pp. 4-5)

Archetypes might be characterized as universal, typical, repetitive (conventional) patterns or structures—primary (primordial) mental models, hence psychic realities which exist for individuals and groups of individuals (Jung's "collective unconscious") (Hillman, 1975).

An oral literature is a vehicle for encoding archetypal memories. The archetypes are accessed and engaged through the invention and telling of stories. Neumann (1972) defines literatures and other symbolic forms of archetypal mental images (i.e., statuary and other visual art) as means by which the subconscious confronts human consciousness. Stories, story structures, and story contents are architectures which give substance to subconscious archetypal memories. Story structures alone, aside from their obvious organizational functions, have metaphoric properties; they represent primordial (archetypal) patterns: circles, cycles, spirals, windings, unwindings, repetitions, substi-

tutions, cause/effect chains, and chronological sequences. Story characters, actions, and circumstances are manifestations of the archetypal contents of the collective unconscious. Through "story," "storying," and storytelling, these (archetypal) patterns of the subconscious become visible and tangible. The (oral) literacy event in which stories are experienced is a communion between conscious and subconscious, in which people can *know about* (see and hear) what they already know. The storytelling is a shared witnessing; it confirms a collective reality, belonging, and group ownership of a cosmology. Literary activity is a conscious summation of cultural knowledge.

The following abbreviated motif listing (Thompson, 1955-58) provides sufficient argument for establishing the archetypal contents of oral literatures as a primary function of literary invention and activity and for such literary content as a primary cultural agenda for learning.

MYTHOLOGICAL MOTIFS: creator, gods, demigods and culture heroes, cosmology and cosmogony, earth topography, world calamities, establishment of natural orders, creation and ordering of human life, creation of animal/plant life, origins of animal/plant characteristics.

ANIMAL MOTIFS: mythical animals, magic animals, animals with human traits, friendly animals, marriages of people to animals, fanciful traits of animals.

TABU MOTIFS: tabus connected with supernatural beings, sex tabus, eating/drinking/speaking/looking/touching tabus, class tabus, unique prohibitions and compulsions, punishments for breaking tabus.

MAGIC MOTIFS: transformations, enchantments and disenchantments, magic objects, magic powers and manifestations.

DEAD MOTIFS: resuscitation, ghosts, reincarnation, the soul.

MARVELS MOTIFS: otherworld journeys, marvelous creatures, extraordinary places/things/occurrences.

OGRES MOTIFS: kinds of ogres, falling into an ogre's power, ogres defeated.

TEST MOTIFS: tests of identity, truth, marriage, cleverness, prowess, fear, vigilance, endurance, survival, character; quests, nature of quests.

WISE AND FOOLISH MOTIFS: acquisition/possession of wisdom/knowledge, wise and unwise conduct, cleverness, fools/foolishness/absurdities, types of fools.

DECEPTION MOTIFS: contests, bargains, thefts, cheats, lies, escapes and captures, fatalities, self-injuries, humiliations, seductions and deceptive marriages, adultery, destruction of property, shams, bluffs, disguises, illusions, traps, impostures, hypocrisies, false accusations, villains and traitors.

REVERSAL OF FORTUNE MOTIFS: victory of youngest/weakest,

modesty rewarded, pride brought low.

ORDAINING THE FUTURE MOTIFS: judgements, decrees, oaths, vows, bargains, promises, prophecies, and curses.

CHANCE AND FATE MOTIFS: wagers and gambling, lucky and unlucky accidents, luck and fate.

SOCIETY MOTIFS: royalty, nobility, social orders/relationships, families, trades and professions, government, customs.

REWARD AND PUNISHMENT MOTIFS: deeds rewarded/punished, nature of rewards/punishments.

CAPTIVE AND FUGITIVE MOTIFS: captivities, rescues, escapes and pursuits, refuges and recaptures.

UNNATURAL CRUELTY MOTIFS: cruel relatives, murders and mutilations, sacrifices, abandonment, persecution.

SEX MOTIFS: love, marriage, married life, chastity and celibacy, illicit sexual relations, conception, birth, child care.

NATURE OF LIFE MOTIFS: life's inequalities.

RELIGIOUS MOTIFS: services and ceremonies, edifices and objects, sacred persons, beliefs, charity and charities, religious orders.

TRAITS OF CHARACTER MOTIFS: favorable/unfavorable traits.

HUMOR MOTIFS: discomfiture, disability, social classes/races/nations and nationalities, sex, drunkenness, lies and exaggerations.

MISCELLANEOUS MOTIFS: formulas, symbolism, heroes, unique exceptions, horror/terror, historical/genealogical/biographical.

Archetypal memory cannot be measured directly, cannot be constructed using conventional (atomistic, mechanistic) formal instruction, and cannot be reduced very easily to the forms of common scopes and sequences. Its origins and operations remain somewhat mysterious and emerge through the tangible evidences of human behavior and creative endeavor. The oral literature, oral stories and storytellings are such tangibilities. The fact of such activity ensures the "confrontation" of conscious and subconscious and the confirmation of primordial subconscious reality.

Conclusion

Storying is the making of symbol for otherwise inaccessible memory. An oral literature thus produced, its structure, its language, its content and its internal devices, does not constitute a "scientific" curriculum. (Making a science of a literature by "studying" it is not equivalent to experiencing authentic literacy events—*doing*— literature.) An oral literature is a cultural metaphor which represents, instead, that larger and more comprehensive universe of mind in and by which "science" itself is

known and judged. The modern debasing of oral literatures, hence cultural cosmologies, and the substitution of science for metaphor has resulted in the loss of one kind of truth—one legitimate human reality, and, perhaps, a loss of balanced perspective.

Formal education, in determining that myth and science have identical ends, and in replacing the truth of myth with the truth of science, has played a significant role in the removal of oral literatures to the frivolous and quaint provinces of "primitive" thinking. Native American peoples are not alone in losing contact with their oral literatures as a result of the experiences of formal schooling. But Indian cultures, perhaps, experience a different kind and degree of literary and cultural deprivation, and one which has more serious consequences for Native American children. The empirical curriculum is, in many ways, influenced by the archetypal contents and structures of the collective subconscious of western European cultures, because the curriculum is western European. And, though educators might devise different approaches for the instruction of Indian children, the curriculum and the nature of the system itself become metaphoric agents which work to impart a host of western European truths and to provide subtle confirmations of the subconscious realities of western European cultures. The style, structure and organization of "school" does not confirm the cosmologies of Native American groups.

The right introduction and employment of native literatures in formal educational settings might be, ultimately, a more powerful means of maintaining native cultures than specially tailored approaches to instruction of the worldview of a foreign (European) culture or to the study of tribal knowledge, habits, and lifestyles.

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Teaching Native American Literature

James R. Saucerman

The 1986 report of the Carnegie Forum's Task Force on Teaching as a Profession makes sweeping recommendations, even demands, for the "rebuilding" of America's educational system beyond literacy. Among the recommendations is that teachers must be able to think for themselves, must "be people whose knowledge is wide-ranging and whose understanding is deep" (p. 45).

Part of the way to develop such a teacher, once more of the brightest and best have been attracted to the profession, is to provide a

rigorous undergraduate curriculum that embraces a common core of history, government, science, literature, and the arts. That core should develop the essential skills of comprehension, computation, writing, speaking, and clear thinking. It should deepen appreciation of our history and culture, foster an understanding of the theory and appreciation of science and technology, develop aesthetic sensibilities, and inspire creative impulses. (p. 50)

The study of Native American literature cannot do all these things, but it can answer many needs. The teacher of junior and senior high school students in Indian communities must know

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the Native American literary heritage and forms of expression and be as sensitive as possible to the subtleties of images and themes. In addition, he or she must be alert to the shaping of a positive self-image in each student, a shaping often resident in literature. Then the teacher can make more appropriate selections of material and modes of presentation appropriate to the region, tribe, and community without limiting intellectual inquisitiveness. For example, sensitivity to the importance of one's name in developing good self concepts helps the teacher to avoid the blunder committed by the teacher in Phil George's short poem "Name Givaway" who insists on giving the foreign name of "Phil George" to her young student—refusing to recognize his real name: TWO SWANS ASCENDING FROM STILL WATERS.

While the Native American literature has existed, of course, since Native Americans have existed, not until the early 1970's did it finally break free of history and anthropology. No matter how well intentioned historians and anthropologists have been as individuals, or how inescapably important history and anthropology are to the literature, its recognition as more than curiosity and historical record has been a long time coming. But Native American literature has arrived and should be used.

This chapter does not provide specific lesson plans or course designs. Those are left to teachers who can draw upon their own backgrounds and experiences. However, such groups as the Council for Indian Education, Box 31215, Billings, MT 59107, and the Navajo Curriculum Center at Rough Rock Demonstration School, Rough Rock, AZ, 86503 offer assistance. For example, the Navajo Curriculum Center publishes a two-volume *Teaching Guide for Indian Literature* (Campbell, 1983). Even so, it rests with teachers to know enough to select appropriate literary texts for their students. With that understanding, the purpose of this chapter is threefold:

1. To provide background on the nature of Native American literature that can guide the initial direction a teacher might take.
2. To identify as basic core some Native works which have become (or are becoming) classics which are inescapable in a review of the literature regardless of what other valuable and interesting selections may be included in a teacher's reading assignments.
3. To identify useful secondary source materials available to assist teachers understand the nature of Native American

literature and select reading appropriate to individual classes or situations.

Native American Literature as part of World Literature

As with all good literature, the best Native American literature strikes at the heart of essential truths and how they are derived from our relationships to the spiritual presence, to the landscape, and to each other, and is, as well, highly personal. Literature is the expression of the universal artist engaging the world around him or her: the voice of W.B. Yeats, William Faulkner, Frank Kawabata, Ovid, Scott Momaday, Simon Ortiz, or Leslie Silko. The personal nature comes from a characteristically intense participation of the individual with the wholeness of the surroundings, or the fragmenting failure to find such a wholeness. The Native American voice speaks from its own world in America and from the unique position of being native to the land, even while sometimes separated from it by the dominant, white, modern American society.

The voice evokes the presence of "What Moves-moves" described by Kenneth Lincoln in the introduction to *Native American Renaissance*. In spite of the rich, varied texture of Indian literature, this "conception of the human voice invoking power" (Lincoln, p. 2) is not only pan-Indian, as Lincoln would have it, it is pan-human. To lead students into the universality and uniqueness of Native American literature, a teacher must recognize the essential truths localized in the particulars of existence, whether given in biography or in a highly fanciful poem or story.

Ralph Waldo Emerson writes in *Circles*, "Our life is an apprenticeship to the truth that around every circle another can be drawn; that there is no end in nature, but every end is a beginning" (p. 263). That idea is exemplified in much Native American literature. Emerson adds,

The life o. man is a self-evolving circle, which, from a ring imperceptibly small, rushes on all sides outwards to new and larger circles, and that without end. The extent to which this generation of circles, wheel without wheel, will go, depends on the force of truth of the individual soul. (pp. 264-65).

Native American literature, too, records the individual soul's inward search of itself, and the rushes of that soul outward through many circles to the further reaches of our encircled existence where it shares a commonality with the world at large. Within that most expansive circle are smaller circles of communal tribal experiences. Native American literature lives, as does the literature of many cultures, at each extension of awareness, from the personal, self-evolving circle outward to larger, more inclusive circles, gaining strength from both the universal values and from its own more particularly shared tribal values. The figure of the circles within circles is appropriate because Native American literature does not lie outside the established world literature, but like each cultural circle or entity has its unique being within that larger circle, a part of it rather than *apart* from it.

This chapter deals with the pan-Indian reaches of the circle rather than the inner circles of regional and tribal literatures that give life to individual pieces. The general reviews, suggestions, and directions given in this chapter cannot answer all needs. Particular selections, reading assignments, and themes are left to teachers who, with the help of their own experience and books suggested in this chapter, can select readings most appropriate to their region and students.

If we were to teach a course in so-called world literature, which often means "Literature of the Western World" (perhaps from Ancient Greeks to that of Modern Europe), all of us would recognize and accept the impossibility of adequate, thoroughly-complete studies of all literature within that domain, that circle. Recognizing that impossibility, we might accept the selectivity of the course; so must we not demand of any one class an in-depth study of all Indian literatures of all nations and all time. The governing necessity must be the same as that accepted for a course in literature of the Western World, along with the same freedom to choose pieces most appropriate to the objective of the class.

One favorable comment about Nathaniel Hawthorne's works (*The Scarlet Letter*, for instance) is that Hawthorne cannot keep the past out of the present or the present out of the past. This is also true of Native American literature—whether an ancient song of wholeness or a contemporary story of struggle within a fragmented modern world. Abel's struggle in *House Made of Dawn* forms a classic example. Abel's fractured life is made

whole through his returning to the values of the natural rituals, especially the restorative "Navajo Night Chant," and the healing power of the words. Momaday's conscious use of ancient rituals is perhaps the most obvious. But the importance of the accumulation of past literature as it informs the present dares not be lost: we must not think the past exists in present literature only in direct borrowings. The teacher of Native American literature must constantly be aware of two worlds: the ancient tribal world and today's technological world. Many conflicts and the resolutions of those conflicts in the literature generate from the tensions between those two worlds, whether in Phil George's short poem, in Charles Eastman's autobiographical accounts, in Scott Momaday's *House Made of Dawn*, in Leslie Silko's *Ceremonies*, in John Mathew's *Sundown*, in Mourning Dove's romances, or in the dynamic contemporary poetry of Simon Ortiz or Wendy Rose.

One of the best tools for unlocking the ancient tribal values and the new, re-created aesthetic participation is Owen Barfield's book *Saving the Appearances*. Although he does not discuss Native American literature specifically, Barfield offers a concept and a vocabulary to help us better understand the literature.

The core of Barfield's argument in *Saving the Appearances* lies in two closely related concepts. First, the difference between the tribal outlook toward nature and the "modern technological" outlook is more than merely a difference in thinking about phenomena (which he labels alpha thinking); it is also a difference in figuration, the process by which the mind constructs phenomena from sense experience. As modern readers of ancient myths and tales, "we are in contact with a different kind of thinking and a different kind of perceiving altogether" (Barfield, p. 29) because we experience not with our impartial senses alone but with other things such as "mental habits, memory, imagination, feeling and will" (p. 20). Furthermore, "the striking difference between primitive figuration and ours is that the primitive involves 'participation,' that is, an awareness, which we can no longer have, of an extra-sensory link between the percipient and the representation" (p. 34). The relationship between the early tribal poet and the outer world is not the same as the relationship that our mechanomorphic consciousness might assume. Early man had a participation in a world which, for him, was not "outer" at all.

Because phenomena are collective representations, they change

from one era to another, from one culture to another. This is Barfield's second major concept, "evolution of consciousness." Barfield argues that, just as there has been biological evolution, so has there been an evolution of consciousness which causes us to differ in our figuration of phenomena. That evolution has caused particles to become separate, unrepresented objects existing independently of our participation. This path toward nonparticipation, toward isolation, in the Euro-American world leads from the emergence of Greek reflective thought and the direct and purposeful rejection of participation in ancient Israel, to the modern scientific revolution which made a fait accompli of the detachment of the outer from the inner worlds. Without denying either tribal or modern scientific phenomena, awareness of the history of this evolution of consciousness can help us to imaginatively recreate another kind of participation which Barfield calls "final" participation, a symbol-creating activity akin to nineteenth-century Romantic imagination that had Goethe as a patriarch and Samuel Taylor Coleridge and Ralph Waldo Emerson among its disciples.

Native American literature often makes use of the remembered original participation and the re-created final participation which it shares with all great literatures worldwide. Failure of the reader to recognize this participation creates a separation that can lead to a weakened understanding of contemporary writers who aesthetically restore participation.

Choosing a basic core of Indian Literature

What does a junior high or senior high school student care about the Barfieldian analysis of phenomena reviewed above? Not much. The literature must speak for itself if the student is to respond. However, teachers must know and care if they are to focus certain historical or critical light on individual selections so students may read the literature with greater understanding and enjoyment.

A standard anthology would be the best source for early myths and folk tales to be read in either junior or senior high, although the reading level would have to be carefully monitored. Selecting poetry creates more of a problem even though the number of excellent poems appearing in anthologies is a positive development of the last decade. The problem arises when poems a teacher wishes to use in class are not always to be found in a single anthology. For example, Ray Young Bear's fine poem "Morning-

"Talking Mother" is in the *Viking Portable*, as is James Welch's poem "Surviving;" however, neither is in Sanders and Peek, but Sanders and Peek include Scott Momaday's "Angle of Geese" and good poems by Patty Harjo, Simon Ortiz, and James Welch. Joy Harjo's poem "Are You Still There" appears in yet another anthology. (All are appropriate for high school, perhaps even junior high.) The problem is indigenous to literature texts generally, for one typically finds that an English or American literature anthology includes some but not all of the poems by John Donne or Emily Dickinson that a teacher might wish to include in a course. The same principle applies to short stories. For instance, the collaborative story "Chee's Daughter," by Juanita Platero and Siyowin Miller, appears in some anthologies but not all standard ones, yet it is a very good story to help form a core reading list for junior or senior high school students. The best solution is to select (when possible) a useful anthology then supplement it.

The best assistance in selecting reading materials comes from the bibliographies compiled by Anna Stensland (1979), Paula Gunn Allen (1983), Andrew Wiget (1985), and Colonese and Owen (1985). These bibliographies offer the best help in selecting primary and secondary Native American writing. Most of these bibliographies contain a core of autobiographies and novels appropriate to junior and senior high school students. Stensland most clearly identifies and suggests the appropriate level of the literary works.

In addition to what may be found in anthologies, a brief core reading list of biography and autobiography would include Charles Eastman's *Indian Boyhood* (1902), Emerson Blackhorse Mitchell's *Miracle Hill* (1967), and John Neihardt's recounting of Black Elk's life story. A core of novels (and romances) would include D'Arcy McNickle's *Runner in the Sun* (especially for junior high), his *Surrounded* (1936), and Janet Hale's *The Owl's Song* (1976). Stensland also lists Momaday's *House Made of Dawn* (for inclusion in high school classes). That novel is, to date, the single outstanding novel by a Native American; however, it could prove difficult reading for students and would demand carefully helping them through its stylistic features.

To our good fortune, recent years have brought wider publication opportunities for Native American writers and publication of a number of books and articles extremely useful to teachers of Native American literature. Paula Gunn Allen's *Studies in*

American Indian Literature includes a list of periodicals which typically publish works by Native Americans and scholarship about Native American literature. Among the most accessible and useful of these are:

American Indian Culture and Research Journal. American Indian Studies Center, 3220 Campbell Hall, University of California, Los Angeles, CA 90024.

American Indian Quarterly. Native American Studies, University of California, Berkeley, CA 94720.

Blue Cloud Quarterly. Marvin, SD 57251.

Journal of American Folklore. 1703 New Hampshire Ave., NW, Washington, DC 20009.

MELUS (Multi-Ethnic Literature of the United States). Department of English, University of Cincinnati, Cincinnati, OH 45221.

Studies in American Indian Literature. Department of English and Comparative Literature, Columbia University, New York, NY 10027.

Sun Tracks: An American Indian Literary Annual. Department of English, University of Arizona, AZ 85721.

Western American Literature. Department of English, UMC 32, Utah State University, Logan, UT 84322.

Allen lists another twenty titles and should be consulted for the full range. She also lists (pp. 313-315) "Special Issues of Periodicals" devoted to one or more aspects of Native American writing.

The bibliographies that follow list major anthologies of Native American writing and books about Native American literature which contain material that should prove useful as general studies or particular advice. These are highly selective lists, of course, and one should consult bibliographies included in most volumes and those annual bibliographies appearing in journals. The annotations suggest the principal strengths and possible weaknesses of each text.

The teacher of Native American literature must face several questions: What makes a circle within the grander circle distinctly Native American? What shared basic assumptions are enclosed within that circle, whether unique to Native American literature or not? What shared values and modalities give power to the particular forms? The answers often arise from the students' responses to the literature.

Selected bibliographies and scholarship for further reading

Allen, Paula Gunn. (1983). *Studies in American Indian literature: Critical essays and course designs*. New York: Modern Language Association.

This volume follows Stensl nd's original work by a decade as the next major study of its type, but is aimed primarily at college level courses; therefore, teachers should not expect direct application to junior and senior high school. However, the forty page "Works Cited" section, the outstanding essays by such scholars as Paula Gunn Allen, Elaine Jahner, Gretchen Bataille, LaVonne Ruoff, Linda Hogan, and Patricia Smith offer substance valuable to any teacher of Native American literature regardless of level. The chapter designations are "Oral Literature, Personal Narrative, Autobiography, and Intermedial Literature"; "American Indian Women's Literature"; "Modern and Contemporary American Literature"; and "The Indian in American Literature." A useful "Resources" section contains a bibliographical essay titled "A Guide to Anthologies, Texts, and Research"; a selected list of periodicals which publish American Indian literary works and scholarly articles about the literature; a further list of periodicals which have devoted special issues to Indian literature; and a selected list of presses which often publish Indian works.

The book is an extensive, inescapable volume to have in any library. However, it is best used in conjunction with other resources such as Andrew Wiget's or Kenneth Lincoln's listed below.

Chapman, Abraham. (Ed.). (1975). *Literature of the American Indians: Views and Interpretations: A gathering of Indian memories, symbolic contexts, and literary criticism*. New York: New American Library.

This volume has served teachers well since its publication; partly because of the range of material suggested by the long subtitle. That range is further demonstrated by inclusion in the set of twenty-six selections such figures as John Stands in Timber, N. Scott Momaday, Vine Deloria, Jr., Franz Boas, Mary Austin, and William Bevis. Paula Gunn Allen's excellent essay "The Sacred Hoop: A Contemporary Indian Perspective on American Indian

Literature" stands out from among other very good essays in the volume, as does N. Scott Momaday's address "The Man Made of Words" and William Bevis's fine essay on the problems of translating poetry from one culture to another.

Colonese, Tom and Louis Owen. (1985). *American Indian novelists: An annotated bibliography*. New York: Garland Press.

The preface to this bibliography states "This selected bibliography is intended as an aid to students of the American Indian novel and as a guide to the rapidly expanding volume of critical material dealing with Indian novelists" (p. ix). The entries include novelists writing in the 1920's and 30's such as Mourning Dove (1888-1936), John Joseph Mathews (1894-1979), and D'Arcy McNickle (1904-1977) as well as contemporaries such as N. Scott Momaday, Leslie Silko, and James Welch. For each novelist there is a biographical paragraph, one-paragraph synopses of that author's novels, brief listing of other works by that author, and one-paragraph responses of other scholars of Native American literature, Charles Larson, Anna Stensland, Simon Ortiz, Paula Gunn Allen, and Kenneth Lincoln among others. Entries range from two pages for Dallas Chief Eagle, to five pages for D'Arcy McNickle, to nearly twenty pages for N. Scott Momaday.

Lincoln, Kenneth. (1983). *Native American Renaissance*. Berkeley and Los Angeles: University of California.

The introduction, "Sending a Voice," sets the reader on the track of Lincoln's theme. The volume's nine chapters cover the expected range from "Ancestral Voices in Oral Tradition" to "The Now Day Indi'ns." It also includes a useful selective bibliography of primary Native American works and scholarly studies of the literature. Lincoln has been faulted for being too selective, for omitting essential scholarship, and for his "poetic-like" writing style; nonetheless, this book is informative and rewarding to read, an outstanding addition to a personal or school library.

Stensland, Anna Lee. (1979). *Literature by and about the American Indian: An annotated bibliography* (2nd ed.). Urbana, IL: National Council of Teachers of English.

This is the major volume published by NCTE which has served teachers so well since its first edition in 1973 and especially since

the present, even more useful, second edition. Its great advantage is suggested by the title, for the volume contains fully annotated bibliographies under the following headings: "Myth, Legend, Oratory, and Poetry," "Fiction," "Drama," "Biography and Autobiography," "History," "Traditional Life and Culture," "Modern Life and Problems," "Music, Arts and Crafts." In this second edition, the entries in each category are grouped under elementary, junior, and senior high school, and adult headings. Stensland's bibliography contains a section of capsule biographies of American Indian authors and sections with the self-explanatory titles "Guides to Curriculum Planning" and "A Basic Library of Indian Literature." One shortcoming of this otherwise outstanding bibliography is also among its strengths: the significant presence of non-Indian writers. However, the standard classic works of such writers as Charles Eastman, Scott Momaday, James Welch, and Leslie Silko (among others) are clearly present. It remains, for its purpose, a benchmark volume unrivaled to date.

Wiget, Andrew. (1985). *Native American Literature*. Boston: Twayne Publishers (G.K. Hall).

This recent contribution to the familiar Twayne's United States Authors Series is an extremely useful general study. Although the book is fairly well balanced, Wiget does pay more attention to contemporary Native American poetry than have some other scholars; therefore, this particular contribution helps fill in one of several gaps in Native American studies and has the added advantage of a later publication date. This volume, too, contains a useful selected bibliography.

Selected anthologies

Momaday, Natachee Scott (Ed.). (1976). *American Indian Authors*. Boston: Houghton, Mifflin.

This small volume (151 pages) is made excellent by the selections included. Although contemporary materials should be used to supplement it, this text would serve very well as a high school text. Not only does it include the inescapable figures (Charles Eastman, Emerson Mitchell, N. Scott Momaday, and James Welch), it also includes selections not often reprinted such as Thomas Whitecloud's fine Phi Beta Kappa award essay "Blue Winds Dancing."

