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## **AMERICAN INDIAN LEARNING STYLES SURVEY: AN ASSESSMENT OF TEACHERS KNOWLEDGE**

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### **INTRODUCTION**

Theoretical discussions of learning styles as a focus of presentation and study have become a part of the vernacular in Indian education. A sense of optimism suggests that an understanding of learning styles is one of the keys to understanding the school experience for American Indian students. Policy-makers, administrators, teachers, teacher aides, parents, and students have become sophisticated thinkers and users of the knowledge being generated about learning styles and teaching styles. However, the degree of this understanding in terms of meaning and application to instruction does not have a prominent place in the literature. The term "learning styles" has different meanings for people; for some, it is synonymous with "cognitive styles," and for others it refers to preferred approaches to learning based on modality strengths, and others believe it means hemispheric functioning, i.e., whether one is right-brained or left-brained (Browne, 1990; Kleinfeld & Nelson, 1991; More, 1989).

The present study is an exploratory effort to determine current thinking about learning styles from the perspective of those groups closely associated with American Indian students, i.e., teachers and administrators of the schools attended by American Indian students. The study assumes that there is a pervasive, but not clearly defined, understanding by practitioners of learning styles relating to American Indian people. An awareness that American Indian students exhibit learning styles that differ from mainstream students is apparent as evidenced by the presentations and informal discussions that occur at many conferences and symposia on American Indian education. The purpose of this study was to determine the extent of teacher knowledge about learning styles and to determine the extent to which this knowledge is applied in classrooms attended by American Indian students.

### **RESEARCH DESIGN**

#### **Conceptual Framework and Survey Design**

The model set forth by Ramirez and Castaneda (1974) and Cox and Ramirez (1981) which describes the relationship between cultural values and learning styles provided the framework for this study. This framework suggests that cultural values influence socialization practices which in turn influence the ways

children prefer to learn. The authors believe that the general teaching style of a family, along with the task, situation, and materials, is of basic importance in determining a child's approach to learning or learning preference. "Insofar as these teaching styles reflect a certain set of values held by parents and family, values that in many cases are clearly culturally determined, one may posit that cultural differences in learning style preferences develop through children's early learning experiences" (Cox & Ramirez, 1981, p. 63).

The American Indian Education Handbook published by the California State Department of Education (1982) includes a list of 27 cultural values "adhered to by most Indian groups" (p. 24); the values are presented with attitudes, behaviors, and educational considerations. This source and the Ramirez and Castaneda conceptual framework guided the development of an American Indian Learning Style Survey instrument.

The survey included 11 response items on which participants were asked to indicate a rating on a five point Likert-type scale<sup>1</sup> and respond to several open ended questions corresponding to the conceptual framework. In addition, participants were asked to define learning style, rank their degree of knowledge about learning styles, and indicate application strategies and to what extent the strategies are used. Finally, respondents were asked to reveal tribal status, tribal affiliation, educational preparation, experience working within American Indian settings, language, type of school in which they were currently employed, and location of school.<sup>2</sup>

### **Data Collection and Analysis**

The survey was administered to 154 participants in four regional and national effective practices workshops during June and July 1990. Workshops were selected as a vehicle for distributing the survey because the participants were representative of the teaching force in schools attended by American Indian students. The American Indian participants in the survey represented 22 tribal groups from across the United States (see Appendix A). Fifty-one identified themselves as tribally-enrolled American Indians, and 105 identified themselves as non-Indian participants. A majority of the respondents were teachers in public and Bureau of Indian Affairs (BIA)-funded schools attended by American Indian students; a small number of administrators and other personnel also participated.

The survey instrument was administered to respondents before participation in a workshop on American Indian learning styles. Attempts were made to ensure that all survey items were completed. During the data management stage, each survey item was coded, and data were entered into an electronic ASCII data base using an IBM personal computer. The quantitative data were analyzed using cross tabulations and Chi-square test of significance procedures on a commercially available statistical software package. The qualitative data were managed and analyzed using HyperQual (Padilla, 1991), a Macintosh compatible program that greatly facilitated the constant comparative method (Glaser & Strauss, 1967; Strauss & Corbin, 1990) of analyzing the narrative responses.