Rosen, Kenneth (Ed.). (1974). *The Man to Send Rainclouds: Contemporary Stories by American Indians*. New York: Viking.

Stories by Leslie Silko and Simon Ortiz dominate this collection because of their quality and number. This collection, while a good one, could be supplemented for classroom use by more contemporary stories and a wider selection of writers.

Rosen, Kenneth (Ed.). (1975). *Voices of the Rainbow: Contemporary poetry by American Indians*. New York: Seaver Books (Viking).

This volume also is somewhat dated; however, it remains a more successful text than Rosen's collection of short stories because of the number of poets included and the range and excellence of the selections from the twenty-one poets represented.

Sanders, Thomas E. and Walter Peek. (1973). *Literature of the American Indian*. Beverly Hills: Benzinger Bruce & Glencoe. (Abridged paperback, 1976.)

This volume remains the best general anthology in spite of its 1973 date, in part because a relatively small section is devoted to contemporary literature. One of its greatest values lies in the treatment of early myth, folk literature, and oratory.

Velie, Alan R. (1979). *American Indian Literature: An Anthology*. Norman: University of Oklahoma Press.

One fascinating part of this anthology is the "Songs" section which includes a version of the Delaware "Walam Olum" in pictograph, Delaware text (anglicized), and English. Chippewa songs are included complete with musical notation.

Turner, Frederick W. (1973). *The Portable North American Indian Reader*. New York: Viking.

One of the formidable *Viking Portable* series, this includes a limited but very useful range of writing under the headings "Myths and Tales," "Poetry and Oratory," "Culture Contact," and "Image and Anti-Image." The "Myths and Tales" section seems strongest, although effective individual selections occur in each section.

Additional works cited

- Barfield, O. (1965). *Saving the appearances: A study in idolatry*. New York: Harcourt, Brace & World.
- Campbell, D. (1983). *Teaching guide for Indian literature* (Vols. 1-2). Kough Rock, AZ: Navajo Curriculum Center.
- Carnegie forum Task Force Report (1986, May 21) as excerpted in *The Chronicle of Higher Education*, 43-54.
- Emerson, R.W. (1981). *Selected writings of Emerson*, Donald McQuade (Ed.). New York: Modern Library (Random).

Social Studies and the Native American

C. Adrian Heidenreich

Following the Treaty of Lancaster in 1744 between the Six Nations and the Colony of Virginia, the colonists invited the Indians to send some boys to Williamsburg College where they would learn the ways of white people. After a day and night of consideration, the Indians thanked them heartily, but declined. They explained that some of their young people already had been sent to college, and when they returned, they were bad runners, weak, ignorant of living in the woods, and spoke the Indian languages imperfectly; they "were therefore neither fit for hunters, warriors, or counselors; they were totally good for nothing." In grateful sense of the offer from Virginia, however, the Six Nations invited the white people to send some boys to the Indians, who would "take great care of their education, instruct them in all we know, and make men of them" (Hughes, 1976, p. vii). Over a half century later, however, such perceptive leaders as President Thomas Jefferson still believed that once Indians learned about the white man's ways they would in self-interest give up their native cultures and adopt those of the non-Indian. When this had not been completed by 1889, Commissioner of Indian Affairs Thomas Jefferson Morgan stated in his Annual Report that

the reservation system belongs to "a vanishing state of things"... [and that] Indians must conform to "the White

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man's ways," peaceably if they will, forcibly if they must. They must adjust themselves to their environment, and conform their mode of living substantially to our civilization. This civilization may not be the best possible, but it is the best the Indians can get. They can not escape it, and must either conform to it or be crushed by it. (1889, p. 3-4)

A fundamental knowledge of the social studies might have led to caution in such statements and the assumptions which underlie them. Studies of Native American groups, of the nature of culture, of intercultural relations, and of the economic-political context of Indian-white relations were of great importance to development of American social studies (Voget, 1975). The Social Science Movement in America developed in the 1840s and 1850s, and the term "social studies" was used by the 1880s to refer to diverse studies of society. In 1905, the sociologist Thomas Jones (1908) wrote an article on "Social Studies" for *Southern Workman* magazine. He was an instructor on this subject at the Hampton Institute in Virginia, a boarding school which had been founded to teach Black and Indian students. His article stressed the value of studying civics, social welfare, and economics to help his students become acquainted with and adapt to the larger American society. Thomas Jones served as chairman of the National Education Association's Commission on Reorganization of Secondary Education, Committee on Social Studies from 1913 to 1916 when that organization gave official sanction to the term "social studies." In 1921, the National Council for the Social Studies was founded. At the first annual meeting of the Society of American Indians in 1911, the Seneca anthropologist-historian Arthur C. Parker stated that the philosophy of Indian education should be based on ideas from anthropologists, especially Lewis Henry Morgan and Franz Boas; from sociologist Fayette McKenzie; and from some practices of the new field of social work. He argued that Indians must adapt and assimilate, but must retain their Indian individuality.

Until recently knowledge of the social studies was not well known among the public, including educators and politicians, and there have been many blind alleys and sometimes outright failures in forcing Indians and other native peoples to conform to the ways of the dominant culture. Finding that assimilation had been accomplished only partially by 1926, Congress authorized a special investigation of "The Problem of Indian Administration." Released in 1928 and known popularly as the *Ham Report*," it was based on the principles of modern social

studies. This report recommended that the fundamental task of the Bureau of Indian Affairs should be educational,

devoting its main energies to the social and economic advancement of the Indians, so that they may be absorbed into the prevailing civilization or be fitted to live in the presence of that civilization at least in accordance with a minimum standard of health and decency. (p. 21)

The Report also recognized that "the Indians have much to contribute to the dominant civilization." Government policy and practices should develop and build on Indian economic and social life "rather than to crush out all that is Indian" (p. 22).

In 1933, President Franklin D. Roosevelt appointed John Collier as Commissioner of Indian Affairs. Collier had been trained in the social studies discipline of Anthropology and had previously worked in community development projects. He directed the Bureau of Indian Affairs (BIA) to no longer follow policies prohibiting practice of Indian culture, such as speaking tribal languages and performing religious ceremonies, which had been largely in effect for the half century since T. J. Morgan's time. Collier (1947) believed Indians had a "power to live...the ancient, lost reverence and passion for human personality, joined with the ancient, lost reverence and passion for the earth and its web of life" and that they had tended it as "a central, sacred fire" from which modern America had much to learn. In fact, he suggested that Indian cultures "must and can be discovered in their continuing existence, or regenerated, or set into being de novo and made use of" (p. 154-155).

Numerous studies by social scientists during the past one hundred years have revealed the strength of Indian traditions and the ability of Indians to survive, adapt, and renew these traditions. Among the studies are those by Indian scholars such as Francis LaFiesche (Omaha), Luther Standing Bear (Lakota Sioux), Ella Deloria (Yankton Dakota Sioux), D'Arcy McNickle (Salish), Bea Medicine (Yankton Dakota Sioux), Edward Dozier (Santa Clara Pueblo), Jack Forbes (Powhatan), Alfonso Ortiz (Tewa), and Vine Deloria, Jr. (Yankton Dakota Sioux). In 1977, the American Indian Policy Review Commission (1977) opened its Final Report with the statement that "A history, once thought ancient and dead, has risen to challenge this generation of Americans." In education today, we recognize the influence of such analyses from the social studies in the concept of Multicultural Education. And probably more Indian students

major in education and social studies at the college level than in any other fields.

In a major study of Indian education, Estelle Fuchs and Robert Havighurst (1973) found that the most common suggestion by parents was that "schools should pay more attention to the Indian heritage" and that Indian community leaders were "overwhelmingly in favor of the school doing something to help Indian students learn about their tribal culture" (pp. 170 & 187). So concerned were tribal leaders and educators about such issues in Montana that they used the channels of participatory democracy to encourage a change during the 1972 revision of the Montana Constitution. That change made it state policy to recognize the distinct and unique cultural heritage of American Indians and to be committed in its educational goals to preservation of their cultural integrity. In 1973 the Montana State Legislature passed House Bill 343, the Indian Studies law, which was

an act requiring American Indian studies to be part of the educational background of public school teaching personnel employed on, or in public schools located in the vicinity of, Indian reservations where the enrollment of Indian children qualifies the school for federal funds for Indian education programs, and encouraging American Indian studies as part of the educational background of all school personnel employed in the state. (Montana State Board of Education, 1975, p. 5)

The subsequent Indian Culture Master Plan (Montana State Board of Education, 1975) called for three main objectives:

1. to urge formal schooling that is relevant to the aspirations, values, customs and historical perspectives of Montana's Native Americans, with particular emphasis on language, history, and religion, as well as to their social, political and recreational pursuits
2. to provide a forum for the presentation of true, accurate and undistorted information about Native Americans and Montana Indian culture in the state's higher education institutions and public schools
3. to enable non-Indians to better understand Native Americans through the development of an awareness and appreciation of their unique cultural contributions. (p. 7)

During those same years, a number of tribes started "cultural commissions" or "cultural committees" and tribally-controlled

community colleges, as well as working with other colleges to develop Native American Studies programs to help teach awareness and preservation of their cultures and to monitor information about them. Community colleges on reservations in Montana, and many others, offer courses on tribal history, language, and culture. Navajo tribal education policies require courses in Navajo history and culture (Navajo, p. 9). Since 1983, all students at Eastern Montana College have been required to take nine credits (three courses) of "multicultural studies," which can include Native American Studies as well as languages other than English, comparative literature, international economics, and other such courses.

Yet understanding of Indian culture and history is not common. Montana House Joint Resolution No. 60 (1974) states that:

both the teaching force in Montana and their student population are at present substantially undereducated in the history, values, and culture of American Indians as seen by Indians.

The American Indian Policy Review Commission (1977) concludes that:

One of the greatest obstacles faced by the Indian today in his drive for self-determination and a place in this Nation is the American public's ignorance of the historical relationship of the United States with Indian tribes and the lack of general awareness of the status of the American Indian in our society today. (p. 3)

Recognizing these issues, along with lack of understanding of other cultural groups in America, the National Council for Accreditation of Teacher Education (NCATE) adopted a "Multicultural Education" standard in May 1977, to become effective January 1, 1979. This standard requires teacher-training institutions to give evidence of planning for multicultural education in its teacher education curricula. NCATE (1979) defines Multicultural Education as:

preparation for the social, political, and economic realities that individuals experience in culturally diverse and complex human encounters. These realities have both national and international dimensions. This preparation provides a process by which an individual develops competencies for perceiving, believing, evaluating, and behaving in differential cultural settings. (p. 4)

All of the above have been influenced by modern social studies, including methods of research, studies of specific groups, and comparative studies.

Basic definitions and methods in the social studies

For many thousands of years, there have been attempts to understand what goes on in human groups and how they function. Since the late 19th century, methods of study based on scientific approaches used in fields such as biology and physics—for example, hypothesis, field observation, and experimentation—increasingly have been applied to human groups. Use of such methods, along with classical interpretive or “humanistic” approaches to human social aggregates or institutions, is often called “social studies” or “social science.” Those who are more demanding in use of scientific methods alone, or who deal with the individual as the unit of analysis, prefer the term “behavioral science.”

The social studies deal with the behavior of people in relation to other people and the environment in which they live. Modern social studies include the disciplines of Anthropology, Economics, Geography, History, Linguistics, Political Science, Psychology, and Sociology. This list is not exclusive, and some persons would add such fields as Psychiatry, Social Work, and Law. Mathematics and statistics are used to help interpret the findings of the social studies fields (Engles, 1971; National Academy of Sciences and Social Science Research Council, 1969). The term social studies also refers to the combined use of methods and data from the several social or behavioral sciences to understand and predict our own behavior and that of others. Clements, Fielder, and Tabachnick (1966) provide a useful definition of “social study”:

1. The process of learning about variety and change in the actions of people as they arrange to live together in groups. This learning goes on through the gathering and interpreting of social data, as well as through critical examination of the conclusions and generalizations of social scientists.
2. The development of intellectual skill appropriate to this study:
 - a. Acquiring a language whose content and structure are capable of patterning, ordering, and communicating social realities,

- b. Acquiring the 'suppleness of mind' that permits the examination of alien individual and cultural forms. (p. 13).

The overall goal is to understand the social forces and institutions which influence us. Social studies helps to understand human behavior and institutions—to establish fact and theory which will provide a basis for more rational management of human affairs in planning and policy making. This helps to fulfill a major stated goal of education: to prepare students to be participating citizens in a democratic community or society. That is, the social studies aim to tell us what and how things are, why things are the way they are, and to predict where they have been and where they are going. Research methods in the social studies include:

1. Data collection (field observations, surveys, interviews, analysis of documents, tests, case studies, and longitudinal studies);
2. Experimental methods (psychological and other laboratory experimental testing);
3. Interpretive methods (such as content analysis, statistical manipulation, game theory, and other analytical devices) which help to explain the data.

Some studies are done as "basic research" to enhance understanding without any necessary immediate application of that knowledge; other studies are "applied research" when the major purpose is to develop data and understanding to serve a particular application. Social policies are established by input from the data of such studies as well as from informal channels and formal negotiations at various local, state, and national levels.

There has been much discussion about how to study human groups and how to teach about them. One concept is that of "society." In every living group—bee hives, ant nests, deer or buffalo herds, baboon troops, or human groups—individuals (organisms) who compose the group interact with each other in structured and unstructured ways. These organisms and their interaction, taken collectively, are called a "society." The interaction, or behavior, of animal groups is largely directed by biological (hereditary) tendencies and environmental needs. The interaction of human groups is directed by some of the same forces and, in addition, the uniquely human directive called "culture."

The English Anthropologist Edward B. Tylor (1874) defined "culture," or "civilization," as, "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (p. 1). Phrasing this more generally, Vine Deloria, Jr. (1969) writes:

Culture, as Indian people understood it, was basically a life-style by which a people acted. It was self-expression, but not a conscious self-expression. Rather, it was an expression of the essence of a people. (p. 185)

The culture concept was drawn from its root meaning of "cultivation" as creation, as in the growth and development of domesticated plants and animals. As Laguna Pueblo poet Carol Lee Sanchez writes of Indian identity as creation:

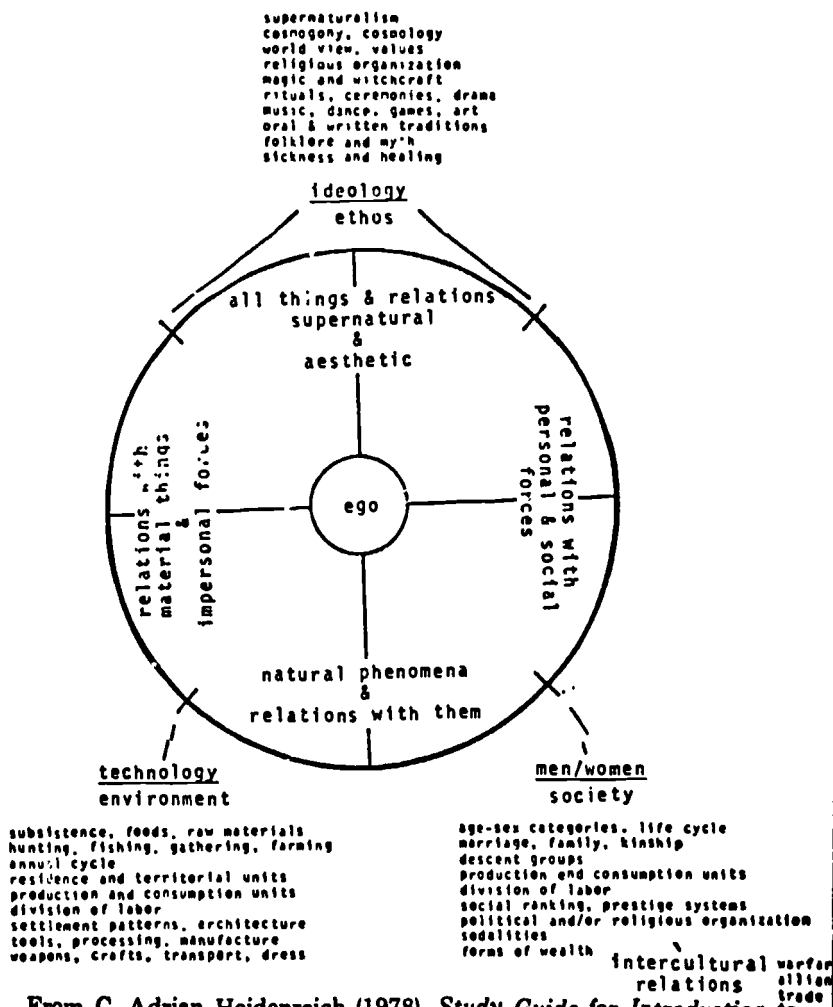
Each tribe adapted various
forms of European beads and
ruffles and braids that
became traditional
ceremonial dress by
the late 1700s—
but—they are Indian!
because: WE wear them!
because: WE put them together
in a certain way. (Hobsen, 1981, p. 241)

Culture is the basis of the unique quality of humanity as defined by N. Scott Momaday (1975), Pulitzer prize-winning Kiowa Indian author of the novel *House Made of Dawn*: the ability—as individuals and as groups—to imagine ourselves into existence.

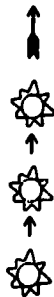
Culture includes those patterns for living (ideal, as well as actual, everyday patterns) which orient society (a group of people) toward their behavior as it occurs in relation to current and changing conditions within the society, in the environment, and between themselves and other societies (See Figure 1). "A culture" includes all intertwining aspects or segments of the lifeway of any single group of people—everything from hunting, factory work, and toilet training to kinship, language, and religion. This concept is an acceptance of the real differences among different socio-cultures, that peoples in different times and places have different ways and customs, and of the uniqueness of each culture. This acceptance is inherent in the

language of the Montana constitutional recognition of the distinct and unique cultural heritage of the American Indians and in the NCATE definition of Multicultural Education. "Culture" in a more comprehensive sense also refers to the total traditions of all humanity. In this sense, it is a claim for the essential unity of the human species—the idea that there are general likenesses (biologically, socially, and psychically) among all humans.

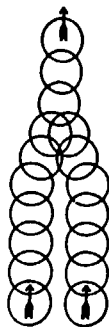
Figure 1A. Elements of Culture



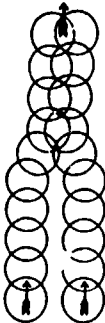
From C. Adrian Heidenreich (1978). *Study Guide for Introduction to Native American Studies*. Billings: Eastern Montana College.

**PROTEAN AND CORE CULTURE**

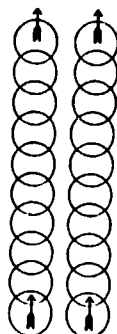
Cultures can be modeled in a variety of ways, including the idea of a culture as a central, persistent "core" (such like a nucleus or a stable energy system) and the idea of culture as a continually changing "protean" form (such like an ocean or shifting threads and patches) in an old quilt). This illustration represents a combination of those two 1-2-ee.

**ASSIMILATION**

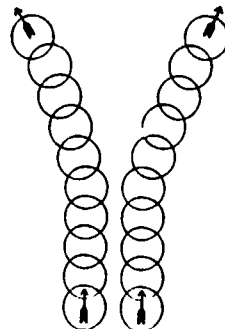
Two (or more) cultures, once separate and different, merge together into a distinctive new whole, a mixed cultural tradition and complete blending of formerly distinct cultures. This idea also is known as "the melting pot."

**ACCULTURATION**

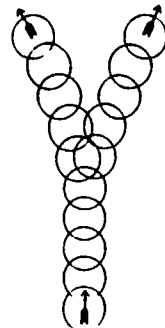
Two (or more) cultures, once separate and different, merge together partially into a distinctive new whole, a mixed and overlapping cultural tradition, along with continuing different cultural persistences; there is often a symbiosis in the relations between/among the coexisting cultures. This idea also is known as "cultural pluralism" or "multiculturalism."

**PARALLEL INDEPENDENT CHANGE**

Two (or more) cultures, once separate and different, retain independent identities and develop with emphasis on cultural persistence in adaptation to essentially continuing and/or similar conditions and environments.

**DIVERGENT INDEPENDENT CHANGE**

Two (or more) cultures, once separate and different, retain independent identities and change significantly from what they were and in divergent directions in adaptation to new and essentially different conditions and environments.

**CULTURAL SEPARATION/DIVERGENCE**

Groups of people from a single culture separate, become isolated from each other, and change significantly from what they were and in divergent directions in adaptation to new and essentially different conditions and environments.

Figure 1B. Some Cultural Change Models

Cultures are created through the adaptations of human groups to "reality" and by the ability of humans to "imagine themselves into existence." Cultures change as a result of:

1. "Drift" - all human beings innovate -- create new ideas and practices -- partly from a need for variety; new generations do not learn everything the old generations have to teach them; and the amount of cultural knowledge is so great that some things are forgotten in the sifting of time.
2. Internal Factors - interpersonal and social relations and agreements; inherent tensions, imbalances and contradictions which occur in any living system; visions and goals for the future.
3. External Factors - environmental possibilities and limitations; drastic environmental changes; interactions with other cultures.

There has been considerable discussion about how to define and describe the nature of culture, a concept considered to be a central one shared among the social studies. World-wide research has established many characteristics of culture, its pervasiveness, and its different forms. Other key definitions and concepts related to culture are especially useful as they apply to teaching Native American students. Space allows only brief mention of some of them. These include ethnocentrism; cultural persistence ("tradition") and change (adaptation, including invention, diffusion, cultural syncretism and cultural poverty or breakdown); intended and unintended consequences; terms which refer to how cultures interact (conflict, accommodation, acculturation, assimilation); and social indicators (things that reflect or measure aspects of social behavior and the quality of life, particularly in its non-economic aspects). These are discussed in such sources as McDaniel (1976); Banks (1973a); National Academy of Sciences and Social Science Research Council (1969); Homans (1967); MacKenzie (1966); Clements, et al. (1966); and Kluckhohn (1949). Teachers should become familiar with them.

Teaching social studies concepts

Purposes of education include exploration of knowledge, clarification of values, and development of skills. Teaching strategies need to be developed by teachers to meet the needs of the specific communities in which they teach as well as to meet national goals and standards. Also, methods for teaching social studies concepts will vary from grade to grade. In elementary grades, simple exposure to concepts and practicing a few skills should occupy much of the time. In later grades, there needs to be an increasing complexity of exposure and learning. Older students need to develop increased self-awareness and to practice description, observation, comparison, and reading what others have written, both biographical works and studies of social groups.

Students can take field trips to historical locations and social and ceremonial events. In the old days, Plains Indian children made toy items such as tepees, dolls, and horse equipment which paralleled the material items of their elders, and students today can do the same. They can act out roles, play games, sing with drums, listen to flutes, keep diaries, write poetry, and write their own story books. They can make photographs, tape recordings,

or videotapes and do interviews of each other and of elders or other community people and use these to explain what people do and what their culture is like. Another technique is to have tribal or community members who have knowledge of the culture come to the classroom and give a talk. Guest speakers, in the same manner as is done with films and other activities, need to be integrated into a larger lesson with lead-in and follow-up activities.

Each lesson or classroom activity can be organized around a topic (such as family life, religion, values, material culture, or politics) or an activity skill (such as public speaking/oratory, interaction analysis, or athletics). It is sometimes useful to choose one significant event or aspect of social life—for example, treaty negotiations—and help students understand the context, limitations, and agreements which are imposed (or which people imposed on themselves), and the intended as well as unintended consequences of such social decisions and actions. For example, an intended consequence for a tribe during the 1868 Fort Laramie treaty negotiations was to establish reservations to protect their land base. An unintended consequence was that their power over resources on that land (for example, buffalo and travel routes) became diminished. Another example is the tendency for peoples to idealize their past—either by reference to horrors such as smallpox epidemics among Indians or the Holocaust among Jews, or positive things such as the freedom to ride with the wind and hunt buffalo among the Plains tribes. There should be awareness that there are conflicts of opinion in the interpretation of social life, in reference to the present, past, or possible futures.

Another approach is to discuss the influence of cultures on each other. Some years ago, when I taught a course at Colstrip, Montana, just north of the Northern Cheyenne Reservation, the teachers asked me two apparently contradictory questions (though they did not ask them on the same day): 1. How can these Cheyenne kids really be "Indian?" They drive to high school in pickup trucks, wear blue jeans, and are great basketball fans. 2. Why are these Cheyenne kids so different from our white kids?

One way of answering the questions is to refer to Ralph Linton's (1936) description of the typical day of the average American.

Our solid citizen awakens in a bed...which originated in the Near East...He throws back covers made from cotton, domesticated in India, or linen, domesticated in the Near East...or silk...discovered in China...He slips into his moccasins, invented by the Indians of the Eastern

woodlands...On his way to breakfast he stops to buy a paper, paying for it with coins, an ancient Lydian invention...His plate is made of a form of pottery invented in China. His knife is of steel, an alloy first made in southern India, his fork a medieval Italian invention, and his spoon a derivative of a Roman original. He begins breakfast with an orange, from the eastern Mediterranean, a cantaloupe from Persia, or perhaps a piece of African watermelon. With this he has coffee, an Abyssinian plant...waffles...made by a Scandinavian technique from wheat domesticated in Asia Minor. Over these he pours maple syrup, invented by the Indians of the Eastern woodlands. As a side dish he may have the egg of a species of bird domesticated in Indo China...When our friend has finished eating he settles back to smoke, an American Indian habit, consuming a plant domesticated in Brazil in either a pipe, derived from Mexico...[or] a cigar, transmitted to us from the Antilles by way of Spain. While smoking he reads the news of the day, imprinted in characters invented by the ancient Semites upon a material invented in China by a process invented in Germany. As he absorbs the accounts of foreign troubles, he will, if he is a good conservative citizen, thank a Hebrew deity in an Indo-European language that he is 100 per cent American. (pp. 325-27)

Notice how many references there are to American Indians in this passage. Malcolm McFee (1968) coined the term "150% man" to describe people who could operate fairly well in two co-existing cultures, such as the rural non-Indian culture and that of the Blackfeet Indians in northwestern Montana. We must recognize that we are all multicultural to some extent, and there should be positive reinforcement that it is okay to be as fully bilingual/bicultural as possible. Some students even may become 200% persons

Another important orientation is to emphasize how different disciplines in the social studies can be used to approach a particular topic. Banks (1973b, p. 157) uses the illustration shown in Figure 2.

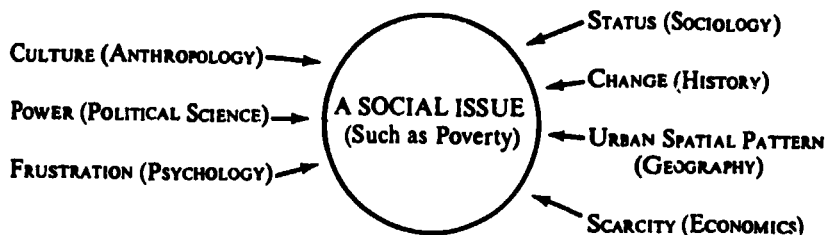
Emphasis on the ability to listen well, and to read and speak in English as well as a tribal language if appropriate to the particular classroom, should accompany the social studies unit.

Social studies can be taught in a bilingual/bicultural setting: the vocabulary and concepts of different cultures can be used to define the social world, such as terms for kinship and geographical place names. Social studies lessons can be combined with lessons in other areas, such as language and physical education. For example, students can make throwing arrows (crafts or shop) throw them (physical education), and learn about how throwing arrows or spears were (and are, in some tribes) important socially and historically in skill development, social interaction, competition, hunting, warfare, and recreation.

There should be a balance between teaching what students are interested in—for example, answering student questions or having students discuss, look up, and evaluate answers to their own questions—and teaching things about culture and social relations which they might not think to ask about or in which they, at first, showed no interest. Teachers need to know how to find materials on a particular topic, tribe, or tribes to be studied. Students can be sources of information about their own tribe. They can help in discovering more about their own community and its relations with other communities and government agencies.

Interviewing elders, community leaders, parents, siblings, and friends can give children positive reinforcement. However, learning is gradual, and one assignment or even two or three years of class study does not necessarily lead to adult-level understanding of the complexities of a particular culture or of social relations generally. There should be awareness of the levels of information studied. For example, a seventh grade class will not be able to

Figure 2. Understanding a social issue with social science concepts and theories.



This figure illustrates how a social issue such as poverty can be sufficiently understood and therefore reflectively acted upon only after the social actor has viewed it with the concepts and theories from a number of social science disciplines. Any one discipline gives only a partial understanding of a social problem or issue. Thus, the social studies programs must be *interdisciplinary*.

gather the sophisticated knowledge about kinship or religion that a twelfth grade class might. It took Cheyenne priests and those of other Plains tribes years to learn the proper knowledge about the Sun Dance, both in performance and theology. A one- or two-hour transcribed interview or a week-long topical unit on Indian religion is not the equivalent. But such an activity can encourage students and provide entry into the skills and knowledge of social studies. According to traditional Plains Indian culture, children were not simply repositories of teachings of elders, but were considered to be persons capable of participation in the culture according to their level of skill, experience, and insight. Skills and knowledge learned in an educational setting might later be applied to social issues affecting the community. School is not a substitute for home and community. It is one of the several ways of learning and perpetuating a culture.

Issues in the social studies

At one Montana college during the early 1980s, a committee met to discuss general education requirements, including the possibility of adding courses on Indian culture. One faculty member stated that Indian students had no need for such courses because they should learn to live in the white man's world, and that there was no need for non-Indians to take such courses because white people do not have to live on reservations. Earlier in this essay there was reference to the Montana Indian studies law, which required teachers to have background in Indian history and culture. As might be expected, there was some controversy about that law. Many of the issues centered around questions about what is Indian culture and heritage, how courses and workshops can present sensitive and accurate information on them, and why Indian culture should be singled out over Hispanic, cowboy, women's, or any other culture. There was the issue of whether teachers should be required to take such educational courses. The Montana Indian Studies Law became so controversial, in fact, that pressure and lobbying by teachers and others led the Montana legislature to pass House Bill 219 in 1979 which changed the requirement to allow individual school districts to require background in Indian studies if they so desired, rather than keeping it as a state requirement.

It is important to remember that social studies issues are inherently complex because so much is involved with habit patterns, the social interpretation of events, the fact that people react to their knowledge or ideas about themselves (the feedback

phenomenon), and the rapid change and the openness of the future (future shock). Intergroup relations also have an effect. A report on the outlook and needs of the behavioral and social sciences by the National Academy of Sciences and Social Science Research Council (1966) stated that:

the behavioral and social sciences are potentially some of the most revolutionary intellectual enterprises ever conceived by the mind of man. This is true basically because their findings call into question traditional assumptions about the nature of human nature, about the structure of society, and the unfolding of social processes. (p. 272)

A related issue is that when a social scientist simply describes social behavior, he or she is often interpreted as endorsing that form of behavior, or sometimes interpreted as discussing sacred or personal things that should not be "public knowledge." Teaching in educational institutions is a political process as much as it is a consideration of facts and skills, and teaching Native American students often involves explicit issues not recognized as issues among non-Indians. Writing about Black Studies, James Banks (1973b) stated that an important goal is to give students "the ability to make reflective decisions so that they can resolve personal problems and, through social action, influence public policy and develop a sense of political efficacy" (p. 152). In teaching Native American students as well, there is emphasis on development of practical knowledge and effective political activist skills appropriate to democracy which can be of benefit to the individual and the community. Much of this focuses on becoming aware of and freed from colonialism and oppression, institutional and other forms of racism, economic exploitation and poverty, political alienation and powerlessness, and low self-esteem.

Lin (1985) in a recent study of Crow Indian boys compared his findings to those reported by Chadwick (1972, p. 140) that "Indian students feel despair, disillusionment, alienation, frustration, hopelessness, powerlessness, rejection, and estrangement... (p. 10). The years of cultural oppression have made their mark on Indian cultures and individuals. Clyde Kluckhohn (1962) stated that "Navajo culture is becoming an ugly patchwork of meaningless and unrelated pieces, whereas it was once a finely patterned mosaic" (p. 340). Yet, at the same time, it could be stated of the Navajo and many other tribes, as Malcolm McFee (1972) stated of the Blackfeet tribe:

Two hundred and thirty years of adaptation and adjustment to change has resulted in a bicultural community held together by special bonds. The past events have not resulted in tribal disorganization, but in a reorganization that accommodates the simultaneous persistence of many traditional social and cultural characteristics from both interacting societies. (p. 121)

Kluckhohn suggested that "basic divergences" between Indian and "our American culture" be made more explicit to the Indian (1962, p. 342). This is one thing classroom teachers can do. A value chart, such as the comparison of traditional, bicultural, and pantraditional family behavior among Minneapolis urban Chippewas prepared by Red Horse, Lewis, Feit, and Decker (1981), can provide a beginning for discussion (see Figure 3).

One of the most difficult issues in discussing the findings of the social studies regarding Indians and Indian-white relations is the matter of the feelings and anger brought out, on the part of both

Figure 3. Some selected variables of behavior according to family lifestyle-patterns among Minneapolis Urban Chippewas.

Variable of behavior	Family lifestyle pattern		
	Traditional	Bicultural	Pantraditional
Language	Ojibway constitutes conversational language of parents and grandparents. Children are bilingual and able to transact family affairs following Indian language	English constitutes conversational language by parents, grandparents, and children. Grandparents are usually bilingual. Some Indian language is recaptured through formal classes.	Either English or Ojibway constitutes conversational language of parents, grandparents, and children. Indian language is recaptured through formal academic classes
Religion	Midewiwin remains as the belief system. It retains the characteristics of a very closed system, following family networks	Anglo belief system prevails; is generally, but not exclusively, Catholicism. Some all-Indian congregations exist with culturally adapted canons	A modified Indian belief system mixing several traditional forms; i.e., Midewiwin, Native American Church, etc. Unlike closed structure of traditionalists, proselytizing strategies are employed.
Family relational field	Extended network.	Extended network.	Extended network.
Social engagement	Some acceptance of dominant society's activities; i.e., bowling, etc. Cultural activities such as feasts, religion, and pow wows prevail and take precedence over all others	Dominant society's activities prevail, i.e., bowling, baseball, golf. Relate to non-Indians well. Cultural activities remain of interest but not necessarily enacted through behavior, e.g., will sit and watch at pow wows and read about religion. Very active in Indian meetings and politics.	Openly eschew activities of dominant society. Cultural activities prevail. Those who are not expert try to recapture singing and dancing skills.

From Red Horse, J.G., Lewis, R., Feit, M., & Decker, J. (1981). Family behavior of urban American Indians. In R.H. Dana (Ed.), *Human Services for cultural minorities* (pp. 55-63). Baltimore: University park.

Indians and non-Indians, often for different reasons. This can become quite sensitive when Indian students appreciate the information or focus and non-Indians feel they are being attacked, or feel guilty and vulnerable, or vice versa. One of my students wrote in evaluating me that "the instructor is so sympathetic to Indian culture that he hates other cultures"—something that is not the case and which I certainly had not intended to convey.

Sensitive topics can be approached in a variety of ways. For example, an overview of Plains Indian history can emphasize the brutality of warfare and the massive deaths which occurred in the smallpox epidemics which several times wiped out over half the population of the tribes. Or it can emphasize the constant heroism of individuals and ultimate survival of the group, and the creativity developed by the tribes in their continual adaptation to new conditions. Or, there can be a balance in presenting both of these issues as they relate to Indian culture and history.

Several things to be considered when teaching social studies related to Indians are:

1. Indian viewpoints should be respected as alternative explanations to other hypotheses and opinions.
2. Unsubstantiated theories need to be treated as such—as theories or hypothesis.
3. Accurate names should be used for tribes, place names, and concepts used by local Indian groups.
4. The first 20,000 years of the original Americans' history should be discussed prior to European, Asian, and African American history.
5. Discussions of Indians must become "Americanized," so that the Indian part of the 100% American culture is explored.
6. European expansion needs to be dealt with truthfully.
7. The on-going cultural development and adaptation of Indian groups should be dealt with—not simply as cultures with a past and not just in terms of Indian-non-Indian relations.
8. Native heroes and resistance leaders should be considered—from 1492 to the present.
9. There should be an emphasis on the fact that history tends to be cyclical, and there are both evil and good in every era.
10. There should be focus on the 20,000-year struggle of Indian people trying to develop the art of living in harmony with the Universe, and the past 500 years of struggle against conquest, with emphasis that what really matters is the spiritual struggle of all peoples—of character development, not simply material "progress." (adapted from Forbes, 1973, pp. 218-219)

In elementary grades basics are taught which give children skills in observation and knowledge of particular concepts and terms. Controversy as such need not be stressed until junior or senior high levels. Remember that social studies is not just "ethnic studies." It encompasses much more. It is important for students to learn about multiple cultures—their own, those of other tribes or groups, and the "mainstream" national and international cultures with which they will have to interact as adults. Multicultural Education was defined by the National Association for Accreditation of Teacher Education (NCATE) with certain implications:

Multicultural education is preparation for the...*realities* that individuals experience in *culturally diverse and complex human encounters* . . . in differential cultural settings. Thus, multicultural education is viewed *as an intervention and an on-going assessment process* to help institutions and individuals become more responsive to the human condition, individual cultural integrity, and cultural pluralism in society. (1979, p. 4, emphasis added)

Fuchs and Havighurst (1973) stated that "teachers of Indian children should be systematically trained to take account of the sociocultural processes operating in the community and classrooms where they work" (p. 303). This is true of Indian and non-Indian teachers. It is important, if possible, to have teachers from the culture being taught, or who have had direct and in-depth experience with those cultures, as well as training in social studies. Remember that culture is a living, creative process, continuously developed by people living out their lives in interaction with others. That is the basis of the social studies.

Instructional materials and sources

There is much information to know about the social nature of human beings and about any particular culture and intercultural relations, and many skills to be learned to know about them (Task Force, 1976). Ideally, there should be a graded series of lessons, integrated so that students can proceed from 1st to 12th grade. For most Indian tribes, however, there is relatively little material adapted to various grade levels. There is more generalized Indian material, but even here materials adapted to any one grade, cultural, or intercultural setting, or type of student (for example, reservation Indian, urban Indian, or non-Indian living

among or near Indians) is limited. One dilemma is that there is not a large market for Indian materials, so much of the material is produced in small quantities and is soon out of print. A teacher, school librarian, or tribal archivist will have to work diligently to acquire appropriate materials and usually will have to rely heavily on inter-library loans and sources like the Educational Resources Information Center (ERIC).

Generally speaking, however, there is quite a range of suitable materials. For illustration, I will list a few of the culturally relevant materials I have found particularly useful.

1. Reading materials (stories)

The Buffalo of the Flathead (1981) and other books in the *Indian Reading Series*. Portland, OR: Northwest Regional Educational Laboratory.

Kleitsch, Christel, & Stephens, Paul (1985). *Dancing Feathers*. Toronto, Canada: Annick.

Linderman, Frank B. (1972). *Pretty Shield, Medicine Woman of the Crows*. Lincoln: University of Nebraska.

McDermott, Gerald (1977). *Arrow to the Sun: A Pueblo Indian Tale*. New York: Puffin.

Momaday, N. Scott (1968). *House Made of Dawn*. New York: Harper and Row.

Ryniker, Alice D. (1980). *Eagle Feather for a Crow*. Kansas City, MI: Lowell.

2. Physical objects and artifacts

Coe, Ralph T. (1977). *Sacred Circles: Two Thousand Years of North American Indian Art*. Kansas City: MO: Nelson Gallery of Art-Atkins Museum of Fine Arts.

Hanson, James A. (1975). *Metal Weapons, Tools, and Ornaments of the Teton Dakota Indians*. Lincoln: University of Nebraska.

Hunt, W. Ben. (1973). *The Complete How-To Book of Indian-craft*. New York: Collier.

Culin, Stewart (1907). *Games of the North American Indians*. 24th Annual Report of the Bureau of American Ethnology, Washington, DC.

Western Trading Post (catalogue), 32 Broadway, Denver, CO 80209, (303) 777-7750.

3. Pictures, maps, and other graphics

Dunn, Dorothy. (1968). *American Indian Painting of the Southwest and Plains Areas*. Albuquerque: University of New Mexico.

Rickman, David. (1983). *Plains Indians Coloring Book*. New York: Dover.

Wade, Edwin L., and Strickland, Rennard. (1981). *Magic Images: Contemporary Native American Art*. Norman: Philbrook Art Center and University of Oklahoma.

Waldman, Carl (illustrations by Molly Braun) (1985). *Atlas of the North American Indian*. New York: Facts on File.

4. Films, tapes, and records

Canyon Records (catalogue). Major producer of Indian records, 4143 No. 16th St., Phoenix, AZ 85016; (602) 266-4823.

Children of the Long-Beaked Bird (Videotape of the daily life of a contemporary Crow boy). Bullfrog Films, Oley, PA 19547; (215) 779 8226.

I Will Fight No More Forever (Feature film on videotape about flight of Chief Joseph and the Nez Perce from Idaho to Montana). Congress Video Group, South Plainfield, NJ 07080.

More Than Bows and Arrows (Film about the contributions of Indians to world culture). Camera One Productions, 8024 11th Ave. NE, Seattle, WA 98115; (206) 524 5326.

Koanok (Docudrama videotape about the first encounters between Indians and Englishmen in Virginia)

Weatherford, Elizabeth (1981). *Native Americans on film and video*. New York: Museum of the American Indian (Broadway at 155th Street, NY, NY 10032). (A listing with descriptions of about 400 films and videotapes)

5. Museum and historic site visits

Check your local area. A few sites in the Billings area include the Western Heritage Center, Pictograph Caves State Park, and Plenty Coup Memorial State Park. (Be aware that some museums still contain exhibits displaying only one side of the historical record.)

6. Reference Books

America's Fascinating Indian Heritage (1978). Pleasantville, NY: Reader's Digest.

Hodge, F.W. (Ed.) (1907 & 1910). *Handbook of the Indians North of Mexico* (Vols. I & II). Washington, DC: Smithsonian Institution.

Kehoe, Alice B. (1981). *North American Indians: A Comprehensive Account*. Englewood Cliffs, NJ: Prentice-Hall.

Sturtevant, W. (Ed.) (series currently being published). *Handbook of North American Indians*. Washington, DC: Smithsonian Institution.

7. Bibliographies and directories

Hirschfelder, Arlene B.; Byler, Mary G.; & Dorris, Michael A. (1983). *Guide to Research on North American Indians*. Chicago: American Library Association.

Jennings, Francis (Ed.). (various dates). *Newberry Library Center for the History of the American Indian Bibliographic Series*. Bloomington: Indiana University.

Murdock, George P., & O'Leary, Timothy J. (1975). *Ethnographic Bibliography of North America* (5 vols.). New Haven: Human Relations Area Files.

Native American Directory. (1982). San Carlos, AZ: National Native American Cooperative. (Includes tribes, museums, organizations, events, stores, and so forth)

Prucha, Francis Paul. (1977). *A Bibliographical Guide to the History of Indian-White Relations in the United States* (Vol. I) (to 1975). Chicago: University of Chicago.

Prucha, Francis Paul. (1982). *A Bibliographical Guide to the History of Indian-White Relations in the United States* (Vol. II) (1975-80). Lincoln: University of Nebraska.

8. Teaching Guides

American Indian Education Handbook. (1982). Sacramento: California State Department of Education.

Oklahoma's Indian People: Images of Yesterday, Today, and Tomorrow. (1983). Oklahoma City: Oklahoma State Department of Education.

Unlearning "Indian" Stereotypes: A Teaching Unit for Elementary and Children's Librarians. (1981). New York: Council on Interracial Books for Children.

Teachers will have to produce some materials to supplement available published materials. One of the most important activities in social studies education is for children to learn about their own lives and their own culture. They can do this by keeping journals; interviewing community members; and recording, photographing, and videotaping elders, ceremonies, and other activities. Books, work sheets, recordings, slide programs, and videos can be produced by such work. Micro-computers and printers, along with ditto masters or photocopying machines, are useful in preparing classroom materials. Examples of books pro-

duced with student help include *Heart Butte: A Blackfeet Indian Community* (Reyhner, 1984) and *Between Sacred Mountains* (Bingham & Bingham, 1984).

Texts and films are appropriate both for content and for teaching children the methods of social studies. However, it must be emphasized that such materials, whether locally or commercially produced, are brief accounts of parts of a culture. Even a several-hundred-page book only begins to describe the culture of a tribe. All materials should be evaluated. The California State Department of Education's *American Indian Education Handbook* (1982, pp. 83-86) provides an excellent brief "Suggested Criteria for Evaluating Instructional Materials." And there is always a need for additional up-to-date materials.

Human resources (knowledgeable people) are very important. Local community members, teachers, and tribal cultural committees, along with consultants, should be involved in producing, examining, and choosing social studies teaching materials appropriate to the classrooms of their children.

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Teaching Science to the Native American Student

Carlos J. Ovando

In 1976 the American Association for the Advancement of Science (AAAS) prepared a document, "Recommendations for the Improvement of Science and Mathematics for American Indians." Among the recommendations were 1) that high school science teachers should use an ethnoscientific approach which draws upon the way scientific principles are expressed in the Native American culture; 2) that bilingual instruction should be used where loyalty to the Native American language is fairly intense; and 3) that a vigorous effort should be made to recruit Native American students for programs in science and technology (Green & Brown, 1976). These recommendations reflect three important issues of improvement of science instruction for Native Americans addressed in this chapter. First, how can an effective balance be achieved between traditional, home-learning experiences of students and a formal science curriculum? Second, what should be the role of the home language and/or English language development in science curriculum? Third, what is the place of science teaching within the whole school curriculum for Native Americans?

The relationship between home and school culture

The ways in which we come to learn about science include some

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of the following processes: "investigating, discovering, experimenting, observing, defining, comparing, relating, inferring, classifying [and] communicating" (Holt, 1977). Regardless of the level of scientific sophistication, humans all over the world, as they interact with their environment, have had to use these same processes to develop technology which enables them to survive. As Cajete (1986) observes,

Expressions of the science thought process are abundant in historical-traditional Native American cultures. They have ranged from the simple practical technologies developed to survive in a given environment to highly complex and elaborate technologies developed by the "high" civilizations of Mexico, Central, and South America. These expressions of the science thought process have all taken distinctive cultural forms which reflect primarily the way a particular group of Native Americans has adapted to a particular place and environment. The science thought process has been reflected in Native American agriculture, medical practices, astronomy, art, ecological practices, hunting, and gathering. (p. 4)

Activities, then, that can be applied to formal science learning in school are as integral an aspect of Native American cultures as they are of all cultures. Therefore, all children bring to school a base for scientific knowledge, skills, and experiences. This base can be related to the school's curriculum. For example, Native American children may have had first-hand experience with such issues as soil erosion, conservation, use of pesticides, and consumption of traditional versus mainstream Anglo-American food. These experiences can be applied to formal fields of science such as ecology, ethology (the study of animal behavior), genetics, geology, and nutrition.

Of course, as Cole and Scribner (1974) point out, "how people perceive the environment, how they classify it, how they think about it" varies across cultures (p. 5). The AAAS' ethnoscience is a field of study which attempts to delineate within a particular culture its patterns of perception, classification, and thought. Working within the context of Native American culture, Cajete (1986) defines ethnoscience as,

the methods, thought processes, mind sets, values, concepts, and experiences by which Native American groups understand, reflect, and obtain empirical knowledge about the natural world. (p. 1)

These methods and concepts may differ subtly and dramatically from the way in which Anglo-Americans (white Americans of the dominant English-speaking culture) interpret the environment. If, for example, a lesson dealing with frogs is presented to Anglo and Native American students, their subjective reactions (positive and negative!) to touching a frog will be derived not only from their individual personalities but from their cultural backgrounds as well. Beyond the rather specific issues of frogs, students from traditional Native American backgrounds might be more inclined to see scientific processes from a holistic point of view while students from mainstream Anglo-American backgrounds might be more interested in breaking down the subject into its smallest components. Cajete (1986, p. 50) discussed the work of Maruyama and Harkins (1978), which describes, for example, Western classification systems as tending to be more hierarchical and quantitative while Native American systems tend to be more mutualistic and qualitative. Western systems also tend to see cause-effect relationships as unidirectional, linear phenomena, whereas Native American thought patterns tend to allow for many possible directions in cause and effect. As Cajete (1986, p. 6) explains, "cause and effect cannot be isolated from other causes and effects with which they share a wholistic relationship within a system."

Differing scientific world views, however, do not have to mean mutually exclusive approaches to formal science lessons. In the school science setting both Native American and non-Native American students and teachers have something to contribute and something to learn from each other. If the relationship between the traditional Native American home culture and the Westernized school culture is a two-way street, the quality and practicality of the scientific learning experience can be enhanced. Suppose, in other words, that curriculum and methods become responsive to the patterns and experiences of the home cultures, and that, at the same time, the local community adapts practices or concepts from the formal school curriculum which may have relevance to solving problems in the local environment. On this point, Scribner and Cole (1973), make the following observation:

Changes in textbooks, curricula, and teaching techniques are all needed and important, but they cannot be counted on to bridge the gulf between school and practical life by themselves. A two-way movement is necessary here. The first, which is already under way in some experimental

schools, is to move everyday life into the school so that subject matter and activities deal with some of the same aspects of social and physical reality that the pupils confront outside of school.

The second has been little attempted. The techniques of the modern school need to be introduced into the context of recognized practical problems. Education must be stripped from the schoolroom and made instrumental in traditional settings. (p. 558)

In other words, interchanges are to be made between the home culture and the school culture. Guthridge (1986), in an article entitled "Eskimos Solve The Future," points out how he uses students' cultural frame of reference to solve future problems. Guthridge has trained teams of students from Gambell, Alaska, to compete in the Future Problem Solving Program. These teams have won state and national awards. Many assigned problems—such as the warming of the earth's climate or the use of laser technology—require student research in scientific fields. Guthridge points out that

In Future Problem Solving at Gambell we have learned to apply Eskimo training to the modern school setting. Students find, record, and memorize possible problems and solutions that might be applicable to the assigned subject matter, and then—slowly—figure out what the material means. (p. 71)

Steps involved in the Future Problem Solving model were originally designed with a Western mind set in which a great deal of verbal interaction was required among students. Guthridge, however, accepted students' use of their own communication style and pace until it felt comfortable and necessary to move toward more verbal articulation of ideas. He credits the spectacular success students from Gambell have had in coming up with highly imaginative solutions to future problems to this flexibility in approach. Students use learning strategies which have served their hunting ancestors well for millennia but, at the same time, they acquire skill in using some Western problem-solving techniques which they can and may, in the future, apply to local issues. In discussing the Western versus the native world views, Guthridge tells his students, "The human brain is nothing more—and nothing less—than an efficient computer. Why not give it two types of software?" (1986, p. 72).