## **FINDINGS**

### **Do Values and Socialization Practices Affect Learning Style?**

As suggested by the Ramirez and Castaneda (1974) framework, all respondents were asked, "To what extent do you believe that cultural values affect the socialization practices of American Indian families?" No statistically significant difference existed between American Indian and non-Indian responses with the alpha criteria set at .05. Cross-tabulation revealed that a vast majority (91%) of both groups felt that cultural

values have a strong to very strong effect on the socialization practices of American Indian families. Similarly, no significant differences existed between American Indian and non-Indian responses when asked, "To what extent do you believe that cultural values affect the ways in which American Indian students approach learning?" A majority, 75% of the respondents, indicated that cultural values have a strong to very strong effect on a student's approach to learning.

Respondents were then asked to indicate the degree to which values affect demonstration of learning. No significant differences existed between American Indian and non-Indian respondents. A cross-tabulation revealed that a majority of both American Indians (57%) and non-Indians (68%) believed that cultural values affect the ways in which American Indian students are more comfortable in demonstrating what they have learned.

### Which Values?

Respondents were asked to review a list of 27 values (without descriptions of attitudes, behaviors, and educational considerations; see Appendix B) attributed to American Indian cultures and to select the values which affect the following: (a) the ways in which American Indian students approach learning, (b) the ways in which American Indian students demonstrate what they have learned, or (c) both. No statistically significant differences occurred between American Indian and non-Indian groups on 15 values. For example, both groups indicated that cooperation and importance of the family are values that affect approach to learning and to a lesser extent, demonstration of learning. Values which were not selected by a majority of respondents included pragmatism, patience, (veneration of) age, and importance of cultural pluralism.

Statistical differences between American Indians and non-Indians were apparent in responses to selection of nine cultural values which affect approach to learning, demonstration of learning, or both (see Table 1). In contrast to non Indian respondents, American Indian respondents tended to indicate that discipline, holistic approach to health, spirituality, and group harmony had an effect upon an American Indian student's approach to learning more so than demonstration of learning. Moreover, careful observation and careful listening were values selected more often by American Indian respondents than by non Indian respondents for their effect on both approach to learning and demonstration of learning, respectively.

*Table 1. List of cultural values with significant differences between American Indians and non-Indians*

Cultural Values	Significance
Discipline	.00
Indifference to work ethic	.00
Group harmony	.01
Holistic approach to health	.02
Spirituality	.04
	.05

Indifference to ownership	.08
Careful listening	.08
Caution	.10
Careful observation	

alpha=.01, \*\*alpha=.05, \*\*\*alpha=.10

Non-Indian respondents were more likely than American Indian respondents to select indifference to ownership and indifference to work ethic as cultural values which affect an American Indian student's approach to learning. Non-Indians also were more likely than American Indians to select caution as a value which affects both approach to learning and demonstration of learning.

Cross-tabulations were employed to further investigate variations in responses among the respondents to three cultural values that were approaching significance with alpha = .10. American Indians were more likely to select placidity and permissive child rearing as values that affect an American Indian student's approach to learning.

### **Knowledge of Learning Styles**

When ranking (from 1-10) their knowledge of learning styles as it related to American Indian students, a majority of the American Indian (65%) and non-Indian (67%) respondents indicated moderate knowledge. Furthermore, a majority (70%) of both groups indicated that "use of strategies which address learning style differences" was often to always a consideration. When respondents were asked to what extent their "cultural values affect their teaching style," a greater percentage of non-Indians (51%) felt that their teaching style was more often affected by values than American Indians (31%). On the other hand, a greater percentage of American Indian respondents (33% compared to 15% for non-Indians) indicated that it was always a consideration to a greater extent.

### **Definition of Learning Styles**

Respondents were then asked to define learning styles. No qualitative differences in the type of definitions provided by American Indian and non-Indian respondents were evident. The definition of learning styles proposed by the National Task Force on Learning Style and Brain Behavior and quoted by Bennett (1990) served as a benchmark to compare and rate the respondents' definitions:

*Learning style is that consistent pattern of behavior and performance by which an individual approaches educational experiences. It is the composite of characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. It*

*is formed in the deep structure of neural organization and personality which molds and is molded by human development and the cultural experience of home, school and society.*  
(p.140)