As discussed above, Native American students bring to

classrooms skills and experiences which can be used as springboards into the scientific process; materials and teaching techniques adapted to tap these resources can result in students gaining greater mastery of science concepts. However, it does not follow that all science texts must be rewritten to reflect students' home background. Science lessons need to start with students' prior knowledge, experiences, and motivation. Only teachers can do that; textbooks alone cannot. As a case in point, Kleinfield (1979) has noted in her study of St. Mary's (a successful Alaskan boarding school) that, while there was no special curriculum for Native students, what seemed to matter most in the school's effectiveness was the close relationship between students and staff. Character development was of central concern. What we may learn from St. Mary's, then, is that a science curriculum which has been carefully adapted to reflect culturally-compatible classroom practices and home experiences may not be effective unless teachers are deeply committed to the academic and personal growth of their students.

The role of the native language and English

The second important issue relevant to the AAAS recommendations for Native Americans' science education which we will examine is the role of the home language and the role of English language development. According to Title VII guidelines, the dual purpose of bilingual education is not just to teach English to non-English-background students but to provide effective knowledge transmission. In other words, bilingual instruction has a federal mandate not only to provide English-language skills for limited English proficient (LEP) students but to make sure that they prosper academically in content areas such as science.

In an effort to address pressing linguistic and content area needs in math, social studies, and science of limited English proficient students, Chamot and O'Malley (1986) have designed a model called the Cognitive Academic Language Learning Approach (CALLA). This model provides for development of English through activities in math, social studies, and science. Of course, in Native American bilingual programs the goal is usually *not* to provide a transition into mainstream American culture but rather to maintain and develop biculturalism. Nonetheless, the CALLA model has validity as a method for teaching English. In this model, instead of studying English as a second language in the formal sense and as a separate subject, students use English in science lessons to develop English linguistic skills as well as to

gain an understanding of scientific content and processes. According to Chamot and O'Malley, the CALLA approach can be used effectively both with limited English proficient students and English-dominant students who come from a minority-language background. They point out that an

example of the connection between the science curriculum and language experience is that students must use language actively to reason through an observation from its inception to a conclusion. The process of analyzing a problem, describing, classifying, and other skills that are fundamental to science curricula are an integral part of language development. (1986, p. 27)

Rather than emanating strictly from a mainstream science text, the students' cultural background can be incorporated into CALLA science lessons. For example, the authors suggest that some lessons be based on discovering the scientific properties of familiar things from the students' home background.

Teachers using the CALLA approach, beyond planning an activity-based science lesson, also prepare to address such things as the vocabulary needed for the lesson (for example, the colloquial meaning of "dense" versus the scientific meaning), the types of language structures involved (for example, "more than" and "less than"), and the types of study skills required (for example, how to use reference books, diagrams, and tables).

In preparing such lessons, care needs to be taken not to water down the content of the lesson while simplifying the language to the required degree. Therefore, to maintain the appropriate level of difficulty in content, it may be highly desirable to preview and review the lesson in the students' home language. Thus, to have the most success with a CALLA approach to science, teachers need be well-versed not only in science content, process, and activities, but also in ESL and bilingual teaching principles. In the Native American context, often involving small schools in remote, rural locations, teamteaching and use of non-school human resources may be important in having the greatest success with a CALLA approach. For example, a local staff member with ESL training might work with a visiting geologist from a university to prepare some lessons.

The promise of success with this type of hands-on discovery method with limited English proficient students is supported by emerging research. For example, Chamot and O'Malley cite research by De Avila, Cohen, and Intili (1981) and Rodriguez and

Bethel (1983) which suggests that learning English through science can be effective and fun (1986, p. 24). Studies by Rowe (1970), Agers and Mason (1969), Hoff and Languis (1973), and Renner and Coulter (1976) suggest that limited English proficient students who study science through activity-based lessons simultaneously make strong progress in English language skills (cited in Sutman and Bilotta, 1986).

Despite the opportunity offered by a partnership of science and ESL, there are also local Native American contexts in which initial science training in students' home language may be possible and desirable. For instance, in the Choctaw bilingual program in Mississippi students receive the majority of classroom instruction, including science, in Choctaw. Doebler and Mardis (1981) found that Choctaw students in the bilingual program (the experimental group) did substantially better in post-tests in social studies and science than did Choctaw students submersed in English-only classrooms (the control group). As seen in the Choctaw example,

Science achievement of non-English background speakers can be enhanced by instruction in the native language continuing for several years after they have mastered basic English-language skills, because students are still more adept at processing abstract cognitive operations through their home language. If sufficient instruction or tutoring cannot be provided in the home language due to the lack of human material resources or to the presence of multiple languages within one classroom, activities designed to use concrete, visual, and context-embedded learning formats will increase the ability of the language-minority student to master required skills and concepts. (Ovando & Collier, 1985, p. 205)

Of course, there are many local factors which will determine when and to what degree science instruction will be in the Native American language or in English. However, there are three basic guidelines which may be useful to consider:

1. New math and science skills, facts, or concepts are most effectively learned in the student's native language.
2. When second-language instruction is incorporated into a math or science lesson, identification of specific language objectives to match the targeted math or science objec-

tives will provide more opportunities for students to practice particular vocabulary sets or sentence structures.

3. The more context-embedded the presentation is (for example, observation of a thermometer's response to hot and cold), the more likely LEP students can master the content even if presented in English. The more context-reduced a lesson is (for example, explaining the meaning of gravity), the more important it becomes to provide instruction in the native language. (Ovando & Collier, 1985, pp. 213-214)

Getting students interested in science

Related to the development of language through the science curriculum is our third important issue, the place of science within the overall school curriculum. The AAAS recommended that Native American students be actively recruited to study science and technology. This is an important goal to be encouraged. But, to accomplish it, students need to be exposed to science in a positive and meaningful way early in elementary school. It may be too late to attract students by the time they are in high school. Fortunately, young children seem to approach their natural environment as a marvelous series of question marks. They spend hours observing with genuine enthusiasm the world around them. They seem to be captivated by all forms of life—bees, antelope, other children, horses, deer, butterflies, trout, and so forth. They are fascinated by such natural phenomena as electrical storms, snow, wind, and rain. They love to observe what happens when they throw rocks into the water. Human-made items like airplanes seem magical to them; so do other human inventions like hot air balloons, bicycles, computers, radios, vacuum cleaners, watches, VCRs, tape recorders, and so on. In other words, children's natural desires to make sense out of their environment (with all its beauty, complexity, and mystery), can be nurtured formally in the elementary grades so that the spark is not gone by the time these children are in high school. The reason for doing this is not just so that we can have a higher number of Native American scientists later on, but so all Native American adults of the future will have an understanding of how science impacts their lives.

Unfortunately, as DeAvila (1985, pp. 21-23) points out, many programs targeted to language-minority students such as Native Americans suffer from the compensatory education stigma.

Because students in compensatory education programs have low test scores in the "basics," reading and mathematics, almost all attention is focused on improving achievement in these areas. Other subjects, such as science, tend to be addressed incidentally and haphazardly after the other "work" of the school day is done. The implicit assumption seems to be that, in a linear fashion, students cannot learn about science until they have achieved mastery of a certain level of literacy. DeAvila, however, argues that a discovery-based, activity-oriented science program is an ideal vehicle for simultaneous, parallel development of thinking skills, literacy skills, oral language skills, and science content.

One way to address the concerns raised by DeAvila regarding the way many language-minority students in compensatory programs are denied the opportunity to develop scientific discovery skills is to consider some teaching and learning strategies suggested by Herber (1978). His approach is known as content-area reading. Viewing content areas, such as science, as powerful and exciting vehicles for learning to read, he offers the following suggestions. First, teachers should see reading not as a subject unto itself but as a vehicle for getting from point "A" (lack of knowledge about a certain subject) to point "B" (the source of interest). That is, literacy should be taught as a means to an end. Reading skills anchored in meaningful purpose will have greater power over students than reading skills taught in isolation with no relationship to other subjects. Thus, for example, a teacher who is aware that students are interested in how the Rocky Mountains came about may wish to select readings from a text which will focus students on the processes by which such mountain ranges are produced. In this particular case, the end, discovering how such a mountain range was formed, becomes the driving force behind students wanting to read the passages. Through the geological reading assignment, in parallel fashion, the teacher can provide instruction in such reading skills as cause and effect and sequence of events.

Much difficulty associated with extracting information from science texts has to do with the highly-complex nature of the vocabulary, the organization of the text, the language structure, the literacy skills, and the study required to master the concepts. Without effective guidance it is easy for students to fall behind, become frustrated, and eventually give up. This may be especially true for students from language-minority backgrounds; vocabulary and sentence structure, for example, are clearly language issues. What Herber says about instruction in general

can easily be translated to a situation where teachers are working with language-minority students such as Native Americans:

The subjective observation that the student "can't read the textbook" is based on the incorrect notion that they should be able to read that material independently. Assignments are given; students do poorly in their attempts to read the material; the teacher is disappointed; the students are frustrated. (1978, p. 17)

In the situation which Herber describes, teaching is not really going on. It does not take much imagination for a teacher to tell students to read a certain section of the book and answer questions at the end of the chapter. The skill of teaching comes in providing students with skills to build a bridge between what they already know and what they need to learn. In Herber's approach, reading for comprehension requires active engagement of science teachers with their students in such a way that:

(1) before teachers give specific reading assignments, they discuss with students the objectives to be attained from the reading;

(2) that teachers and students discuss prior material or experiences which set the context in which the new material is to be learned; and

(3) that teachers carefully examine the vocabulary students need to understand to make sense of the reading material (Herber, 1978, p. 38).

Bilingual teachers working with limited English proficient students on science assignments may need to go over and put extra emphasis beforehand on the crucial vocabulary associated with the text. One type of pre-reading vocabulary activity is to provide students with a list of terms they will encounter and have them write down what they think the words mean. This will relate what they already know to what they are going to learn. Then, using a dictionary, group work, and teacher's explanations, students can write down what the words actually mean in the particular lesson. In addition, teachers may need to help students identify in the text where the authors are simply giving information, where they are explaining causes and effects, or where they are classifying. The use of passive tense in science texts may need some explanation (Who or what is doing what to whom or what?).

As can be seen, Herber's approach to teaching reading at the same time as teaching a subject such as science involves a great

deal of oral preparation and a variety of pre-reading activities with students before the assignment is given. In these pre-reading activities, Herber (1978, p. 173) suggests that prediction can serve as a means of engaging students in the reading process. If students make predictions about what will happen in a given science experiment or study, they are more likely to want to read and to comprehend the assignment to see if their prediction was accurate or not. By predicting beforehand, the students have an investment in what they are about to read or observe.

Both the CALLA approach and Herber's content-area reading can serve to integrate two subjects into one (for example, science/ESL or science/reading). Such integration of subject matter may be considered a method culturally compatible with some Native American traditions. In that respect, Cajete comments that

There is no word in any traditional Native American language which can be translated to mean "science" as it is viewed in modern Western society. Rather, the thought process of "science," which includes rational observation of natural phenomena, classification, problem solving, the use of symbol systems, and applications of technical knowledge, was integrated with all other aspects of Native American cultural organizations. (1986, p. 4)

It follows naturally that, in incorporating Native Americans' traditional backgrounds into the formal science curriculum, a variety of areas of study or experiences can be interrelated. As will be seen in the following section on resources, for example, study of traditional myths, legends, and stories about the stars can be integrated with lessons on modern astronomy.

Sample Resources and Ideas for Teaching

In this section, resources in four areas pertaining to the improvement of science teaching for Native American students will be described:

- 1) ideas for use of the local environment;
- 2) ideas for use of local history and traditional stories;
- 3) sample science lesson plans; and
- 4) organizations and programs for teachers and students.

The lists, of course, are not comprehensive, but they provide a sampling of available materials. Some materials may be used as

they are, while others may offer ideas for ways in which science teachers at the local level can develop their own materials or lessons.

Ideas for use of the local environment

The following materials exemplify some exciting ways to use local resources to teach science within the cultural and environmental context of Native American students.

1. *Ethnobotany of the Hualapai* (Watahomigie, Powskey, & Bender, 1982) is a locally produced bilingual monograph which describes plants in both scientific and common terminology and notes the way in which they fit into the Hualapai culture of Northwestern Arizona.

2. *Nauriat Niginagtuat: Plants that We Eat* (Jones, 1983) is likewise a locally-produced monograph commissioned "to help preserve Inupiaq food wisdom, and to encourage the use of local foods" with a focus on improvement of the nutrition of young Eskimos in the Kozebue area of Alaska.

3. *Dena'ina K'et'una: Tanaina Plantlore* (Kari, 1977) is another excellent publication which examines the close relationship between plant life and the Dena'ina, or Tanaina, Indians of Alaska.

4. *Village Science: A Resource Handbook for Rural Alaskan Teachers* (Dick, 1980) is a highly imaginative and outstanding example of how an area school district has developed a series of secondary level science lessons using such commonly available things in their region as boats, chain saws, snow machines, wood stoves, guns, vapor barriers, and hand tools. These items are linked to such science concepts as friction, surface area, inertia, action-reaction, centrifugal force, and center of gravity. Each unit has text with illustrations, suggested activities, and student response sheets.

5. *Antler and Fang* (Education Development Center, 1970) is a small publication of the social science curriculum *Man: A Course of Study*. The booklet explores the interrelationship among caribou, man, and wolf.

Like the wolf, man must find a caribou, approach and kill it before he can use it. But man does not have sharp teeth and strong jaws. He does not have great endurance. He can not run faster than ten miles an hour. He does not follow the caribou through its yearly migrations.

How does man find the caribou?

How does he get close to it?

How does he kill it?

What does he do with the dead animal? (p. 22)

6. *Pitengnaqsaraq: Yup'ik Eskimo Subsistence Board Game* (The Lower Kuskokwin School District Bilingual/Bicultural Department, 1983) introduces Yup'ik students to the critical function which weather and seasons play in subsistence economies dependent on fishing, trapping, hunting, and gathering for their survival. The game provides a natural lesson in ecosystems.

7. Sometimes an idea for the science curriculum may come from an unlikely source. For example, Hale (1980), a linguist, suggests:

The study of language should form a part of curriculum. Linguistic science has the advantage over other sciences that the data relevant to it are immediately accessible, even to the youngest of students, and it requires a minimum of material and equipment. (p. 3)

In other words, according to Hale, science teachers can readily use "linguistic knowledge which students possess as a subject matter of science" (p. 3). For example, he suggests that by engaging students in an analysis of the structure of their home language, they will "begin to formulate the laws which govern the observable behavior of linguist form. Observing data and making generalizations about it is an important activity at this stage" (p. 7). As an illustration of this point, students in a Papago context may start by using such possessive patterns as 'my dog,' 'my house,' 'my horse,' 'my mother,' and so forth to try to discover the rules by which the possessive construction takes or does not take the suffix /-ga/.

8. Teachers of science working with Native American students need not limit themselves to examining resources labeled, so to speak, "For Native American students." For one thing, there is often a dearth of good materials that address the needs of language minority students. Therefore, we need to look for ideas wherever we can find them. The following are examples of general resources which can be useful to science teachers working with language minority students within Native American contexts:

The Scavengers Scientific Supply Company, P.O. Box 211328, Auke Bay, AK 99801, offers a profusion of science education supplies. Its catalogue lists animal skulls (for example, er-

mine/weasel, marten, mink, muskrat, red fox, and beaver), fur kits, plant specimen, and slides as well as posters of invertebrates, fish, mammals, birds, geology, ecology, and plants.

A Guide to Nature in Winter: Northeast and North Central North America (Stokes, 1976) is a general reference publication very useful when taking winter field trips to examine such things as animal tracks in the snow and to look for birds which are then quite conspicuous. The author notes,

Winter is a particularly good time in which to do this, for with leaves gone birds are more easily seen, and many join together in flocks, making them even more conspicuous. Now is the time to take birds you may have dismissed all summer as "just a Mockingbird" or "only another Chickadee" and relate them on a deeper level of interest. (p. 185)

Ideas for the use of local history and traditional stories

In the previous section, the use of students' physical environment for development of science lessons and activities was explored. In this section we will examine, how Native American stories, community lore, and local life histories can be integrated with the study of science.

1. *Ulgunigmiut: People of Wainwright* (North Slope Borough School District, 1981) is a student-produced local history of the Eskimo community of Wainwright, Alaska. The monograph does not pertain to any specific field of science. However, it illustrates how students working on such a local history project could be guided to use aspects of historical research to branch into scientific studies. In the case of the Wainwright book, for example, the salient topic of whaling could be used to begin a study of the physiology and behavior of whales.

2. The Yukon-Koyukuk School District has produced a series of autobiographies, or life stories, of Native Americans of interior Alaska. The biographies are written transcriptions of what contemporary Athabaskans have told orally about their life experiences. The books are designed as culturally-relevant materials for upper elementary students. Again, there is no direct science content in the life histories, but they demonstrate how science lessons could be fused with locally-meaningful material. For instance, the topic of fishing could be incorporated with a study of fish life cycles and food chains; the topic of gold mining

could be related to local geology; or the topic of fishing could lead to a study of microorganisms as they relate to food preservation.

3. *Star Stories* (Skinner, 1986) is a delightful publication which presents beliefs and concepts from a variety of Native American cultures regarding the cosmos. It incorporates these ways of thought into science lessons in the area of astronomy.

4. *Famine Winter* (Reyhner, 1984) was originally an oral account told in the last quarter of the 19th Century about a trip a Blackfeet family made northward in search of a strange kind of bear (a polar bear). The brief account, interesting in its own right as a form of literature and history, could also serve as a starting point for such science topics as ecological regions (plains, forest, tundra), bird migrations, seasons, and the effects of latitude on seasonal changes.

Sample lessons

The following resources provide detailed examples or collections of science lessons which can be tailored to the needs of Native American students. The first two monographs cited focus on development of English skills while acquiring science content and processes at the same time. The other two references are to materials which incorporate traditional Native American themes into science lessons.

1. *Learning English through Science* (Sutman, Allen, & Shoemaker, 1986) includes, in addition to a variety of instructional strategies, narrative descriptions of three sample science lessons in which the strategies are applied. Two of the lessons are at the high school physics level while the third one, on machines, could be suitable for kindergarten or early primary.

2. *A Cognitive Academic Language Learning Approach: An ESL Content-Based Curriculum* (Chamot & O'Malley, 1986) also has three sample lessons in its chapter on science. The lessons state language objectives, science objectives, and learning strategies. They also describe preparation for the lessons, presentation, practice activities, evaluation, and follow-up activities. The first lesson, for example, which draws easily on local resources, is on the interaction between rocks and water.

3. *Introduce Science to Students Using the Environment: A Guide for Teachers of Native American Students* (Richau, 1981) contains eighteen lessons for elementary students. A few topics included are soils, land and population, mini-climates, the web of life, and ecosystems. All lessons are based on locally-available outdoor field experiences and include instructions for planned

observation. Many of the lessons begin with a "non-scientific" quote from a highly-regarded Native American elder or a poem related to the topic, and these introductions give deeper meaning to the lesson.

4. *Science Lessons for Native Americans* (Otto & Eagle Staff, 1980) is a collection of lessons, ranging from kindergarten to adult level adapted to Native American cultural traditions. Each lesson includes a statement on implications the lesson has for Native Americans. For example, a lesson on conditions necessary for seed germination and development ends by asking why Native Americans planted crops on river bottoms instead of on hilltops or buttes.

Organizations and programs for teachers and students

Following are some resources which provide a support structure for information networks and science education opportunities.

1. The Native American Science Education Association (NASEA, 1333 H Street, NW, 11th Floor, Washington, DC 20005, is a not-for-profit organization begun in 1982 to improve science education for Native American students. The organization is dedicated to increasing the representation of Native American students in science and math-based careers. It also produces and disseminates information about culturally-relevant science and math programs. Among its projects and services are regional science network conferences, a science education resource center, science equipment loans, regional in-service workshops, field research awards for outstanding teachers, and science circuit riders who provide on-site help to teachers. NASEA also offers a model high school science program (Dekwanakwui, Ulohnanne Science) and a bicultural health science program for high school students (Ak'Wa K'Yak'Win Yanikwadinna).

2. *Kui Tatk* is the newsletter of the NASEA (same address as above). Published quarterly, the newsletter includes such things as information on workshops and conferences, articles on theory and methods, culturally-relevant science charts for the classroom, NASEA news, lists of opportunities for students and teachers (such as summer programs, scholarships, and fellowships), and film reviews.

3. Also a product of NASEA, the *Science Education Resource Center Catalogue of Holdings, Spring 1986*, lists resources for

Native Americans in art, astronomy, energy, health, math, language arts, natural science, science, social science, and teacher education. (same address as NASEA).

4. *Winds of Change* is a quarterly magazine for American Indians involved with science and technology published by the American Indian Science and Engineering Society (*Winds of Change*, 1310 College Avenue, Suite 1506, Boulder, CO 80302). The publication is designed to provide information on Native Americans in science careers and to encourage Native American youth to choose science-related careers. It includes portraits of Native American scientists, articles on tribal use of technology for resource development, news on corporations involved with Native American issues, descriptions of schools providing good opportunities for American Indian youth, and information on scholarships.

5. The Minority Access to Research Careers program (MARC), sponsored by the National Institutes of Health, is a highly generous scholarship program to prepare minority students for entrance into graduate programs in the biomedical sciences. Admission to the program is based on strong academic performance (MARC Program, National Institutes of Health, Bethesda, MD 20892, Phone 301 496 7941).

Conclusions

Working in bilingual education, Lambert (1984) has developed the concept of subtractive versus additive bilingualism. Subtractive bilingualism is described as students' lack of development in their home languages as they develop second-language skills. Additive bilingualism is described as continuing cognitive development in the home language while also mastering the second language. Lambert argues that in subtractive bilingualism the lack of development in children's home language will also lead to deficiencies in their mastery of the second language. Additive bilingualism, on the other hand, provides the best potential for full development of children's first and second languages. In this paper we have discussed three main issues:

1. The need for a two-way interchange between the traditional Native American learning environment and a school's formal science curriculum.

2. The potential to use science lessons as excellent vehicles for development of English language skills in some situations, while giving instruction in the home language in other situations.

3. The desirability of elevating and integrating science study

into the web of the overall school curriculum, using science and its connection with the home culture as a means of helping to teach the "basics."

All of the above points, as well as the material resources we discussed, reflect a common need to break down unnecessary barriers between traditional Native American cultures and the Western science framework; between the content area of science and other school subjects. These things are additive processes. Just as additive bilingualism enriches both children's first and second language, additive science education can enrich Native American students' traditional heritage at the same time that it prepares students to master scholastic science content and processes. And additive science education can do this within a context of more holistic understanding and meaning.

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Mathematics and the Indian Student

David M. Davison and Duane E. Schindler

The bilingual student is a disadvantaged mathematics learner—in terms of both cultural orientation and language processing. It is too simple to say that “American Indians don’t have math brains” or that they “can’t do math.” Such comments come all too easily in the face of the poor achievement of American Indian students in mathematics beyond about the fourth grade level. The responsible educator must ask “Why do these students not perform better in mathematics?” and “What can be done to help them learn more effectively?” The task for the mathematics educator is to design a curriculum that will enable Native American students to do better.

In response to these questions, it is appropriate to consider the influence of language and culture on a bilingual student’s technical language development. The authors reviewed this influence as studied by other investigators (Schindler & Davison, 1985). For example, Green (1978) found that math avoidance, differences in perceived utility, ability to distinguish nuances of meaning in the English language, and the mathematics vocabulary of the American Indian language all need to be considered as factors in the mathematics learning of Native Americans. She discounted the idea that American Indian students fear and avoid mathematics because of failure and lack

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of inherited skills, but noted further that American Indian students view mathematics as irrelevant to real life.

Garbe (1985), in his work with Navajo Indians, suggested that the students were not getting enough instruction in mathematics vocabulary. He recommended that vocabulary to be mastered be clearly identified and that student performance in vocabulary be passed on to the teacher of the next grade. Teachers should try to use students' past experiences with mathematical terms to help give the terms meaning in a mathematical context. The introduction of a new term should be carefully orchestrated through repetition in context, and through saying it aloud and spelling it.

Green (1978) and Closs (1977) both commented on the lack of interest in historical material dealing with the mathematical contributions of Native Americans. This is reflected in the scant attention accorded Mayan contributions, for example, in classroom applications of the history of mathematics.

Leap, et al. (1982) observed that American Indian students' errors in mathematics problem solving were due to the use of Indian language mathematics-based problem solving strategies rather than inaccurate mastery of Western mathematics skills. A review of studies of mathematics learning among a variety of non-Western cultures indicated that indigenous peoples are often unable to solve mathematics problems that are not perceived as culturally relevant (see, for example, Saxe, 1982). For example, the abstract addition of thirty-seven and fourteen is meaningless to some non-Westerners. It would be more meaningful to restructure the problem as the addition of thirty-seven horses to fourteen horses since in most Native American communities horses are important.

The Eastern Montana College Title VII Dean's Grant was awarded to address the needs of a multicultural/bilingual American Indian population by focusing on the expansion of selected teaching methods classes. A primary goal of the program has been to extend the capacity of the institution to provide training relevant to bilingual educators in the innovative use of technology, mathematics, and science. In the first year of the grant the Project Director concentrated on an investigation of English language mathematics concepts and terms used in the Crow Indian language, an important native language in Montana.

The use of the Crow language is high among the adult Crow reservation population, and nearly eighty per cent of Crow Indian

children are fluent speakers of the Crow language (Read, 1978). While designed primarily to address the needs of teachers in reservation schools, this study has implications for many other bilingual American Indian students. In terms of the different ways in which they process mathematical information, these students are being neglected through the strategies used in regular mathematics instruction in schools.

Mathematics concepts in the Crow language

To explore the relationship between the acquisition of mathematics concepts in the English language and in the Crow language and to document the existence and use of mathematics vocabulary in the Crow language, the authors devised a structured interview study with Crow Indian adults in several reservation communities and Crow Indian children in three reservation schools.

The adults were all fluent speakers of Crow. According to the adult informants, names for square and circle were well known, but the name for triangle (which means, in English, "three points") was of recent origin and less widely known. Names for other terms such as sphere were recent descriptive inventions.

Mathematics terms currently in use reflect the mathematics important within the Crow culture. Crow language terms exist for addition and subtraction because these operations have meaning in the Crow culture. Crow language terms for operations such as multiplication and division were not found in the survey. This may be because the informants did not typically use the terms. The adult informants noted that number names are important in ceremonies and have special significance in the Crow culture.

Student interviews

The authors identified three schools on the Crow Indian reservation—Pryor, Crow Agency, and Lodge Grass—where there is a significant population of bilingual students. At each school an administrator selected ten students considered fluent in both English and Crow. The authors had requested that students be selected from those in grades four, five, or six who had been involved in a bilingual education program.

A fluent Crow-speaking adult acted as interpreter to ask the survey questions in Crow. The students came one at a time to the room where the authors and interpreter were located. Each interview lasted approximately twenty minutes. The students processed the interpreter's questions and answered them in Crow.

The interpreter then translated the student's answer into English for the authors.

Following is a summary of responses:

1. Nineteen of the thirty students could recite Crow names for numbers up to ten but no higher, while only one could give numbers beyond twenty. However, when the interpreter gave the Crow number name and asked the student to identify the number, eighteen recognized number names beyond twenty, and six of them recognized names for numbers greater than one hundred. This suggests that even in bilingual programs students are not using the Crow names for the numbers frequently, although they recognize them.

2. Twenty-six of the students use Crow number names when speaking with other Crow Indians, especially with family members. For example, some students living or spending considerable time with their grandparents speak only Crow while with them. This suggests that the students are using the Crow number names they know.

3. With only three exceptions, the students said they used English language number names only in school. There was a clear distinction in the minds of these Crow-speaking students that one spoke the Crow language at home and the English language at school.

4. Nineteen of the students used mathematics only when dealing with money while eight of the remainder said "when using numbers in an English language way." This finding also supports the notion that these students associate the use of the Crow language with their out-of-school life.

5. Students appear to encounter the terms for addition and subtraction only in the context of mathematics instruction—whether the terms were known seemed to depend on whether the students could remember them from bilingual instruction.

6. The term for one-half, and to a lesser extent, that for one-fourth, form part of the traditional Crow culture. Otherwise, fraction names are viewed as part of the English-language culture only.

7. Twenty-three of the students knew or recognized Crow names for at least four shapes (circle, square, triangle, rectangle, and star), and only two knew or recognized fewer than three shapes. The term for circle was unfamiliar to only two students, three were unfamiliar with square, and four with triangle. The widespread recognition of terms for circle and square was to be expected in terms of their significance in traditional Crow

culture. Certainly, the importance of these geometric shapes in the Crow culture is supported by these findings.

8. When asked the position of a designated rod in a set of Cuisenaire rods, only one-fourth of the students used the ordinal term representing fourth, the majority answered "four." It is clear that the Crow language distinction between cardinal and ordinal numbers was not understood by these students.

9. Each student was given the twenty-four-piece set of geometric attribute pieces consisting of the three primary colors; the shapes square, triangle, circle, rectangle; and the sizes large and small. Each was then asked to sort the attribute set. In twenty-five instances the student sorted initially by shape, whereas most westerners sort initially by color. This would appear to support the notion that American Indians relate better to spatial representations than do non-Indians. This also supports a tentative conclusion that American Indians process mathematics differently from non-Indians.

10. When asked to identify differences between given attribute pieces, seventy-five percent of the students could identify all three attribute changes. This suggests that these students are very capable of relating to geometric materials.

Interpretation of the findings

All students interviewed were classified by administrators as bilingual, but only one could count beyond twenty in the Crow language. The effect of years of schooling Crow children in English appears to be that Crow language mathematics vocabulary is being lost. Even when the children knew Crow number names (as in counting), they appeared to be thinking in English and translating into Crow. They reported that they used English number names when talking with other Crow speaking children, but that they use Crow number names when talking to Crow speaking adults.

Based on interview data, it appears the Crow language with its geometric terms and uses of mathematics operations is not being used to aid mathematics taught in English in Crow reservation schools. If Crow is to be used to teach mathematics to Crow-speaking children, the teachers need to be aware of the operations of mathematics within the Crow language and to be able to use the logical constructs within the Crow language to assist Crow-speaking children in the accommodation of mathematics instruction in English. This means that specialized teacher preparation programs for teachers of Crow-language-speaking children

should include study of mathematics concepts in the Crow language. Crow bilingual education programs in the elementary schools may center Crow language lessons on mathematics functions in the Crow language and thus assist non-Crow-speaking teachers in facilitating Crow-language-speaking children's accommodation of English language mathematics concepts. Crow-language instruction in mathematics may enhance English-language mathematics achievement of Crow-language-speaking children. An experimental Crow-language bilingual mathematics class which taught initial reading and mathematics in the Crow language to Crow-language-speaking first-grade-level children resulted in these first graders receiving higher scores on a standard English-language achievement test of mathematics ability than a matching group of Crow-language-speaking first-grade-level children who were given initial mathematics instruction in English (Closs, 1975).

Methods of learning mathematics

Equally as important as the role of language and culture on the Native American child's learning of mathematics is the way mathematics is learned. How do Native American students process mathematical ideas? What is their style of learning?

One way of responding to these questions is addressed by the "Math and the Mind's Eye" project, centered in Portland, Oregon. As project director Maier (1985) indicated, many people, regardless of culture, find mathematics devoid of meaning, consisting of nothing more than mathematical jargon and symbol manipulation. This results in mathematical underachievement, anxiety, and aversion. Many who are successful in mathematics employ sensory perception, models, and imagery, but this is not where the focus of school mathematics lies. Maier focuses attention on visual thinking and its role in teaching and learning mathematics.

The "Mathematics Their Way" program, in use for a number of years, has proved successful because of its emphasis on relating mathematics to reality. The program has been particularly successful with American Indian students who have benefited from the more hands-on, less abstract approach. There is a clear suggestion these students will be more successful when presentation of mathematics material responds to their learning styles by being less abstract and more visual and tactile. This observation is supported by students' preference for geometric tasks, and suggests that they can succeed in English-language mathematics so

long as it makes sense in terms of the way they process information. Initially, use of the native language is important as an aid to learning English-language terminology; the continued successful learning of mathematics depends on students being able to process the ideas in a meaningful way. Accordingly, it appears that for students from more spatially-oriented cultures, such as American Indians, a more-sensory-oriented teaching style would seem essential.

Summary

Three influences affect the American Indian student's capacity to learn English language mathematics. The first is the role of language, the second is the culture, and the third is the student's learning style.

The authors found that Crow Indian bilingual students are not maintaining mastery of the Crow language as far as knowledge of Crow language mathematical terminology is concerned. This raises questions about the impact of bilingual education in mathematics instruction, at least in terms of mathematical vocabulary. Incomplete learning of mathematics vocabulary in the children's first language may be creating children who have incomplete mastery of either their first language's mathematics construct or the constructs of English. The influence of the students' culture, and the perceived relevance of the mathematics curriculum, is seen as an additional problem. Except for working with money, students do not perceive the mathematics they learn in school to be of any use to them, nor is the school curriculum seen as culturally relevant. Most significantly, the students did not share either a large number or a wide range of goals. The school curriculum, as far as these students were concerned, related to just one goal—earning money. Even though these students were young, school had very little message for them.

The methods by which mathematics is typically presented do not consider the Indian student's learning style. Textbooks are typically written for white middle class America and present mathematics as an essentially abstract subject. While many textbook series now make reference to the use of tactile and visual aids, few teachers present mathematics in other than an abstract manner. The Indian student depends upon a more sensory approach to be able to learn mathematics effectively.

These influences, singly or in combination, have affected the ability of many American Indian students to succeed in mathematics. Students in bilingual education programs need more attention paid to mastery of mathematics terminology in the native language, and thence to the mastery of English language mathematics vocabulary. Wherever possible, mathematics concepts should be presented in a culturally relevant manner, using situations in which the students may have some interest. Above all, the presentation of mathematical ideas needs to be consistent with how students learn. The use of a tactile/visual approach assists students to form meaningful images. The authors suggest that progress in these three areas will contribute to more successful learning of mathematics by American Indian students.

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Physical Education for the Indian Student

Robert W. Grueninger

Traditionally, the values and skills which a Native American needed for survival were perpetuated through games and sports. Activities often simulated hunting, food gathering, tipi building, relaying vital messages, or fighting (Wise, 1976). Skills emphasized were those of throwing spears, shooting arrows, riding horses, and running. Games developed and tested the strength, stamina, speed, pain tolerance, and courage required for life. Those that did well in these tests hopefully would develop into tribal leaders with the skills and courage needed for war.

The "little brother of war" was the name Native Americans gave for lacrosse, one of the many Indian gifts to modern-day America. The truth is that the American Indian can feel a sharing in the development of many popular, contemporary sports and sole pride in ownership when it comes to the origin of many sport and recreation items and games. Ancestral forms of field hockey, ice hockey, soccer, and football were played in the Americas as well as in other corners of the world long ago. Canoes, sleds, snowshoes, moccasins, hammocks, kayaks, ponchos, toboggans, parkas, stilts, swings, tops, and in fact, rubber balls are Indian inventions (Brescia, 1981; Josephy, 1968; Lavine, 1974). Games such as Blind Man's Bluff, Prisoner's Base, Crack the Whip, Hide and Seek, and Follow the Leader were common among tribal children (Whitney, 1977).

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Physical education programs for the native student should begin by creating an awareness of Indian contributions to games and sports and an appreciation for their role in American history. Recognizing the unique aspects of the native experience, opportunities should be considered to introduce games of low organization at the primary level which are either Native American games or which can be adapted to be more relevant to the cultural setting. In the middle and upper grades, when introducing lead-up games and sports, the physical educator is encouraged to incorporate those that have roots in Indian culture, or at least to explain the extent to which the game has been known in the Native American experience.

Second, while physical fitness and motor skill development should be the primary objectives of physical education, regard also should be given to the significant social and emotional growth opportunities available to the Native American child through physical education classes, intramurals, and interscholastic sports.

Third, a curriculum based on developmental motor tasks is immediately suitable since all children, regardless of race or ethnic background, go through the same sequences in learning motor patterns. Yet, timetables and comparative emphases may vary, so leeway must be given to individual children; do not expect everyone to adhere to the same, fixed timetable of development.

An account of games played by Indians would fill several books, and several have been written that list games and tell how they were played (MacFarlan, 1958; Culin, 1975). Equipment is described in some of the books, with detailed instructions on how to make it. Improvisation is possible with the use of newer materials. For example hoops made of plastic or of rubber hose joined with a wooden dowel and tape could substitute for the traditional wooden hoops in the hoop and spear game. Since Indians continually made the best use of what they could find in their environment, such as by using metal for arrow tips and spear heads when iron became available, it would not seem impure to use synthetics, plastics, or even manufactured equipment in teaching and practicing in the eighties those playforms that came into existence centuries ago.

Mention will be made here of some of the more common active games, sports, and contests that would have provided physical fitness benefits to contestants. Fancy dancing is omitted, since it thrives both as an exercise and an art form apart from any need

to preserve it. Also omitted is discussion of the many guessing games and games of chance, which also form a rich, continuing tradition. Suffice it to say that gambling was associated with games of all types.

Indian games

Children's games mimicked adult activities (*Lakota*, 1972). Girls would put up miniature tipis and boys would bring rabbits, imitating the hunt. Stilts were fashioned for Hopi, Shoshone, Crow, Zuni, and Mayan children, to mention but a few. Swings were enjoyed by Pawnee and Teton youngsters. During the winter, children in the north country would spin conical tops on the ice (Lowie, 1954). Children liked to imitate the motions of animals, so Follow the Leader as a leader assumes different animal movement patterns would be well received (MacFarlan, 1958). Tag games were also popular, as were other running and relay games. The Indian game of Lummi sticks, from the Northwest tribe of the same name, is known to every physical education teacher today.

Fish Trap. Northwest Coast Indian youth enjoyed a tag game played by between 4 to 12 fishermen and 1 to 3 fish. The fishermen held hands simulating a net, and would attempt to catch the fish. If the fish were touched by any part of the net, they were considered caught. The game continued until all of the fish were netted (Rcss, 1979).

Hoop Race. The Beaver Clan of the Seneca Nation enjoyed a circle relay involving passing a 24-inch diameter hoop over the head, body, and legs of each player around the circle and back again in reverse sequence (step in to the hoop, over the trunk, and off over the head). The first team to complete the hoop passing without missing a person or step was the winner.

Corncob Darts. Darts made of shelled corncobs and feathers were thrown at a circular target drawn on the ground at various distances. Twenty feet was common, although the target could be nearer or farther depending upon the skill level of the participants.

Dodge Ball. Mandan, Pawnee, and other prairie tribes played a form of dodge ball in which a batter would toss up and bat a rawhide ball with a four-foot hardwood stick. If any of eight or so fielders encircling the batter caught the ball, the fielder would throw it from that spot at the batter. The batter had to dodge the ball while staying inside a four-foot diameter circle. If hit, the

batter became the fielder, and the thrower became the batter (Whitney, 1977).

Archery

Indians commonly held their bows horizontally rather than vertically. Variations proceeded from (a) standing and shooting at a stationary target to (b) standing and shooting at a moving target, such as a ball of yucca (Navajo), (c) standing and shooting at a buffalo hide being dragged by rawhide, (d) trying to have more arrows in the air in a rapid fire technique at one time than could your opponent, (e) launching a piece of straw into the air and trying to hit it with an arrow, similar to trap shooting (Crow), and (f) riding and shooting at a grass target (Lavigne, 1974). Targets varied from shooting through holes in a yucca in New Mexico, to corncobs in other parts of the Southwest, and to a sapling branch in California. The Blackfoot had their own version of archery golf, consisting of shooting an arrow into the ground and then shooting a second arrow at the first. Where the first arrow landed became the "tee" for the next shot. The Pawnee variation consisted of shooting an arrow so that it would land flat about 50 yards ahead. Other archers then attempted to shoot so their arrows would come to rest across the first (Whitney, 1977).

Bowling

In Georgia, archeologists discovered several twenty-foot long bowling alleys built by the Cherokee. The alleys were made of hardened clay. Stones were pitched at clay pins or clubs. In the Southwest, corncob targets were knocked down by rolling wooden balls. In Louisiana and Arkansas, however, the Caddo Indians played an interesting team game, not unlike what is now known as "Pin Guard." A field about 30 feet by 70 feet was marked out, and six clay "Indian clubs" were placed side by side along each end line. Two teams of seven players competed; each team confined to its own half of the field. The object was to throw a basketball-sized ball filled with seed so that it would knock down the pins. Play continued until one team had knocked over all the pins on the other team's end line (Whitney, 1977).

Winter sports

Eastern tribespeople slid objects along the ice in contests for distance. The objects, called snow snakes, consisted of sticks, arrows, feathered darts made of animal ribs, horn-tipped saplings, antler pieces, or even unstrung bows (Lowie, 1954). Snow snake

among Northern tribes employed flat or round rogs as long as ten feet which were hurled across crusted snow or smooth ice.

Snow boat apparently was an Indian version of today's Cub Scouts' Pinewood Derby. Today Cub Scouts make pinewood cars and race them down ramps; Indian children whittled canoes out of hardwood and raced them down iced chutes. A small keel kept the boats from flipping over or off the track (Lavine, 1974).

Lakota made sleds using the ribs of buffalo as runners and cherrywood for the body of the sled. The ribs were tied on with rawhide, and a buffalo head decorated the front of the sled (Wolfe, 1982) Khotana, Cree, and Chippewa youngsters raced both on snow shoes and in toboggans (Whitney, 1977).

Ice Shinny. The most interesting winter game was Ice Shinny, found among numerous Northern tribes. Early North American white settlers were accustomed to the sight of a brave running across the ice pushing a puck with a curved stick. Shinny was played with crooked sticks similar to the ice hockey sticks of today. In fact, ice shinny may be considered a precursor of ice hockey, although skates were not used. Teams competed in attempting to score goals against the opponents by hitting a ball through a goal with the stick (Lavine, 1974). Among the Blackfoot, two upright logs were the goal posts, placed on end lines about one-quarter mile apart. The puck was a knot of wood covered with rawhide or was a stone. A game consisted of seven points. As many as 50 players were on a team.

Shinny

Shinny was the forerunner of both ice and field hockey, and was popular from Canada to Mexico, from the Atlantic to the Pacific. Although the ice version was played by men and women, the land game was engaged in primarily by women. The field varied from four hundred feet to one-quarter mile long. Teams competed by defending goals located at opposite ends of the field or by taking turns and counting the number of strokes that it took to score a goal by hitting the ball along the ground with the stick. Indian Agent Albert Kneale gave this account of the game as it was played on the Crow reservation:

The Crows played a game somewhat similar to shinny, and what a game it was! The field was possibly five miles in length, and there were no side lines. The goal lines were marked off by an array of vehicles and saddle horses belonging to the contestants, and a few individuals who for some reason were incapacitated. There was no limit to the number

of players. It was district versus district... Everyone... children. Young men, young women, the middle aged, and even old men and women, who could struggle to their feet only with difficulty, could be found sitting on the ground somewhere on the field grasping their shinny sticks, hopefully waiting for the battle to come close enough for them to get one swipe at the ball. (1950)

The game was more defined among the Blackfoot, whose women had an impartial method of choosing their teams. Each player would place her individually carved stick on a pile, and a blindfolded person would choose the sticks two at a time, dividing them into two piles which henceforth formed the teams (Lavine, 1974; Whitney, 1977). Perhaps a variation of this method could be used in dividing players into teams for other games in which players have their own, or at least easily identifiable, equipment.

Double Ball. Double Ball was a variation of shinny in which two baseball-sized balls were tied together with a six-inch leather thong. The double-ball was carried or thrown with a hooked stick some two- to six-feet long. The game was popular among Pawnee and Pima women as well as females of many other tribes, but was hardly ever played by men. Menominee women played double ball on a hundred yard long field, with a three-foot stick, and from six to ten players on a team. The game started with a ball toss at midfield. Then players would pick up, run with, and pass the ball until a goal was scored. It was permissible to tackle the ball carrier, but was not okay to touch the ball with the hands (Brescia, 1981). Today, although variations might be used in contests or relays, MacFarlan advises against the team game because of the considerable risk of injury from the stick (MacFarlan, 1958).

Lacrosse

While Indians had their own types of bowling, hockey, baseball, wrestling, and football, primitive forms of these sports were found in other parts of the world as well. Lacrosse, however, is uniquely American Indian. The French explorer Rene Laudonierre recorded the game in 1564 in what is now Mississippi, among the Choctaw. The game was called Kabocca. The ball used was the size of a golf ball, and most commonly was made of buckskin stuffed with hair. Sometimes it was made of wood (Lavine, 1974; Culin, 1975). There were as many as seven hundred players on one team! Each player had two sticks with a cup-shaped end to catch and throw the ball. Goal posts were a mile

apart. The score could run to one hundred points, and a game could take four to five days, or longer. The Choctaw played Kabocca against the Creeks and the Chickasaws, among others, to earn hunting privileges, to settle disputes, or to determine the best warriors.

Kabocca was played by men of the Algonquin and Iroquoian tribes of the Atlantic Coast and Great Lakes, the Lakota to the west, the Muskhogena of the South, and by the Chinook and the Salish in the Northwest, with different names. Although the Iroquois called the game Tokonhon, the "little brother of war," French settlers, observing that the curved sticks used by the Senecas resembled a bishop's staff called "la crossier" in French, named the game Lacrosse.

Lacrosse was a violent, active sport, with much running, quick starts, and frequent injury (Anderson, 1983). Santee, Shawnee, and Sioux (Lakota) permitted women to play Cherokee, Choctaw, Muskogee, and Seminole used two rackets; the rest of the tribes mentioned used one. James Mooney described a game he witnessed among the East Cherokee in 1889 as follows:

It is a very exciting game, as well as a very rough one, and in its general features is a combination of baseball, football, and the old-fashioned shinny. Almost everything short of murder is allowable in the game, and both parties sometimes go into the contest with the deliberate purpose of crippling or otherwise disabling the best players on the opposing side. (Culiv, 1975, p. 586).

Fortunately, the rules have been refined through the years. Teams have been limited to, first, 30 or so per side, and, then, to the current 10-a-side for men, 12-a-side for women, and the field has decreased to the size of a soccer pitch. Rules of safety and protective equipment have been added (Anderson, 1983).

Modern Lacrosse is played widely in Canada and the United States (Whitney, 1977). A variation, Box Lacrosse, is played in iceless hockey rinks, adopting rules from ice hockey, lacrosse, and "murder ball" (Lavigne, 1974). (Please see the section on "Other resources for further information" at the end of this chapter for sources of rules for hockey and lacrosse.)

Hoop and pole games

Sports implements often were derived from weapons used in hunting or in war. Thus, the shield became a hoop in the hoop and

pole game, and the spear became the pole. In Gamago, the Iroquois hoop and pole game, a five-and-a-half-foot spear of maple was thrust at an eight-inch diameter hoop. Two teams, each of 15 to 30 players, lined up several feet apart and the hoop was rolled in between. After the hoop was speared, the opposite team had to throw its spears to hit inside the hoop. Any player who missed lost his spear (Brescia, 1981).

Sometimes arrows or darts were thrown at a rolling webbed target hoop which had been divided into different point values according to difficulty. Blackfoot warriors shot arrows at the hoop as it rolled past a specified point. Most tribes restricted participation to men, although women of some tribes, such as the Klamath, were allowed to participate. Pawnee tribesmen used darts, and Sauk and Fox, arrows (Lavine, 1974).

A variation of the game as played on the prairie involved two competitors who slid eight-foot long poles after the rolling hoop the hoop would fall over one when it ran out of momentum. Scoring was as follows:

Hoop fell on any part of the pole = 1 point

Hoop fell on the butt end of the pole = 2 points

Hoop fell on the point of the pole = 3 points. (Whitney, 1977)

For physical education classes today, however, the "Buffalo Hunt" game of the Oklahoma area seems most adaptable. The objective is to throw a blunt spear through a ten-inch (inside diameter) ring made of green branches wrapped with rawhide. Children are divided into groups which will make best use of available equipment so as to allow maximum participation consistent with good safety practices. The groups may be subdivided into throwers and retrievers. The last person in line rolls the hoop, and the first throws the pole at it. Each child is given five trials. Throwers become retrievers, and retrievers join the throwing line as rollers, and so forth. Close supervision is advised, to prevent someone from being hit by a pole (Wise, 1976).

Football

Games played with the feet ranged from foot catch to soccer to kick stick races. Foot catch was played by tribeswomen, who balanced a small deerskin ball on top of the foot, kicked it into the air, and caught it again on the foot. Pretty Shield (Linderman, 1932) gives this account:

This happened at The-hollow-rock near The-big-drop. The leaves on the trees were nearly grown. Several of us girls

were playing at kicking the ball. In this game we choose sides. A girl places the ball upon her foot, and kicks it up, keeps doing this until she misses, and the ball falls to the ground. It is then the other side's turn to kick the ball, each girl taking her turn until all have kicked. The side that keeps the ball from falling the longest time, the greatest number of kicks, wins the game; and always the winners touch the foreheads of the losers with their hands. (p. 111)

Pretty Shield described a kicking-ball made for her by her older sister: "The thin skin that is over a buffalo's heart is taken off and stuffed with antelope hair. My ball was a very fine one, painted red and blue" (p. 35). She does not infer that this was the same ball she used in the ball volleying game described above.

Among the Eskimo, the ball was one-and-a-half to two inches in diameter, made of buckskin, and somewhat akin to the popular hackysack now possessed by hordes of American teenagers. By comparison, the soft leather hackysack measures about six inches in circumference, or about one and a half inches in diameter.

There were many variations of ball kicking games; the earliest was recorded as far back as 1583. For instance, the Eskimos had a game similar to line soccer. Yakima men and women played football on a field, counting one point per goal, and allowing a goalie to block the ball. The Paiute played Wat Si Mo, on a 50-yard field, with two teams of four players each, using a three-inch wide buckskin ball (Brescia, 1981). Most tribes disallowed use of the hands, although some games employed hands and feet. The Topinagugim of California had an elaborate football-handball game in which men had to use their feet, while women were permitted to throw the ball. Another California tribe, the Nishinam, played with an oblong ball, 12-inches in its longest diameter, with eight players to a team. Dr. Hudson described the game:

One ball is used. The goals consist of pairs of poles, three feet apart, at the ends of a one-thousand foot course. Rough play is the rule, as a player is allowed to run with the ball in his hands, and interference is permissible. (Culin, 1975. p. 703)

Does this sound familiar?

Tek'mu Pu'ku means, in Moquelumnan tribal language, "to kick little dog," and was one of many kick ball and kick stick races among Native Americans. Two parallel lines were marked six inches apart, and posts were placed at the end of the lines. The

object was to keep the small, buckskin ball between the lines while foot racing; if the ball went out of bounds, it was restarted from that point (Brescia, 1981).