*An analysis of the responses revealed that a range of definitions offered were varied in terms of their completeness. The above definition served as a basis to develop a rating scale where the respondents' definitions were rated with Type Zero, Type one, or Type Two, depending on the completeness of their response. A definition was rated "0" when what was written was not considered a definition; the respondent gave an example of learning styles with no meaning (e.g., small groups, listening, hands on, or other modalities) or referred to something else (e.g., teaching styles) without mentioning learning styles. A definition was rated "1" when the respondent stated that learning style was the way someone learns (i.e., way, approach, process, method, modality, etc.). A definition was rated "2" when the respondent stated in sentence form that learning styles meant the way someone learns in addition to saying something about what affects this approach (i.e., human development, cultural values, environment, etc.).*

*The rating scale was then tested for inter-rater reliability by asking three independent scorers to rate each definition. Results indicated that 90% of the definitions were rated the same. Of the 47 American Indian responses (92% of the American Indian sample), 16 or 34% were rated a 0; 28 or 64% were rated 1; and one response was rated a 2. Of the 69 non-Indian responses (67% of the non-Indian sample), 17 or 24% were rated 0; 51 or 73% were rated 1; and one response was rated a 2.*

*Table 2 presents a range of exemplars illustrating the Type Zero, Type One, and Type Two definitions provided by the respondents. As shown in the table, exemplars 1.1 to 1.3 are nondefinitions, exemplars 1.4 to 1.6 are examples of learning styles without meaning, and exemplars 1.7 to 1.9 refer to teaching styles.*

*Exemplars 2.1 to 2.3 are generic in nature, exemplars 2.4 to 2.6 are more complete by indicating that there is a process through which one learns best, and 2.7 to 2.9 are even more complete definitions in that they provide various examples of how one may learn best. The Type Two definitions, one each provided by an American Indian and non-Indian respondent, are shown as exemplars 3.1 and 3.2.*

*Table 2. Exemplars illustrating three variations in respondents providing response to a question asking them to define learning styles*

Type 0*	Type 1*	Type 2*
1.1 Understanding the students.	2.1 The process a student uses to learn.	3.1 Method of learning based on one's culture, environmental, and learned background.
1.2 Concreteness, visually.	2.2 The way a child learns.	3.2 The ways in which we learn due to training, past experience, family, a cultural beliefs.
1.3 Working at his own task.	2.3 The way in which a particular child processes information.	
1.4 Holistic learning.	2.4 The ways in which a student is most comfortable and naturally learns.	
1.5 Involving the	2.5 A way or method in which learning is most comfortable.	
	2.6 The style that enables a student to learn the material in	

whole group.	the easiest and most comfortable manner.
1.6 Team work.	2.7 The way in which students learn most effectively and comfortably, i.e., kinesthetic, auditory, visual, cooperative grouping.
1.7 Using different techniques and ideas when teaching.	2.8 The mode in which a student learns information best; seeing, doing, or hearing about something.
1.8 The way you teach where students will catch on.	2.9 The way(s) in which students learn. Whether they have a preference for visual materials, hands-on, auditory or a combination of several. It's the way that a student receives and retains information.
1.9 Whatever it takes for the individual to grab the students' interest.	

*\*Type 0 = response not considered a definition; Type 1 = response stated that a learning style was the way someone learns; and Type 2 = response stated in sentence form that learning styles meant the way someone learns in addition to saying something about what affects this approach.*

### ***Applying Knowledge of Learning Styles***

*Respondents also were asked, "How do you apply your knowledge of learning styles to your teaching?" Little distinction in responses was provided by American Indians and non-Indians. However, the responses varied in terms of a subjective assessment of each one based on a rating scale ranging from 0 to 2.*

*A response to the above question was rated a "0" when it did not respond to the question or if the respondents indicated that they did not apply knowledge of learning styles to their teaching. Responses rated "1" indicated that the respondents did apply knowledge of learning styles to their teaching but without mentioning how knowledge of learning styles affected their teaching styles. The responses rated "2" specifically mentioned what the respondents did to apply knowledge of learning styles to their teaching and how their knowledge of learning styles enables them to use accommodating teaching styles.*

*The rating scale was then tested for interrater reliability by asking independent scorers to rate each definition. Results indicated that 85% of the definitions were rated the same. Of the 47 American Indian responses (95% of the sample), 18 or 38% were rated a 0; 24 or 51% were rated 1; and 5 or 11% were rated 2. Of the 62 non-Indian responses (59% of the sample), 18 or 29% were rated 0; 27 or 44% were rated 1; and 17 or 27% were rated 2.*