Intertribal kick ball races were common, such as between the Papago and Pima. The Papago played wuchuta, a team relay in which a wooden ball was kicked from one to another as four teammates raced down a course to score a goal (Woodruff, 1939). Other tribes of the Southwest also played kick ball and kick stick, but the best known kick stick racers were the Zuni. While the Navajo were reputed to have the fastest runners, the Zuni would always win at kick-stick races, kicking a stick along and racing to catch it only to repeat the process for many miles (Nabokov, 1981).

Running

For many tribes, running was and still is an important part of life. According to Mails (1972),

Boys ten or more years of age were compelled to take long runs, to go without food and water for long periods of time, to roll in the snow, to dive into icy water, and to stay awake and alert for hours on end.

Pueblo children were told to "Look to the mountain tops and the running (will) be easy." Hopi children and adults would get up before dawn and run to the fields to cultivate, as far as 35 miles, and then back again by nightfall (Brescia, 1981). Each season had its running races such as corn planting in the spring, when the Zuni and Hopi would run races to bring rain, and harvesting in the fall, when races were run to please the gods and ensure a rich crop (Levine, 1974).

Nabokov (1981) provides a detailed narrative of the August 1980 Tricentennial Run commemorating the 1680 revolt in which the Pueblos routed the Spanish. The victory was in large part attributable to ceremonial runners who spread word of the plan for the rebellion. The 1980 reenactment spanned over 375 miles and took six days; Nabokov digresses in covering the race to discuss the history and accomplishments of Indian runners, from kick stick racers to include log runners, messengers, and, finally, Olympians. He also mentions the Carlisle Indian School, which was famous for two reasons: (1) winning football games against the most prestigious universities in the East, and (2) as the birthplace of Pop Warner Football (Howell, 1978):

The physical educator, then, should feel confident in emphasizing running as a fitness activity and as part of the Native American heritage. Instruction in common track and field events, too, would be most appropriate. One innovation, though, would be of interest. Indians often ran races towards each other. Two young men, for example, would start at points equally distant from a center line and then race headlong towards it, sometimes colliding with full force. This is not recommended, but another modification is suggested in the following quotation from Dr. Frank Russell:

The relay races of the Pimas did not differ materially from those among the Pueblo tribes of the Rio Grande or the Apaches and others of the Southwest...young men ran in groups of four or five. There were forty or fifty runners in each village, and he who proved to be the swiftest was recognized as the leader who should run first in the final contest. It was not necessary that each village should enter the same number of men in race; a man might run any number of times that his endurance permitted. When the final race began each village stationed half its runners at each end of the track, then a crier called three times for the leaders, and as the last call closed the starter shouted "Ta'wai!" and they were off on the first relay. Sometimes a race was ended by one party admitting that it was tired out, but it usually was decided when the winners were so far ahead that their runner met the other at the center. (Culin, 1975, p. 806)

A similar shuttle relay was observed at the Papago Fair around 1924. Ten men lined up in teams at opposite ends of the race course. On the signal rattle, the race started with two runners sprinting around the course in opposite directions. Where the players met was marked by sticks—two sticks, since they met twice each lap. Although the race was to have been continued until the two sticks met at the middle, the sticks were not together at the end of twenty minutes. Therefore, the prize went to the team that was leading. This is surely a complicated contest, but an interesting variation. For class use, smaller teams would be better, in order to provide greater fitness benefits (Woodruff, 1939).

Additional suggestions for physical education

An Ontario, Canada task force on Native American education (1976) recommended emphasizing activities with a cultural background o. participation that also promote physical fitness. Such activities would include Lacrosse, track and field events, and field hockey. Furthermore, they recommended that Native American students design their own recreation programs.

A curriculum for Native American students should introduce traditional activities such as those mentioned here. Beyond these, innumerable games recorded in the literature are easily incorporated within the curriculum. When introducing a game or sport, a physical educator appropriately might give background information that links current participation with that of the children's ancestors.

Both teachers and youth leader are encouraged to remind children of the qualities exemplified by their forebearers which are still identified as Indian traits: powers of observation, meditation, courage, patience, humor, self-reliance, strength, and stamina. Furthermore, through games and sports, opportunities are made to teach values such as competitiveness, the desire to excel, and respect for self and others, and to develop endurance, perseverance, and risk taking (Meeker, 1901).

For the modern Indian youth in search of heroes, one might mention Jim Thorpe (Saux-Fox), a Carlisle alumnus who was one of the greatest running backs football has ever known and winner of the Olympic decathlon in 1912, and Billy Mills (Oglala Sioux from Pine Ridge), who stumbled during the finals of the 10,000 meter run in the 1964 Tokyo Olympic Games but recovered to win the gold medal in that same race. (An Indian Culture Unit, American Indians and Sports, is available from Center One, Suite 200, 1411 K Street, N.W., Washington, D.C. 20005)

In evaluating program objectives, the teacher should use norms specific to the population being tested. This may mean establishing new norms from the test data at a particular school or area, which a student may find more meaningful than standards based on a larger population with little or no representation from Native Americans. For the AAHPERD Youth Fitness Test, norms were constructed for 14, 15 and 16-year-old girls from seven high schools on the Navajo reservation (Beckford, 1976 — These norms may be obtained by writing Dr. Grueninger at Eastern Montana College. Physical education teachers are encouraged to send their physical fitness test results to him for the

compilation of other norms to serve Native American populations).

Pepper and Coburn stress the importance of positive feedback in teaching children. A study in Medford, Oregon, showed that a 4:1 ratio of positive to negative feedback was most beneficial to student achievement in elementary grades. Seek opportunities to commend children for correct efforts even though the exact result desired is still to be attained.

Involve parents in the education process to gain their support and to create a supportive home atmosphere. Open houses and sports festivals are two possible ways to increase parental participation. Other recommendations, based on *Effective Practices in Indian Education: A Teacher's Monograph*, are the following:

1. Recognize that Indians and non-Indians can be effective teachers of Indian children.

2. Realize that Indian children are taught to be accountable for their own actions, and that discipline is handled differently than in non-Indian culture.

3. Appreciate that there are some deep-seated differences culturally that trace back 20,000 to 50,000 years.

A Lummi child in Washington stated, "All children are not the same physically, socially, or culturally." (Pepper & Coburn, 1985). Let us accept what even a child knows: everyone cannot be treated identically; some adaptations are necessary both for cultural survival and for individuals to receive optimal, educational benefits through physical education.

Other resources for further information

NAGWS. Official Field Hockey-Lacrosse Guide. Available from the AAHPERD, 1900 Association Drive, Reston, VA. 22091.

NCAA. Lacrosse Rules and Interpretations. Available from the NCAA, P.O. Box 1906, Mission, KS 66201.

The Honour of All. (Film). Available from the Indian Health Service. The incidence of alcoholism on a British Columbia reserve was almost one hundred percent, affecting every man, woman, and child. Now that same reserve, Alkali Lake, is completely dry of alcohol. A fascinating film showing how the destructive force of alcoholism can be overcome through community effort, allowing people to live happier, more fulfilling lives.

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Teachers and Parents: Working Together

Dick Little Bear

A general review of the literature reveals that "Indian" Education is a neglected field of study. Few detailed works on the subject exist despite the appearance of scholarly interest in native American culture and heritage (Kincheloe, Kincheloe, & Staley, 1984, p. 5). For a topic as specific as "Working With Indian Parents" even less material exists. More work must be done, recommendations made, and results disseminated to educators of Indian children, since a positive working relationship between teachers and parents is essential for proper education of Indian children. This chapter is an attempt in that direction.

The need for teacher/parent communication

In all Indian communities a definite need exists for teachers to work with parents. One reason for that need is that most of those who now teach Indian students are non-Indians from the dominant society. Most of their teacher training has been monocultural, with the American middle-class forming their socioeconomic norm. However, teachers need to realize that when they teach Indian students they are not teaching the norm and that the students they are teaching are being impacted daily by another dynamic culture. These teachers must be receptive to under-going an acculturation process to familiarize them with the particular tribal culture of their students.

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A second reason is that even if teachers are Indian, they may be urban Indians with little or no knowledge about reservation cultures. They will have to undergo an acculturation process somewhat similar to that of teachers from the dominant society.

A third reason is that even if teachers are from a reservation, they may have unquestioningly accepted the values of the dominant society as being superior to those of the Indian. Since their schooling and their teacher training may have bleached them inwardly and brainwashed them into believing that anything Indians do is inferior, they may teach their students the way they were taught. This kind of teacher may need extensive re-acculturation in order to have good working relations with traditional, unassimilated, Indian parents.

A fourth reason is that there is a lack of Indian-developed, culturally-relevant curriculum materials which are tribally specific. Working with parents will enable teachers to bring tribally-specific materials into their classrooms. Being able to use culturally-relevant materials will lead to a culturally-relevant education in which parents and their children see their culture as a vital and necessary part of the school curriculum and today's world.

Finally, a fifth reason for teacher-parent interaction is that too often today's Indians are judged in relation to historical circumstances not of their making, and these judgments have to be eradicated. Stereotypes and misconceptions have been the lot of Indians since they made their first contact with Europeans. Many non-Indians continue to rely on these stereotypes and misconceptions—often confusing them with truth—which categorize Indians in the worst possible manner.

Exclusion of Indian parents has not worked

The dominant society seems to think that if Indians do not want to become middle-class Americans there must be something collectively wrong with them. Such reasoning is fallacious, and teachers must be sensitized as to why it is. The federal government had, or seems to have had, a policy of genocide towards Indians. When Indians survived this policy, the government tried cultural genocide. In the vanguard of this attempt at cultural genocide was education in the form of mission, boarding, and day schools. This really was not education in the true sense of the word; it was enforced acculturation. Indian parents were systematically excluded from participation in the education of Indian youth.

Excluding Indian parents from the education of Indian children has not worked, and, in fact, has made Indians parents very suspicious of modern American education. A century and a half of enforced acculturation under the guise of education has had lasting detrimental effects on all Indians. These effects will continue unless Indian parents are involved in schooling their children, and they will continue until teachers start viewing their students as individuals who represent the sum total of experiences, good and bad, wrought by two different cultures and two different attitudes.

Teachers have to be aware of an attitudinal difference between Indians and other minorities, except for Blacks and some Hispanics in the Southwest. The difference is that most voluntary immigrant minorities came to America wanting to become "Americans." Thus, they rapidly acquired the trappings of the dominant society such as language and values. Indians differ because they simply want to be what they have always been: Cheyenne, Sioux, Arapahoe, and so forth. They would prefer an accommodation with the dominant society rather than assimilation. This desire to be themselves was prevalent among Indians long before 1492. The coming of Europeans did not change this attitude even though Europeans have tried mightily to make all Indians into English-speaking, brown Americans. They have tried to change Indians by violent and by subtle means:

In the mid-1880s Federal Indian policy was modified to reflect the belief that government had a responsibility to "civilize" the Indians. It was not enough that they had voluntarily accepted confinement on the reservation. They must sacrifice the traditional customs and values which had restored some meaning to their shattered lives. But these practices were not approved of either by Americans generally or by federal government officials. They were considered primitive, savage, barbaric, and non-Christian.

Washington turned to education and land reform to accomplish this "civilizing" process. A widespread system of boarding school for Indian children was developed. Some were run by the government, others were under the control of various missionary sects. The schools' function beyond the simple education of the children—and it was simple because those in charge were incapable of imagining that their charges could do anything beyond the most simple tasks—was to remove them from the influence of their elders and their cultural heritage, i.e., to break the bonds of

family, neighborhood, and ethnic identity which white Americans valued so highly when applied to themselves. It was hoped too that adults on the reservations would be more inclined to remain peaceful and give up their traditional ways if their children were confined in government schools many miles away.

The schools the children were forced to attend were strict and authoritarian beyond what anyone would put up with today. They were also, although perhaps not intentionally, cruel. Children were rarely allowed to go home to visit their families; moreover, upon arrival at the boarding schools, they were forbidden to speak their native languages and were required to remain silent until they could speak English. That one could learn to speak by remaining silent is a pedagogical triumph not readily accomplished. (Weeks & Gidney, 1981, p. 119)

This misuse of education produced education-hating Indians. Schools are still associated with punishment and deprivation in the minds of some Indians because that is what it meant to the grandparents and the parents of today's children. That is the detrimental effect teachers must eradicate. Educators have to realize that Indians are going to retain their cultures no matter what and that this attitude is a classroom reality. The fact that tribes still speak their languages and practice their customs despite the many constant assaults on them is evidence that the tribes still find them valid and relevant in this modern society. So while

a central issue in recent discussions of Indians is that, although for at least a century and a half their imminent disappearance has been confidently predicted, Indians have persisted as definable little communities and as an unassimilated minority (Leacock & Lurie, 1971).

These "definable little communities" are going to continue to exist, too. How unassimilated they remain differs from tribe to tribe and depends upon historical circumstances, geographical location, world views, economic conditions, and acceptance or rejection of modern American education. So, contrary to what has been "confidently predicted," Indian cultures have not been wiped out although they have been greatly modified since 1492. However, those cultural essences which have filtered down to the 1980s are still integral, shaping forces in Indian society, and

these essences—physical appearance, languages, world view—must be included if Indian education programs are to be relevant.

Various phrases reflecting national attitudes towards Indians have been coined to encompass a philosophy. Phrases like "white man's burden," "manifest destiny," "make white and delightful," "the only good Indian is a dead Indian," "civilize and Christianize," "accelerated acculturation program," "extermination," "termination," "self-determination" have attempted to address Indian issues. They have not worked. The only thing that's going to work is Indian determination to make European education relevant to Indian culture. Schools can be a good means of preserving Indian cultures if their curriculum reflects the way Indians live and think. Indians commonly preserve their cultures if they have the same means as the dominant society. That means is culturally-relevant education, especially in the earlier grade levels.

"But I want my child to learn English"

Some Indian parents are unwilling accomplices in the continuing eradication of all that makes them unique people. They find an accommodation with the dominant society and accept elements of it. Ironically, Indian parents will bus their children to schools in towns that border reservations rather than put them in reservation schools. This type of parent often fears that teaching Indian culture and language in schools will take time away from other school subjects and handicap their children's ability to learn English and the standard school curriculum in mathematics, science, and social studies. The research presented in other chapters in this book indicates that this is an unfounded fear, if the school has a well-designed bilingual/bicultural program. Parents who oppose bilingual/bicultural education do not seem to realize they are sending their children to the same type of school which quite likely failed their great-grandparents, grandparents, and parents, and which are now failing them and their children. Indian parents who send their children to off-reservation schools are saying, in effect, that Indian education is inferior, which means that Indian values are inferior, that Indian languages are inferior, that being Indian is inferior, and finally, that they and their children are inferior. This need not happen. A culturally-relevant education can enhance the self-image of Indian students, especially when taught by culturally-sensitive teachers.

When these students, who have learned in the school's overt and hidden curricula that being Indian is inferior and have accepted that as truth, go away from the reservations, their opinion of themselves will be severely shaken. They will realize that no matter how assimilated they feel inwardly, the dominant society will judge them primarily by outward appearance. Its judgments will be tinged with all the negative stereotypes that outward appearance evokes from members of the dominant society. Indian students must have a very good self image in order to withstand these negative judgments.

By developing and implementing culturally-relevant curricula, Indian educators will help Indian students develop a good self image and live a better life in a rapidly changing world. By developing strategies to garner a positive working relationship between teachers and parents, they will be helping Indian students succeed in any endeavor. There are channels available to promote and produce a positive working relationship. For instance, parent committees (PACs) are mandatory for many federally-funded education programs for Indians. However, participation in Parent Committees must be viewed as important and directly contributive to children's education; otherwise, parents will not bother to participate. PACs must be listened to and given real power to determine the shape of school programs.

Recommendations for teachers

There is no such human as a generic Indian for which a standard Indian history, culture, and language curriculum can be designed. There are some general similarities, including hair and skin color and life styles based on geographical location. For instance, there are similarities among Plains Indians. In fact, if a reason exists for the notion of a generic Indian, it is the one modelled after Plains Indians associated with the horse, tipi, buffalo, and feather regalia. There are, however, great dissimilarities among Indians, Plains Indian included. These dissimilarities include language, world view, economic condition, degree of acculturation to the dominant society, spiritual outlook, religion, myths, and clan structures. The following recommendations are based on the idea that there is no generic Indian, just as there is no generic white man.

1. Teachers of all nationalities need to become aware of themselves as being from a particular culture. Culture is not the exclusive domain of minorities. Teachers from the dominant society should be aware of their ethnic and cultural origins so

they can better understand American Indian cultural differences and how they relate to the students.

2. Teachers need to become aware of tribally-specific differences. This means that what is acceptable in one tribe may be a taboo in another. For instance, in all Plains Indian cultures, eagle feathers are sacred. Yet, among Cheyennes, eagle feathers must not be touched by Cheyenne females. So, something that seems logical for a teacher to do, such as awarding an eagle feather or its likeness to a Cheyenne female for an athletic or academic accomplishment violates Cheyenne beliefs. Yet, doing so in a classroom with students from another Plains Indian tribe might be perfectly acceptable.

3. Teachers must learn about their students' tribe, including its history and the aspirations of parents and the local community. Teachers should not just read books, usually written by whites, on the subject but should actually talk to tribal members.

4. Teachers should not rely on preconceived stereotypes and popular misconceptions of American Indians. For much too long, Indians have been seen as looking alike, talking alike, behaving alike, and of being indifferent to what the dominant society has to offer. Remember, there is no generic Indian. A teacher who assumes there is does a great disservice and a grave injustice to American Indian children.

5. Teachers need to make modern American education more acceptable to Indians by asking parents, who represent those values and habits that will make the curriculum relevant to students' backgrounds, to come in and share their experiences with students.

6. Teachers should encourage parents to take college courses, to return to college or a post-secondary vocation school, or obtain a GED certificate.

7. Teachers should be aware of linguistic differences and influences on their students. There is also no generic Indian language except, perhaps, sign language. Members of each tribe, regardless of the degree of language erosion, are still impacted by their native language. The language spoken by the elders still influences children. While many of these children come to school speaking English, their English is often non-standard "survival" or "Indian" English adequate as a social instrument but inadequate for academic comprehension and achievement.

8. Teachers should keep expectations high. This is true in academics, athletics, and discipline. Starting low and switching to high expectations will lead to a loss of credibility. Do not lower

expectations for any reason, but especially not because the students are Indians.

9. Teachers must remember that their students are not yet sophisticated in their culture, so it is unrealistic to expect them to be able to give a lot of information about their culture. Teachers must remember that culture is acquired over a lifetime. Students may also have been taught at home that certain information about their beliefs is not to be told to outsiders.

10. Teachers should be very careful of what they say. If a need arises to speak about a local person, teachers should be well acquainted with the person to whom they are talking. This cautionary recommendation is included because of the extended families, clans, and factions that characterize the social structures of Indian communities. These are closely inter-woven and regular communication among community members is a characteristic of Indian communities. This regular communication can bring grief to unsuspecting teachers who do not know the person they are talking to. It is only a slight exaggeration to say that everyone in an Indian community is related either by blood or marriage. A good rule is, "Do not say anything about persons away from them that you would not say about them in their hearing."

11. Teachers should be aware of factors that can enhance a positive self-perception by Indian students. This can be done by discussing Indian contributions to the country, positive Indian values and their relevance to the modern society, and the complexity of the kinship systems. Teachers can also teach students about the geography, ecology, history, and government of their reservation.

12. Teachers can encourage leadership skills among students.

13. Teachers can introduce their students at an early age to preventive strategies and alternatives to alcohol and drug use.

14. Teachers should be aware of the communication patterns of Indian students. Sometimes when teachers ask a question, they do not allow enough time for response and end up answering the question for students. Indian students need more time to answer a question, not because they are less intelligent but because they want to digest the question and formulate a correct response. Their response has to be correct because the culture requires precise communication, not haphazard utterances.

15. Teachers should not deliberately shame a student. Shaming and censure are social control devices among many tribes. It is done only when needed because corrective instructions are ex-

pected to follow. To shame students in front of their peers will evoke negative responses.

16. Teachers should not have a "savior" complex. Indian students do not need saving from their cultural backgrounds; rather, the students need to be shown how their culture, heritage, and Indian-ethos are positively related to the values of the dominant society.

17. Teachers should try to grow while on Indian reservations. Many teachers who have had a long tenure on Indian reservation negate that length by repeating the same experiences over and over each year. The children deserve teachers willing to keep learning. Classes can be taken at Indian community colleges on local culture or summer courses can be taken at colleges and universities that offer programs in bilingual and Indian education.

Recommendations for parents working with Teachers:

1. Parents should know that non-Indian teachers are almost always not sophisticated in the culture of their particular tribe and are bound to make some mistakes. Parents must realize that it takes time to become acculturated, especially for people who come from the dominant culture who have had no compelling need to familiarize themselves to the minority culture and have relied on misconceptions and stereotypes to color their perceptions of other cultures.

2. Parents should volunteer for in-class help. This not only exposes Indian students to positive role models, but it also enables parents to appreciate the rigors teachers undergo daily and how teachers' education has prepared them for their profession.

3. Parents must go to the school to talk to teachers and administrators about the education of their children—especially when there is no crisis. Going to the school should become a regular occurrence, not just when the school sponsors an activity. However, appointments are useful because of teachers' and administrators' schedules.

4. Parents should reinforce what is taught in school. They can find out what is being taught by talking to their children and by visiting the school. If there is a disagreement with what is being taught at school, this disagreement needs to be talked out with the teacher, or if that does not work, with, first, the principal, then the superintendent, and, as a last resort, with the school board.

5. Parents are the first educators of their children and they

must instill in them the need to be educated

6. Parents must re-instill the many positive Indian values time and social circumstances have distorted. If re-instilling these values is not possible, an explanation of why these values have changed should be given. Otherwise, students may ask why they should respect their elders who do not conform to the value system of the dominant society and who are often not respected by members of that society.

7. Parents should be careful about expressing dissatisfaction with the school or school personnel in the presence of their children who are students. Whenever parents talk negatively about the school or its staff, they validate any negative opinions their children have about attending school and implicitly encourage them to ignore what is being taught and to be disruptive. If they disagree with how the school is run, parents should go to the school to try to work out those differences.

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Parents: The Indian Child's First Teachers

Sandra Kay Streeter

Parents are the most important people in a child's educational life, more important than teachers, books, playmates, and toys. Parents, whether they know it or not, train their children to live in society and influence their attitude about themselves and school. What children learn and how interested they are in learning is closely related to how their parents feel about education. This becomes very significant when working with students not from the dominant culture.

Most schools in the United States have a cultural base that is not Indian even when enrollment is mostly Indian. As a result, rules, regulations, and curriculum are frequently unfamiliar to Indian students. This unfamiliar environment can be laid to the use of English as the main or, many times, the only language and to teachers and staff unfamiliar with working with children from Indian cultures. Often there is a notable absence of Indian adults teaching in the school. Consequently, a child looks to the people at home to find out if it is "okay" to participate in this "new" environment. Parents' attitudes and training of the child become very significant at this time.

This chapter focuses on children's early interactional experiences at home and how they relate to children's later academic achievement. Throughout the chapter there are recommendations for addressing parental involvement.

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Factors associated with academic achievement

Literature about early childhood establishes the role of early experience and its relationship to later cognitive and social development is well established. The acquisition of knowledge is seen by many educators and theorists as an active process that depends upon the interactions between children and their environments. This interaction begins within the first few hours of a child's life. The child's physical attributes play an important role in this interactional process.

Physical well-being. Parental involvement in a child's learning process starts at conception where the mother's health effects the growth and development of the brain structure and the central nervous system. By the age of two, a child's brain has attained seventy-five percent of its adult size and is two times heavier than at birth (Dobbing, 1974). Poor nutrition during this period has been associated with structural changes in the central nervous system, shorter attention span, a slowness in adjusting to a new environment or stimuli, and retardation (Davidson & Dobbing, 1966; Brody & Brody, 1975).

Another notable example of the importance of the mother's health is the fetal alcohol syndrome baby who is learning impaired because of the mother's excessive use of alcohol. Research indicates that even children who do not show symptoms as extreme as a fetal-alcohol-syndrome child may have significant alcohol-related brain impairment which causes learning disabilities (Shaywitz, Cohen, & Shaywitz, 1980), short attention spans, and less alertness (Streissguth, Barr, & Martin, 1983). Streissguth, et al. (1983) found that the attentional deficits are still present in children at four years of age. Willemsen (1979) reports that infants born to alcoholic mothers tend to have more problems adapting to sights, sounds, temperature changes, and other demands of the environment than those born to mothers who drink moderately or not at all. Strauss, Lessen-Firestone, Starr, and Ostrea (1975) found that addicted infants are less alert and less responsive to stimuli they can see or hear than are nonaddicted babies.

The use of other chemicals has also been found to be related to a child's temperament. Children born to mother's with heroin or cocaine addiction are born addicted (Willemsen, 1979). Other chemicals or drugs frequently used by pregnant women which affect development of the fetus are nicotine (from cigarettes) and caffeine (from coffee, tea, cola drinks, and some over-the-counter

pill). Women who smoke heavily during pregnancy have offspring who weigh less than normal for a number of months (Willemsen, 1979). Jacobson (1983) documented that caffeine consumption prior to pregnancy was associated with greater arousal and irritability and poorer self-quieting ability in the newborn.

A child's temperament is closely tied to the learning process and formation of its self concept because it influences the ease and quality of interaction between parents and child. Thomas and Chess (1977) identified three temperamental types in infants: the easy child, the difficult child, and the slow-to-warm up infant. Because of the reciprocal nature of the child/caregiver relationship, these temperament styles play an important role in how a child interacts with the environment. A child that has a difficult temperament may have a number of the following behavior characteristics: irregular biological functions and sleep patterns, irritability, a dislike of being touched, and loud and frequent crying. These children are difficult to provide care for and may be emotionally deprived because of their negative responses to being held or cared for. A parent may be discouraged or feel rejected by the child and, therefore, may not be interested in playing with, talking to, or generally stimulating the child. The literature indicates that when infants are not responsive, mothers spend less time interacting with them (Milliones, 1978). This leaves children in an environment with limited stimulation which, consequently, does not stimulate learning.

The permanent and irreversible nature of the development of the fetus during the pre-natal period is often underestimated by the mother as well as potential support groups within society. A mother's health and well being are critically related to the child's capacity for academic achievement and social involvement. Social and educational support systems for the mother and family during pregnancy could be an important factor in the development of healthy infants born into families ready to interact with them.

Self concept formation. Two aspects of a child's self concept that become important when dealing with children not born into the dominant culture are a sense of belonging and a feeling of worth. It is important that both are well established before a child attends school. Evidence in the literature indicates that self concept is a powerful determinant of a child's behavior, specifically achievement in school (Hammer & Turner, 1985).

How one feels about oneself is believed to begin to develop early in life as children interact with their mothers or primary

caregivers. It is associated with behaviors such as rocking, holding, talking to, and being sensitive in meeting an infant's physical needs such as feeding. Through these routine activities children learn whether they have any control over their environment. Children cry to indicate they are experiencing discomfort. If that cry is tended to and the discomfort removed, children learn they have some control over their environment. Erik Erikson (1963) points out that, whenever a child's care is inconsistent or inadequate, a basic mistrust is fostered in the child which can develop into an attitude of fear and suspicion toward the world. This fear and mistrust can carry over to later social interaction. Many parents may not be aware of the ways in which basic trust can be fostered in young children.

Coopersmith (1967) concluded that children develop self concept according to four bases: significance (the way they feel they are loved and approved of by people important to them); competence (in performing tasks they consider important); virtue (attainment of moral and ethical standards); and power (the extent to which they influence their own and other's lives). All four are established within the family and are well in place by the time children enter school.

Environmental stimulation. We often do not think of infants and young children as engaging in cognitive activity because of their relatively limited repertoire of behavior and language. However, a review of the literature on learning in early childhood indicates that children begin to develop cognitive structures as early as one week. Parental behaviors which promote the development of cognitive structures in infancy are verbal interaction and visual stimulation.

It is important that the parents begin verbal interaction with a child shortly after birth, even though the child does not respond in return. Condon and Sander (1974) concluded that long before children begin to speak, they have already laid down within themselves the form and structure of their culture's language system. Some theorists speculate that there is a critical period very early in a child's life for language acquisition (Lenneberg, 1967). By the time infants are six months old they begin to form the sounds that make up speech. If children are in an environment which produces sounds to imitate, and if they receive reinforcement for vocalizing, they begin to speak just at the time when they are biologically ready to learn language. By the age of two, children basically understand the structure of language and the rules of grammar well enough to communicate in two-to-four-

word sentences. Therefore, it is important for young children that their parents talk to them regularly. Bing's research (1963) indicates mothers of highly verbal children provide more verbal stimulation during their children's earlier development and require more verbal interaction during their later development. Verbal interaction with parents increases children's vocabularies as well as teaching them a form of communication. Providing language labels for objects and actions in the environment also helps children grasp concepts. Since success in school is primarily dependent upon communication through speaking and writing, this early emphasis on language will help prepare children for school.

In addition, children apparently can learn two languages simultaneously. It appears bilingual children go through three stages of language development (Volterra & Taeschner, 1978). First, the children learn words from each language. Language switching occurs during this stage. In the second stage, one set of grammatical rules is used with both languages. In the third stage, at approximately seven years of age, children are capable of maintaining fluency in both languages.

Featherly (1985), based on an extensive review of the research, recommended that Indian parents speak to their children in the language in which they are most fluent. If one parent is fluent in English and another in an Indian language, the child benefits if one parent always uses the Indian language and the other parent always uses English with the child. A child that becomes fluent only in an Indian language can quickly learn English in school if there is a good bilingual and/or ESL program; the child who learns little or none of the native language and only "Indian English" at home is handicapped in school (see chapter on bilingual education).

Children also develop cognitive structures when they explore their environment. What is important is that the environment is safe and provides sensory stimulation. How alert infants are, how soon they begin looking at their hands, and when they master the skill of reaching for objects are dependent in part upon the design of their environments (White, 1978). Toys and objects with bright colors, music, reading, talking, movement, and other similar stimulation encourage children to interact with their environments. These important interactions form the foundation for further learning.

Styles of parenting. A large body of research suggests that children's cognitive growth and self concept is directly linked to

parental practices. This research dealing with parental practices has focused on patterns of verbal communication and parental values.

According to Bernstein (1964), language conditions what and how children learn, thus setting limits on their future learning. Bernstein identified two forms of communication codes or styles: restricted and elaborated. Restricted codes are stereotyped, limited, condensed, and lack specificity and exactness. Sentences from a restricted code are short, simple, unfinished, lack detail, and give limited information. Elaborated codes are those in which communication is specific and individualized. Sentences in an elaborated code are longer and give reasons, rationale, and detail about the subject. Hess and Shipman (1965) found that when mothers provided restrictive language codes, children's problem-solving abilities were diminished as well as their performances on standardized IQ tests.

Amato and Ochiltree (1986) found that family environments conducive to the development of competence in children:

1. Encourage children's attempts at mastery.
2. Give children responsive and realistic feedback.
3. Provide warm and supportive emotional environments.
4. Encourage children to explore and manipulate their environments.
5. Provide frequent occasions when parents talk with children.
6. Provide high educational aspirations and expectations for children.
7. Provide assistance with school work.
8. Give rational direction to children's activities, with attention to issues rather than to punishment. This is also more successful than allowing children to regulate their own activities.
9. Provide family life that is relatively free of conflict between members.

Summary

When schools and students come from different cultures, parents' attitudes and training of children at home become very significant. Young children look towards parents and other people they love to provide guidance in an environment foreign to them.

Young parents many times have not thought through their roles in perpetuating their culture or their way of life. This is

especially true when they are personally involved in finding their place in a dominant culture not sensitive to their own needs. This can complicate the lives of infants being formed or shaped by the routines of the day and the basic interactions at feeding time.

If success in school is important, then the community, tribe, or family needs to address the issue of what can be done to help parents provide active support to children. Watson, Brown, and Swick (1983) suggest the following guidelines:

1. Parents must have a community support network from which they can draw in carrying out their roles. (This can be a parent-teacher organization, a church group, a traditional Indian society, or their extended family.)

2. Parents must perceive their role as "educator" and their children's role as "learner" as important and vital to the functioning of the family. (What parents have to teach children is just as important as what the school has to teach.)

3. Parents must act on their perceptions that learning is essential for healthy family living. (Parents must spend time with and give attention to their children.)

4. Parents must understand and know young children. (Young Indian parents are lucky to usually be able to rely on the wisdom and help of their parents and their extended family in bringing up their children.)

The Watson study indicated that many parents believe it is important for children to learn but never actively take part in teaching their children. However, Indian parents need to provide their children with active rather than passive support in the educational setting. This does not mean arguing with and protecting their child "from" the teacher which can teach children that school work does not need to be done or school rules followed. It means working with the teacher in a cooperative relationship. The child is usually the loser in battles between schools and parents. If real problems exist they should be taken up with the school administration and the school board, not fought out in front of the child.

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Building Self-Efficacy in the Indian Student

Russell Lord and James E. Nowlin

For decades, efforts intended to develop and enhance the self-concept and self-esteem of Indian students have attracted considerable attention and effort. While these efforts have been worthy, recent developments in the understanding of human behavior provide more direct means for affecting the self-enhancement of Indian students. The focus of these recent developments has been research into the concept of self-efficacy. This research has yielded considerable evidence showing self-efficacy to be a better foundation upon which to build practical intervention programs of self-enhancement than the older ideas of self-concept and self-esteem.

This chapter provides a basic framework for applying recent knowledge about self-efficacy which teachers can use to enhance the way Indian students see themselves. This framework depends upon the general theoretical tenets of self-efficacy pioneered by Bandura (1977; 1982) and outlines various means for increasing self-efficacy in Indian students.

Self-efficacy: A valuable concept for teachers

Briefly defined, self-efficacy refers to an individual's "expectations of personal effectiveness" in dealing with one's particular

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environment. As a more concise and measurable construct than nebulous concepts such as self-esteem or self-concept (which generally refers to how one "feels" about oneself), self-efficacy offers a couple of critically important advantages. First, feelings are not only difficult to assess accurately, but, because of their ambiguity, they are also subject to misunderstanding and distortion. On the other hand, self-efficacy involves the probability estimates that individuals make for their own behaviors under certain specific circumstances. Secondly, another important advantage offered by self-efficacy is the direction that it helps establish between actions and perceptions.

Unlike self-concept, which has for so many years been viewed as preceding behavioral change, self-efficacy establishes a more accurate view of the circular relationship between actions and perceptions. That is, instead of assuming that a teacher can convince a student with words to hold a more positive self-concept resulting in "improved" behavior, self-efficacy postulates that one's actions are critical components in one's perceptions and must of necessity be changed so as to be consistent rather than discrepant with one's perceptions. As the student is confronted with "effective" behaviors and the task of interpreting them for what they tell the student, it becomes difficult for the student to maintain predictions that he or she is incapable of effective (or efficacious) actions.

One's perceived expectations of personal effectiveness - or self-efficacy - are consistently proving to be significant components governing behavior. "Expectations of efficacy affect people's choice of activities and behavioral settings, how hard they strive, and how long their attempts will persist despite barriers, adverse feedback, or other response costs" (Bandura & Rosenthal, 1982, p. 641). In situations as diverse as predicting recovery from heart attack or directing psychotherapy, self-efficacy now has ten years of research supporting its greater success when compared with other mechanisms (Bandura, 1982).

Though Bandura was not referring to teaching the Indian child when he made the statement cited above, it almost seems as if he were, for many of the problems encountered in teaching Indian children involve "barriers, adverse feedback, [and] other response costs." When the Indian child makes judgments of self-efficacy (which *must* be made since they cannot be avoided), these judgments (whether correct or incorrect) function as choices that often eliminate entire ranges of activities, consequences, and

situations. The child might reasonably seek to avoid all those activities that he or she "believes" or "estimates" to be beyond his or her abilities. That is, like most of us, a child will only choose to attempt activities at which the child predicts a reasonable likelihood of success. A major difference for the Indian child, however, is the background against which those probability estimates of success are made. Generations of failure by "everyone" whom the child perceives to be "like me" can hardly be expected to make the child predict success! (The chapters on the "Historical Background of Indian Education" and "Teachers and Parents: Working Together" in this book explain how these "generations of failure" are a result of technologically superior European cultures being forcibly imposed on Indian cultures.)

Self-efficacy, one's personal conviction of one's ability to be effective, is not necessarily limited to short term behavioral payoffs or immediate consequences. Instead, it develops from one's perceived capabilities to attempt and carry out given tasks, eventually attaining success. Just like others, the Indian child, when faced with difficult tasks about which he or she has serious doubts as to his or her abilities to succeed, will tend to either give a minimal effort or avoid the task altogether (Bandura & Schunk, 1981). Such minimal effort or avoidance prevent the eventual confrontation with failure that the child is predicting by either providing a reasonable cause for that failure (minimal effort) or escaping it completely. As should surprise no one, repeated experiences in circumstances like this commonly produce hopelessness and despair.

It is critical to remember that, in this as in other situations, it is not the child's actual ability that is the deciding variable. Rather, it is the child's prediction as to the likelihood of success, based upon several sources of information, that is the determining factor. The child's expectations of ineffectiveness prevent him or her from even attempting those tasks at which failure is predicted. How long is the journey from this specific occasion to more generalized expectations of failure or learned helplessness? At what point, or after how many such "imagined" failures, does the child develop a schema of self that embraces failure? This process must be short circuited (or rewired) for the teacher/counselor to build self-efficacy in the Indian student.

The components of self-efficacy

While self-efficacy is more straightforward and unambiguous

than prior concepts trying to deal with self-enhancement, it is still more involved than merely examining or restructuring one's cognitive predictions. It consists of (1) knowing *what* to do, (2) possessing the capability of generating the response, (3) having the operative competence required by the response, and (4) developing cognitive estimates of the likelihood of success and failure in future actions. Of these components, the second and third require some explanation before proceeding further. Generative capability refers to one's possessing those cognitive, behavioral, and social skills required by an action, at least in the form of "potential." That is, while one may not presently have the competence to evidence the skills, they are "within one's grasp." For instance, while most of us could not presently run five miles at the rate of one mile every six minutes, many (if not most) of us possess the capacity to generate that response, given sufficient time to prepare and organize the response through training. Operative competence, on the other hand, involves the ability to do an action at the present time. It is the ability to act in response to a changeable environment, and the present time focus distinguishes this operative competence from a more distant, possibly undeveloped, though real capacity to perform an action.

Thus efficacy is not a simple act fixed in a moment of time or place. Rather, it is more of a process, composed of the two different but complementary components labelled generative capability and operative competence. The efficaciousness (or effectiveness) of an act is not contingent strictly upon capability. It is instead contingent upon the use of that capability under certain environmental demands. There is little if any difference (and none of it measurable at any rate) between a person facing a set of tasks without the requisite capabilities needed for success, and a person possessing those capabilities but not using them. As Bandura states, "A capability is only as good as its execution" (1982, p. 122). Interacting with the individual's capabilities are the environmental circumstances which must present sufficient change as to require the execution of the individual's capabilities. As with all of us, the Indian students' perceived self-efficacy results from their perceptions of their executed courses of action as demanded by particular environments and the success or failure outcomes of those actions.

The sources from which self-efficacy develops

For the educator of Indian students, knowing this background

information about self-efficacy is not, of itself, sufficient. To know the components of self-efficacy seems hollow indeed unless one also understands the sources from which self-efficacy develops so that you can intervene in ways that can predictably be expected to positively rather than negatively affect the development of self-efficacy in the student.

When perceiving our ability to act effectively, in certain situations (thereby making a self-efficacy estimate), we all depend upon certain identified sources of information: (1) enactive, (2) vicarious, (3) physiological, (4) cognitive, and (5) persuasive information. We use information gathered from these sources to build our self-efficacy estimates. (1) Enactive information is obtained from the actions themselves and is the feedback that comes to us merely from having produced the action itself. It includes information about the relationship between the action and its contingencies or consequences. (2) Vicarious information is gathered by observations of others whom we judge to be similar or dissimilar to ourselves, and the assessments we make of their successes or failures. If someone we judge more capable than ourself fails at a task at which he or she worked very hard, we are unlikely to become certain that we can succeed at the same task. (3) Physiological information refers to the systemic feedback we receive from our actions in given circumstances. For example, were we to get nauseous from public speaking, it is unlikely that we will feel successful no matter what our "objective" success might have been. (4) Cognitive information is defined as just what it seems to be, that is, the knowledge we gain relevant to some task. This involves the schema that we develop to explain some action or set of actions in certain situations. (5) Persuasive information is listed last for emphasis. It refers to information gained from some other individual who is attempting to convince us of effectiveness.

Of the five sources of information from which we all build self-efficacy, persuasive information is the weakest source. In fact, it seems likely that future research will show that, when persuasive information is inconsistent with the other available sources, such information influences self-efficacy negatively rather than positively. Imagine yourself continually meeting failure, so that your enactive and cognitive feedback tell you that you cannot accomplish this task under these circumstances, you also observe others more competent than yourself failing, and you receive only negative physiological feedback relevant to the task. In this

situation, a teacher or counselor continues trying to convince you that you are being successful and need to just "keep your self-esteem high." Does it seem more likely that this persuasive information will overcome the other, or is it more likely that you will discount the teacher or counselor as a truthful, accurate source of information? To compound the issue even further, teachers and counselors use the "persuasive" approach more than any of the other components, and unfortunately, some use this technique almost exclusively. Persuasion, especially exclusive verbal persuasion, that flies in the face of all other perceived evidence is almost certain to produce negative perceptions of the "persuader" as a viable source of information, thus greatly reducing the effectiveness of the one practicing the "art" of persuasion. Teachers of the Indian student must manage, direct, and interpret all five sources of information relevant to their students' developing senses of self-efficacy in order to be a beneficial and effective agent for positive change in those students' lives.

Building self-efficacy: What to avoid

Perhaps the best place to begin an explanation of how to build self-efficacy is to detail the ways in which it can be undermined. Not only should this catch the reader's attention (not a bad instructional technique in its own right), but it also describes the kinds of interventions all too frequently observed in contemporary educational settings.

One of the situations which most effectively undermines self-efficacy in young children is that of "unrewarded competency." This situation exists whenever competitive circumstances are present, for then, the factor determining "rewards" is not the individual's efforts, but the individual's competency relative to the competitor. In competitive situations, one can strive and strain to one's utmost and make absolutely remarkable improvement, but, if one's competition is just a little "better" (or luckier that time), then you will nevertheless fail. Obviously, a little too much of this (which could be a single instance, depending upon the individual child and the social and cultural milieu) will go a long way toward destroying self-efficacy.

Another very effective technique for undermining self-efficacy is to produce learned helplessness. When people perceive that their efforts do not influence outcomes, that is, failure occurs non-contingently upon their efforts, learned helplessness is likely. Illustrations of this phenomenon are plentiful, ranging from situa-

tions as diverse as the simple laboratory task of trying to put together a jigsaw puzzle that does not go together, finding oneself in a punishing situation from which you cannot escape no matter what course of action you take, or repeatedly encountering failure despite making one's maximum effort. Imagine training every day for races against a superior runner who beats you every time, despite your best efforts and personal improvement in comparison with your own previous times. Or, failing tests in school even when you truly made your best effort and did, indeed, improve relative to your own previous levels of performance. When confronted with consistent or even continual experiences such as these, students learn that failure outcomes are independent of their efforts and the most reasonable recourse is to "give up" or "quit trying." It is reasonable for a child in this situation to "give up" or "quit trying." To counteract or reverse this situation, success and failure need to be perceived as contingent on our own efforts.

The extent to which this phenomenon of learned helplessness generalizes is staggering, and considerable evidence indicates that, once established, it is quite impervious to the supposed "counter effects" of success. At least in animals, success (even forced success) that followed the establishment of learned helplessness did *not* lead to "correction" of the problem and subsequent success. Instead, the learned helplessness persisted in spite of subsequent success. Given a few years of failure despite earnest efforts, what will be the result of "giving" the Indian student "success?" The most reasonable answer is continued failure and low self-efficacy.

The imposition of external control, especially in the form of an "omnipotent" other, combined with the relinquishing of personal control is another situation predictive of reduced self-efficacy. Once again, the individual assessing the probabilities of future success or failure receives information that makes a prediction of failure more likely than one for success. This occurs because control over the environment and the contingencies between responses and results have been vested in "powerful others" rather than in the individual making the estimate. How would any of us develop confidence that we will be successful in future circumstances when our only experience to date has been dependence upon an "omnipotent" other who is successful but very dissimilar to us?

In these "harmful" instances, perhaps we can all recognize cer-

tain teachers, counselors, or coaches whom we have known or observed at one time or another. Perhaps they might even have been held up as "models" whose students were very well behaved and organized. Maybe we have even found ourselves falling into the "trap" of "guaranteeing" success to a student who has encountered extensive prior failures without realizing that the most likely outcome on the part of the student is to discount such success in much the same manner as another failure. That is, the success is unlikely to alter self-efficacy because it was not, after all, dependent upon the student's own efforts since we "assured" it! It is indeed just another source of verification that the student is not effective in determining his or her own outcomes. It is not the success or failure as much as it is the sense that the student makes of it.

Building self-efficacy: Positive steps

Having discussed some of the circumstances to avoid, it only seems appropriate to cover some of the circumstances that the teacher of the Indian student should strive to create. Research (Bandura & Adams, 1977) demonstrates that when individuals have experiences that disconfirm their misbeliefs and aid them in gaining new skills, they experience increases in self-efficacy. For the sake of the teacher of the Indian child, it is worth reiterating that we are advocating the idea that it is the behavior change that produces the enhanced self-efficacy. It is not a case of an inflated self-concept precipitating a positive behavior change. In order to attempt to build effective behavior in the Indian child, teachers must base much of their efforts around the concept of authentic enactive mastery. These are experiences in which the child actively experiences success in dealing with a behavioral task. Stated simply, success builds higher expectations for future success which in turn aids in the attainment of still further successes. The cycle of learned helplessness depends on expectations of failure, which do indeed tend to produce experiential failures, which of course generate more failure expectations ad infinitum. Earlier, it was suggested that this process could be short circuited or rewired. For the teacher, one of the keys to this rewiring is enactive mastery (the child experiencing success in a given behavioral setting).

This is by no means a suggestion that teachers should create artificial success experiences designed to build self-esteem. For instance, the teacher of the Indian child will quickly discover that

performance-contingent rewards gained through the execution of routine, repetitious tasks are not very useful in inspiring efficacious behavior. For example, if in math class a child is rewarded daily for completing several computation problems, a task for which the student shows little interest and no improvement, the reward, even though dependent on performance (repeatedly completing the problems), will have little effect on raising expectations, increasing interest, or elevating skill. Enactive mastery refers not just to performance, but to progressive performance attainments leading to task mastery. Computing math problems in and of itself does not necessarily lead to perceived self-efficacy, even if rewarded. However, continual improvement in one's ability to perform math computations does indeed lead to enhanced self-efficacy, especially when the incremental accomplishments are rewarded. Both children and adults show increases in interest and effort (and usually abilities as well) when they are rewarded for *performance attainment* rather than receiving rewards for engaging in activities irrespective of how well they perform (Bogiano & Ruble, 1979).

Bandura and Rosenthal (1978) encourage the use of participant modeling when trying to effect enactive mastery leading to enhanced self-efficacy. Briefly explained, participant modeling is the process of working through a hierarchy of tasks that eventually lead to mastery. At each step, the model (the math teacher in the above example) exemplifies the relevant activity (calculating math problems) while the student observes. The model then accompanies the student in the performance of the task until the student gains the skill and self-assurance (positive self-expectations) to attempt the task alone. The student continues to work on the task with participatory intervention from the model when the occasion calls for it until the task is mastered (when the student exhibits a strong sense of personal efficacy). Teachers are models for students either actively or passively, either positively or negatively. The research in modeling and self-efficacy theory strongly indicates that when teachers make an active attempt to become a strong participatory model, they increase the chances of enhanced student self-efficacy.

The teacher of the Indian child (and other teachers as well) often misunderstand and therefore misuse the concept of "rewards" as it relates to self-efficacy theory. The mere dispersal of an extrinsic reward often fails to build effective behavior. In terms of interest (and often in school work we can extrapolate a

lack of interest to a lack of effort and then to a lack of skill attainment), the success or failure of the dispensation of extrinsic rewards is subject to a wide array of other factors not under the teacher's control (social messages that accompany the reward for example) (Bandura, 1982). In his work with social learning theory, Bandura (1982) states that interest seems to develop at a significant rate from satisfactions derived from fulfilling internal standards (intrinsic motivation) rather than the mere presentation of an extrinsic reward. "Gaining knowledge and skills that enable one to fulfill personal [intrinsic] standards of merit tend to heighten interest and a firm sense of personal efficacy" (Bandura, 1982, p. 133). This is not to say that extrinsic rewards are totally ineffective, but the truly effective teacher of the Indian child will discover that extrinsic rewards are much more effective when the teacher makes an active effort to understand the child's internal motivators and attempts to adapt the external rewards to the child's internal needs. (See also the description of the reciprocal interaction method of teaching under the subheading of "Pedagogy" in the chapter on "Empowering Indian Students" in this book.)

The teacher can accomplish this "intrinsic motivation" in a number of ways. One suggestion is to make the attempt to avoid those competitive situations alluded to earlier - situations where students are rewarded not for effort but for competency relative to their competitor. Instead of this competition against others, when possible, the teacher can work with students to help them develop personal standards against which to evaluate performance. This form of self-motivation involves internal comparison processes and does not resort to a "me against them" evaluation competition. This type of "self-motivation is best summoned and sustained by adopting attainable subgoals that lead to large future ones" (Bandura, 1982, p. 134). Since the subgoals are attainable, the teacher can make the child's self-satisfaction conditional on the mastery of the subgoal. In this manner, the child creates self-incentives for his or her efforts. The self-satisfaction and self-incentives are intrinsically linked to performance mastery, with the result being perceived self-efficacy (Bandura, 1982). These subgoals, or "proximal goals" as Bandura refers to them (1982), are also important because they provide the Indian child with a standard of performance that acts as a "road map" pointing the way to mastery of the ultimate future goal.

Without standards against which to measure their perform-

ance, people have little basis for judging how they are doing or for gauging their capabilities. Subgoal attainments provide clear markers of progress along the way to verify a growing sense of self-efficacy. (Bandura, 1982, p. 134)

Without attempting to get too deeply involved in the subject, it should also be noted that in addition to perceived personal efficacy, educators need to be aware of the fact that there also exist notions of perceived collective efficacy. Many problems encountered by both the teacher and the Indian student reflect group problems that require collective effort if change is to occur. It is axiomatic that social change is a difficult task. The enormity of the task often produces a sense of futility in the child and in the teacher. This futility tends to produce the feeling that "I cannot change the world, so I will not try." The simple logic of efficacy theory seems to address these feelings of futility. You simply cannot have perceived collective efficacy unless the collective group being referred to is peopled by individuals with perceived personal efficacy. This is a teacher's starting point.

Every Indian child that you instill with self-efficacy is a partial solution to the problem of collective efficacy. Students with perceived self-inefficacy will not only fail to positively affect the group situation, they will not even make the attempt. In dealing with the collective efficacy problem we can use many of the same strategies employed in building personal efficacy. We can relate factional interests to shared purposes. Just as in building personal efficacy, these "purposes" must be explicit and attainable. Because of the enormity of the problem, success will not come quickly or without sustained effort. Because of these two facts (attainability and probable length of process), we are again best served by working toward proximal goals because they provide opportunities for success, incentives to act, evidence of progress, and guide posts to future attainments. "The times call for a commitment of collective effort rather than litanies of powerlessness that instill in people beliefs of inefficacy to influence conditions that shape the course of their lives" (Bandura, 1982, p. 145).

Conclusions

"Self-efficacy is not merely a cognitive estimate of future competence on the basis of past performance; self-perceptions of efficacy enhance performance rather than merely forecasting degree of success" (Stiles, Shapiro, & Elliot, 1986, p. 173). Based on our present knowledge of self-efficacy theory, the teacher

should not be trying to arrange increased standards of self-perception in order to bring about a desired consequence. Rather, the teacher should be trying to provide opportunities for successful experiential attainments to build the child's self-expectations. This begins a cycle of increased perceived self-efficacy leading to expanding and continual increased performances. In strict behavioral attempts to increase the self-esteem or self-concept the effort is made to forestall or modify environmental factors. By adding a cognitive component to the behavioral component as self-efficacy theory does, the belief is built in people that they can "manage" environmental threats, should such threats arise (Bandura, 1982).

If the teacher of the Indian child can make use of some of the self-efficacy tools described in this chapter, providing enactive mastery experiences through proximal goal setting and providing efficacious vicarious experiences through participatory modeling for example, the child will develop a growing sense of perceived self-efficacy. In other words, as we teach children and they become competent in skills such as reading and become more knowledgeable about the world around them, they will perceive themselves as capable human beings. This perceived self-efficacy can only result in a better education for the child and an improvement in the total social and educational picture.

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Empowering Indian Students: What Teachers and Parents Can Do

Jim Cummins

Indian students throughout North America have tended to experience disproportional school failure in educational systems organized, administered, and controlled by members of the dominant group. This pattern is common to indigenous groups in most western countries who have been conquered, subjugated, segregated, and regarded as inherently inferior by the dominant group. Educational failure is regarded by the dominant group as the natural consequence of the minority group's inherent inferiority. This process of blaming the victim is legitimized by pointing at high rates of alcohol abuse, poor hygiene, and lack of middle-class child rearing practices, all of which are viewed as manifestations of the minority group's deficiency. It is not difficult to recognize in this picture the operation of racism that is embedded inextricably into the workings of the society itself. The process of blaming the minority group for its own failure effectively screens from critical scrutiny the ways in which the educational system produces school failure among minority students.

It is striking that in the United States context, the minority groups that experience the most aggravated school failure (Black, Hispanic, and Indian students) have experienced a long history of subjugation and overt racism at the hands of the domi-

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nant European group. In schools, the racism was usually expressed through physical violence. Platero (1975) has described the devastating results for a Navajo child of this psychological and physical violence:

For nearly a hundred years the policy of the United States government was to acculturate the Navajo, so that the Navajo could be assimilated into the White society. To effect this assimilation Navajo children were taken from the shelter of the family and sent to boarding school. Almost every child who entered the boarding school spoke only Navajo, and most of the people employed at the boarding schools spoke only English. When a Navajo child spoke the language of his family at school, he was punished. ... Kee was sent to boarding school as a child where - as was the practice - he was punished for speaking Navajo. Since he was only allowed to return home during Christmas and summer, he lost contact with his family. Kee withdrew both from the White and Navajo worlds as he grew older, because he could not comfortably communicate in either language. ... By the time he was 16, Kee was an alcoholic, uneducated and despondent - without identity. Kee's story is more the rule than the exception. (Platero, 1975, p. 57-58)

Pfeiffer (1975) suggests that many of the schools that Navajo children attend today have similar results: specifically,

The children grow up in these schools with a sense of: (1) Confusion regarding the values, attitudes and behavior taught at home. (2) Loss of self-identity and pride concerning their selfhood - their Navajo-ness. (3) Failure in classroom learning activities. (4) Loss of their own Navajo language development and loss of in-depth knowledge of their own Navajo culture. (1975, p. 133)

A similar pattern has been documented for Hispanic children. In Texas, for example, the judgement of the court in the United States versus the State of Texas case (1981) documented the "pervasive, intentional discrimination throughout most of this century" against Mexican-American students (a charge that was not contested by the State of Texas in the trial) and noted that:

The long history of prejudice and deprivation remains a significant obstacle to equal educational opportunity for

these children. The deep sense of inferiority, cultural isolation, and acceptance of failure, instilled in a people by generations of subjugation, cannot be eradicated merely by integrating the schools and repealing the 'no Spanish' statutes. (1981, p. 14)

The point here is that we cannot understand the causes of minority students' academic difficulties, nor plan effective ways of reversing these difficulties, unless we see that the issues are more complex than a simple mismatch between the language of the home and the school language or lack of adequate ESL teaching. The roots of school failure lie in the ways well-meaning educators inadvertently reinforce children's ambivalence about both their own culture and the majority culture. This "bicultural ambivalence" is the result of generations of overt racism. Minority groups that maintain a strong sense of pride in their own language and culture or who have not internalized an ambivalence about both their own culture and that of the dominant group tend not to experience school failure.

Two questions follow from this analysis: (1) how is the historical pattern of overt racism continued in more subtle forms in our schools today? and (2) how can this institutionalized racism be eliminated so that educational growth becomes a possibility for minority students?

An example of institutionalized racism in action

In schools today there is usually no intent on the part of educators to discriminate against minority students; however, their interactions with minority students are mediated by a system of unquestioned assumptions that reflect the values and priorities of the dominant middle-class culture. It is in these interactions that minority students are educationally disabled. A concrete example will illustrate the subtle but devastating ways that institutionalized racism can manifest itself in the well-intentioned interactions between educators and minority students.

The following psychological assessment was one of more than 400 assessments of ESL students carried out in a western Canadian city which were analyzed by Cummins (1984). It illustrates the assumptions that school psychologists and teachers frequently make about issues such as the appropriateness of standardized tests for minority students and the consequences of bilingualism for students' development.

Maria (not child's real name) was referred for psychological assessment by her grade 1 teacher, who noted that she had difficulty in all aspects of learning. She was given both speech and hearing and psychological assessments. The former assessment found that all structures and functions pertaining to speech were within normal limits and hearing was also normal. The findings were summarized as follows: "Maria comes from an Italian home where Italian is spoken mainly. However, language skills appeared to be within normal limits for English."

The psychologist's conclusions, however, were very different. On the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), Maria obtained a Verbal IQ of 89 and a Performance IQ of 99. In other words, non-verbal abilities were virtually at the average level while verbal abilities were 11 points below the mean, a surprisingly good score given the clear cultural biases of the test and the fact that the child has been learning English in a school context for little more than a year. The report to Maria's teacher read as follows:

Maria tended to be very slow to respond to questions, particularly if she were unsure of the answers. Her spoken English was a little hard to understand, which is probably due to poor English models at home (speech is within normal limits). Italian is spoken almost exclusively at home and this will be further complicated by the coming arrival of an aunt and grandmother from Italy.

There is little doubt that Maria is a child of low average ability whose school progress is impeded by lack of practice in English. Encourage Maria's oral participation as much as possible, and try to involve her in extra-curricular activities where she will be with her English-speaking peers.

Despite the fact that the speech assessment revealed no deficiencies in Maria's spoken English, the psychologist has no hesitation ("There is little doubt..") in attributing Maria's academic problems to the use of Italian at home. The implicit message to the teacher (and parents) is clear: Maria's communication in her first language (L1) with parents and relatives detracts from her school performance, and the aim of the school program should be to expose Maria to as much of the second language (L2) as possible in order to compensate for these deficient linguistic and cultural background experiences.

How does this assessment (which was not atypical of the sample) represent institutional racism in action? First, the psychologist, despite being undoubtedly well-intentioned, lacks the knowledge base required to assess the child's academic potential. This is illustrated by the fact that an extremely culturally-biased test such as the verbal scale of the WPPSI is administered and an IQ score reported, by the failure to distinguish between conversational and academic aspects of L2 proficiency among ESL students, and by the assumption that use of L1 in the home is contributing to the child's academic difficulties. A large body of research shows that this is not the case (see Cummins, 1984).

Second, an implicit Anglo-conformity orientation is evident in the lack of sensitivity to the fact that the child's cultural background and linguistic talents differ significantly from those upon whom the test was normed; the institutionalized racism is manifested not only in the lack of knowledge but in the total lack of awareness on the part of the psychologist (and presumably the institutions that trained her or him) that there are any knowledge gaps. The psychologist is not conscious that the child's culturally-specific experiences might have any implications for the administration or interpretation of the test; there is also no hesitation in drawing inferences about the negative effects of L1 use in the home nor in making recommendations about language use in school despite the fact the psychologist has likely had no training whatsoever on issues related to bilingualism. In short, the institutional structure within which the psychological assessment takes place (e.g. with respect to policy/legal requirements and training/certification programs) orients the psychologist to locate the cause of the academic problem within the minority child herself. This has the effect of screening from critical scrutiny a variety of other possible contributors to the child's difficulty, e.g. the educational experiences to which the child has been exposed. Because the psychologist is equipped only with psychoeducational assessment tools, the child's difficulty is assumed to be psychoeducational in nature. The psychologist's training has resulted in a tunnel vision that is out of focus with respect to the experiential realities of the children being assessed.

A related way in which the example above illustrates institutional racism in practice relates to the fact that the psychologist's professional credibility depends on providing a satisfactory interpretation of the child's difficulty and making reasonable placement or intervention recommendations; to admit

that the assessment reveals nothing about causes of the minority child's academic difficulties would jeopardize the status and credibility of the psychologist. Thus, at both the level of individuals and institutions (e.g. university departments that train teachers, psychologists, and administrators) there tends to be a denial of any lack of expertise or need for significant change in training and/or certification programs. This denial process is illustrated by the refusal of many psychologists to even try any alternative assessment procedures for minority students other than the culturally- and linguistically-biased tests that they have become "experts" in administering. Minority children become the victims of professional "credibility."

How do these subtle unintentional forms of institutional racism victimize minority children? The potential consequences can be illustrated with reference to the case of Maria. As a result of the assessment, there is an increased likelihood that Maria will be reprimanded for any use of Italian with other Italian students in school, thereby promoting feelings of shame in her own cultural background. It is also probable that the child's parents will be advised to use English rather than Italian at home. If parents adhere to this advice, then they are likely not only to really expose the child to poor models of English, but also to reduce the quality and quantity of communication between adults and children in the home since they are likely to be much less comfortable in English than Italian. The importance of adult-child home interaction for future academic achievement has been demonstrated repeatedly (e.g. Wells, 1986) and thus, the advice to switch to English in the home has the potential to exert serious negative effects on children's development. Furthermore, it is likely to drive an emotional wedge between children and parents (including the recently arrived aunt and grandmother who will know no English) since parents may feel that communication of affection and warmth in Italian will reduce the child's future academic prospects.

The theoretical framework presented below attempts to provide a systematic means of analysing the operation of institutionalized racism in schools and directions for challenging this racism.

A theoretical framework for intervention

The framework presented in Figure 1 is adapted from Cummins (1986). A considerable amount of data shows that power and status relations between minority and majority groups exert a major influence on school performance (Cummins, 1984; Ogbu, 1978). Minority groups that tend to experience academic difficulty (e.g. Finns in Sweden, Hispanic, Black, and Indian groups in the U.S., Franco-Ontarian, Black, and Indian groups in Canada) appear to have developed an insecurity and ambivalence about the value of their own cultural identity as a result of their interactions with the dominant group. A central proposition of the theoretical framework is that minority students are disempowered educationally in very much the same way that their communities are disempowered by interactions with societal institutions. The converse of this is that minority students will succeed educationally to the extent that the patterns of interaction in school reverse those that prevail in the society at large. In short, minority students are "empowered" or "disabled" as a direct result of their interactions with educators in the schools. These interactions are mediated by the implicit or explicit role definitions that educators assume in relation to four institutional characteristics of schools. These characteristics reflect the extent to which:

1. minority students' language and culture are incorporated into the school program;
2. minority community participation is encouraged as an integral component of children's education;
3. the pedagogy promotes intrinsic motivation on the part of students to use language actively in order to generate their own knowledge; and
4. professionals involved in assessment become advocates for minority students by focusing primarily on the ways in which students' academic difficulty is a function of interactions within the school context rather than legitimizing the location of the "problem" within students.

Figure 1.
Empowerment of Minority Students:



EDUCATOR ROLE DEFINITIONS

INSTITUTIONAL CHARACTERISTICS OF SCHOOLS

INTER-CULTURAL ORIENTATION

ANGLO-CONFORMITY ORIENTATION

CULTURAL/LINGUISTIC INCORPORATION

Additive-----Subtractive

COMMUNITY PARTICIPATION

Collaborative-----Exclusionary

PEDAGOGY

Interactionist-----Transmission

ASSESSMENT

Advocacy-oriented ----- Legitimization-oriented



EMPOWERED STUDENTS



DISABLED STUDENTS

Each dimension can be analysed along a continuum, with one end reflecting an anti-racist orientation (role definition) and the other reflecting the more traditional Anglo-conformity orientation. The overall hypothesis is that this latter orientation will tend to result in the personal and/or academic disabling of minority students while anti-racist orientations (as operationally defined with respect to the framework) will result in minority student empowerment, a concept that, in the present context, implies the development of the ability, confidence, and motivation to succeed academically.

At least three of the dimensions analysed (cultural/linguistic incorporation, community participation, and assessment⁴) are integral to most statements of "multicultural education" policy. Although policy with respect to linguistic (as compared to cultural) incorporation has tended to be vague and ambivalent, the linguistic component is regarded as central to the present framework on the grounds that a multicultural education policy that ignores linguistic diversity is vacuous and there is considerable research evidence showing the importance of the linguistic component for minority students' academic achievement. The inclusion of "pedagogy" as a central dimension of a framework for analysing anti-racist education may appear unusual; its relevance, however, derives from the fact that genuine incorporation of students' experiences (cultures) into the school program requires that educators abandon pedagogical assumptions that focus primarily on transmission of pre-determined knowledge and skills.

Cultural/Linguistic Incorporation. Considerable research data suggest that for minority groups who experience disproportionate levels of academic failure, the extent to which students' language and culture are incorporated into the school program constitutes a significant predictor of academic success (see Cummins 1984). In programs where minority students' L1 skills are strongly reinforced, their school success appears to reflect both the more solid cognitive/academic foundation developed through intensive L1 instruction and also the reinforcement of their cultural identity.

With respect to the incorporation of minority students' language and culture, educators' role definitions can be characterized along an "additive-subtractive" dimension (see Lambert 1975 for a discussion of additive and subtractive bilingualism). Educators who see their role as adding a second

language and cultural affiliation to students' repertoire are likely to empower students more than those who see their role as replacing or subtracting students' primary language and culture in the process of assimilating them to the dominant culture. Cognitive benefits (e.g. enhanced metalinguistic development) have been frequently associated in research with continued development of skills in two languages (see e.g. Hakuta & Diaz, 1985).

Community Participation. It has been argued (Cummins 1986) that minority students will be empowered in the school context to the extent that the communities themselves are empowered through their interactions with the school. When educators involve minority parents as partners in their children's education, parents appear to develop a sense of efficacy that communicates itself to children with positive academic consequences (see for example the "Haringey Project" in Britain [Tizard, Schofield, & Hewison, 1982] and Ada, in press).

The teacher role definitions associated with community participation can be characterized along a collaborative-exclusionary dimension. Teachers operating at the collaborative end of the continuum actively encourage minority parents to participate in promoting their children's academic progress both in the home and through involvement in classroom activities (see Ada, in press). A collaborative orientation may require a willingness on the part of the teacher to work closely with mother tongue teachers or aides in order to communicate effectively and in a non-condescending way with minority parents. Teachers with an exclusionary orientation, on the other hand, tend to regard teaching as their job and are likely to view collaboration with minority parents as either irrelevant or actually detrimental to children's progress. Often parents are viewed as part of the problem since they interact through their L1 with the children at home.

In the case of Indian students, it seems patently obvious that our failure to build education around the enormously rich human heritage of this continent is depriving students of the sense of pride in their own cultures that is crucial to their academic growth. Students can only become empowered when education becomes a truly community enterprise involving an equal partnership between educators in the school and educators in the home (i.e. parents). It is not enough to focus only on students' experience in the classroom, although this is central component of the change from an Anglo-conformity orientation; in addition,

the collective historical experience of the community must be used as the context for all learning in the school. There are no easy formulas for implementing these changes; patience, ingenuity, and a spirit of committed experimentation are necessary.

Pedagogy. Several investigators have suggested that the learning difficulties of minority students are often pedagogically-induced in that children designated "at risk" frequently receive intensive instruction that confines them to a passive role and induces a form of "learned helplessness" (see Cummins 1984 for a review). Instruction that empowers students, on the other hand will aim to liberate students from dependence on instruction. In the sense of encouraging them to become active generators of their own knowledge.

Two major orientations can be distinguished with respect to pedagogy. These differ in the extent to which the teacher retains exclusive control over classroom interaction as opposed to sharing some of this control with students. The dominant instructional model in most western industrial societies has been termed a "transmission" model (Barnes 1976; Wells 1982, 1986); this can be contrasted with a "reciprocal interaction" model of pedagogy.

The basic premise of the transmission model is that the teacher's task is to impart knowledge or skills that s/he possesses to students who do not yet have these skills. This implies that the teacher initiates and controls the interaction, constantly orienting it towards the achievement of instructional objectives.

It has been argued that a transmission model of teaching contravenes central principles of language and literacy acquisition and that a model allowing for reciprocal interaction between teachers and students represents a more appropriate alternative (Cummins 1984; Wells, 1982, 1986). This "reciprocal interaction" model incorporates proposals about the relation between language and learning made by a variety of investigators, most notably, in recent years, in the Bullock Report (1975), and by Barnes (1976), Lindfors (1981) and Wells (1982). Its applications with respect to the promotion of literacy conform closely to psycholinguistic approaches to reading (e.g. Goodman & Goodman, 1978; Holdaway, 1979; Smith, 1978) and to the recent emphasis on encouraging expressive writing from the earliest grades (e.g. Chomsky, 1981; Graves, 1983).

A central tenet of the reciprocal interaction model is that "talking and writing are means to learning" (Bullock Report, 1975, p.

50). Its major characteristics in comparison to a transmission model are as follows:

- genuine dialogue between student and teacher in both oral and written modalities
- guidance and facilitation rather than control of student learning by the teacher
- encouragement of student-student talk in a collaborative learning context
- encouragement of meaningful language use by students rather than correctness of surface forms;
- conscious integration of language use and development with all curricular content rather than teaching language and other content as isolated subjects
- a focus on developing higher level cognitive skills rather than factual recall
- task presentation that generates intrinsic rather than extrinsic motivation

In short, pedagogical approaches that empower students encourage them to assume greater control over setting their own learning goals and to collaborate actively with each other in achieving these goals. The approaches reflect what cognitive psychologists such as Piaget and Vygotsky have emphasized about children's learning for more than half a century. Learning is viewed as an active process that is enhanced through interaction. The stress on action (Piaget) and interaction (Vygotsky) contrasts with behaviouristic pedagogical models that focus on passive and isolated reception of knowledge.

The relevance of these two pedagogical models for multicultural education derives from the fact that a genuine multicultural orientation is impossible within a transmission model of pedagogy. To be sure, content about other cultural groups can be transmitted but appreciation of other cultural groups can come about only through interaction where experiences are being shared. Transmission models entail the suppression of students' experiences and consequently do not allow for validation of minority students' experiences in the classroom. The human resources, represented by students' cultural backgrounds, can be utilized in the classroom only when educators have

- an additive orientation to students' culture and language such that they can be shared rather than suppressed in

the classroom;

- an openness to collaborate with community resource persons who can provide insight to students about different cultural, religious, and linguistic traditions; and
- a willingness to permit active use of written and oral language by students so that students can develop their literacy and other language skills in the process of sharing their experiences with peers and adults.

Assessment. In the past, both classroom and psychological assessment has had the effect of disempowering or disabling minority students. Academic achievement and IQ tests have located the causes of minority students' educational difficulties within students, thereby screening from critical scrutiny the interactions that students have experienced within the educational system. This process of blaming the victim led to massive overrepresentation of Black and Hispanic students in classes for the educable mentally retarded until the early 1970's (Mercer, 1973). Litigation and legislation (e.g. Public Law 94-142) during the sixties and seventies appeared, on the surface, to rectify this situation insofar as there is no longer overrepresentation of minority students in classes for the retarded. However, the disabling structure has preserved itself simply by shifting the overrepresentation of minority students to classes for the "learning disabled." Ortiz and Yates (1983), for example, report that Hispanic students in Texas are overrepresented by a factor of 300% in learning disability classes. It seems implausible to conclude that three times as many Hispanic as Anglo children suffer from intrinsic neurologically-based learning disabilities; rather, it is more plausible that these children's learning difficulties are caused by the kind of educational interactions they have experienced and that one of the functions of psychological assessment has been to deflect attention away from the ways minority children have been (and still are being) disabled in school; specifically, away from the fact that, traditionally, schools have attempted to eradicate children's language and culture, minority parents have been excluded from any meaningful role in their children's education, the curriculum has reflected, both overtly and covertly, the racist values of the dominant group, and children have not been permitted to express and share their experience within the classroom.

How can assessment play a role in challenging rather than legitimizing the disabling of minority students within the educa-

tional system? The first step is to broaden the conceptual basis for assessment so that it goes beyond psychoeducational considerations towards focusing on the child's entire learning environment. It is virtually inevitable that assessment will contribute to the disabling of minority students when the only tools at the psychologist's disposal are psychological tests (in either L1 or L2). Since the tests focus only on psychological processes, minority children's educational difficulties will, of necessity, be attributed to psychological dysfunctions. To challenge the disabling of minority students, the assessment must focus on the extent to which children's language and culture are incorporated within the school program, the extent to which educators collaborate with parents as partners in a shared enterprise, and the extent to which children are encouraged to use language (both L1 and L2) actively within the classroom to amplify their experiences in interaction with other children and adults. In other words, the primary focus should be on remediating the educational interactions that minority children experience.

In order to broaden the focus of educational and psychological assessment, it is necessary to reduce the territoriality between the roles of teachers and assessment specialists. Formal assessment does have an important role to play but its impact is considerably greater if it is combined with the longitudinal monitoring by classroom teachers of students' progress over time. Teachers have much more opportunity to observe the child tackling academic and cognitive tasks than does the psychologist, and she or he can also observe how the child reacts to various types of interventions. In other words, the teacher has the opportunity to observe what Vygotsky calls "the zone of proximal development" defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (1978, p. 86).

It is important to note, however, that not all forms of pedagogy are equally capable of contributing to the assessment process. When the instruction is "transmission-oriented" in that the teacher views her task primarily as transmitting a body of knowledge and skills to the student, students often tend to be reduced to passive roles of responding to "display" questions (to which the teacher already knows the answer) and filling out worksheets focussed on rote recall or mechanical application. Typically, this

type of pedagogy mirrors the biases of standardized tests. Pedagogy that is empowering, on the other hand, is individualized, experiential, and interactive. Instruction is focused on allowing individual children to progress from their own starting point, expressing and reflecting upon their own experiences, and amplifying their cognitive schemata and knowledge base in interaction with peers and adults (teachers and parents). The pedagogy is expressive of rather than suppressive of minority children's experience. Within this interactive/experiential pedagogical model, children's active use of written and oral language provides teachers and psychologists with a rich database for assessing educational progress and potential academic difficulties.

The alternative role definition that is required to reverse the traditional "legitimizing" function of assessment can be termed an "advocacy" role. The teacher's, psychologist's, or special educator's task must be to "delegitimize" the traditional function of psychological assessment in the educational disabling of minority students; in other words, they must be prepared to become advocates for the child in scrutinizing critically the cultural, social, and educational contexts within which the child has developed.

Conclusion

Reversing the legacy of generations of subjugation and overt racism is a formidable challenge. Recent events in the United States and Canada in relation to the recognition of the rights of Indians do not encourage optimism in regard to the dominant group's commitment to acknowledge or redress this legacy of racism. Thus, if the institutionalized racism in schools is going to be challenged, it can only be done by teachers and by Indian parents and children themselves. A first step is effective control, or at least a genuine partnership, in relation to children's schooling experiences. The general directions for change outlined above are obviously "generic" in that they were formulated to apply to a range of minority groups that experienced systematic school failure. The appropriateness of these directions and the specific applications must be worked out by each community. The change process, however, will inevitably involve a consciousness-raising on the part of the community and at least some educators and will represent a challenge to the status quo that is likely to be strongly resisted by the dominant group. If it is not resisted,

then the chances are that the proposed changes are not challenging the institutionalized racism that is part of the fabric of the societal power structure, and consequently these changes are unlikely to reverse children's school failure.

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