*The exemplars in Table 3 illustrate Type Zero, Type One, and Type Two responses. Type Zero responses indicate a lack of awareness and an ambiguity that may characterize some practitioners' knowledge of learning styles. Several exemplars indicate that some respondents admit not knowing much about learning styles (i.e., 4.1 & 4.2). Similarly, the cautious nature of exemplars 4.3 and 4.4 suggests these respondents know something about learning styles but not enough to influence their teaching. Exemplars 4.5 and 4.6 are too vague in terms of explaining how knowledge of learning styles affects instruction.*

*The Type One responses (see exemplars 5.1 to 5.5) illustrate that respondents need to be more sensitive to different learning styles. Most often, respondents indicated they applied knowledge of learning styles by*

*altering their teaching styles. The instructional techniques vary, but there is little to suggest that the respondent's knowledge of learning styles is either being applied to American Indian students or is due to good teaching.*

*Type Two responses indicate how the respondents' knowledge of learning styles influenced their teaching. The Type Two responses differ from Type One responses because each respondent has demonstrated a diagnostic level of knowledge about learning styles. For example, as exemplars 6.1, 6.2, and 6.3 indicate, the respondents determine the students' learning styles by gauging the students' comprehension of subject matter, being sensitive to clues that the students are not mastering the material, or both. In exemplars 6.4, 6.5, and 6.6, the respondents anticipate the need to first determine the learning styles of students, and this knowledge of learning styles influences their teaching styles. In each case, the Type Two responses suggest that some respondents knew enough about learning styles to first determine the learning styles of the students and then to use appropriate teaching styles which best suit the individual student.*

*Table 3. Exemplars illustrating three variations in response to a question asking how respondents apply knowledge of learning styles to teaching.*

Type 0*	Type 1*	Type 2*
4.1 I don't know anything about native learning styles. 4.2 Since I don't know much about them, not very often. 4.3 Probably not as well as I should. 4.4 Hesitantly. 4.5 As much as possible. 4.6 Get out there and do it.	5.1 Have students do problems on board. When they have a question, to ask me how to do it or I get students to discuss material. 5.2 I make adjustments to provide more nonthreatening experiences in the classroom. 5.3 Cooperative learning, hands-on activities, incorporation of auditory and visual mediums within lesson plans. 5.4 The students read and I lecture on the material. I give notes, worksheets, and tests. 5.5 By reading, giving examples, and showing interest and setting a good example. I always try to make students feel good about themselves.	6.1 I constantly use new teaching approaches if children do not comprehend: manipulative, visual materials, reading tests orally. 6.2 I try different approaches to teaching that best suit the students' needs. I determine the students' learning styles by being flexible and sensitive to their needs. 6.3 I effectively use different teaching styles to help my students grasp the theme being taught. I shift styles when I see a lost look on their faces and try to reach those who may not understand by varying my instruction. 6.4 I try to evaluate each week how I can change teaching methods to fit different learning styles. 6.5 I provide a variety of teaching styles depending on what we are doing, interests of the child, time of day, energy level, and task at hand. I believe in being prepared and spontaneous depending on the learning styles of the students. 6.6 I determine each of my students' preferred learning style through various ways and adjust my teaching accordingly.

*\*Type 0= respondent did not respond to the question or did not apply knowledge of learning styles to teaching; Type 1=respondent did apply knowledge of learning styles to teaching but without mentioning how knowledge of learning styles affected teaching styles; and Type 2=respondent did apply knowledge of learning styles to teaching, and indicated how knowledge of learning styles enabled use of accommodating teaching styles.*

## **DISCUSSION**

*The findings suggest that American Indian and non-Indian respondents had similar views regarding cultural influences on learning styles. Respondents, both American Indian and non-Indian, apparently have thought about the influence of cultural values on the socialization practices in American Indian families. However, it is only recently that the research literature reflects this thinking as it relates to learning style and as a consequence, there is less confidence in expressing the belief that cultural values also affect the ways in which American Indian students learned to learn. In other words, there is some degree of confidence in the theoretical framework proposed by Ramirez and Castaneda (1974) but not to the extent that it is expressed in the influence of values on learning style.*

*An apparent strong belief exists that values do affect the ways in which American Indian students demonstrate what they have learned. Evidently respondents do attribute classroom displays of competence to the ways in which American Indian students have been enculturated to behave according to non-Indian cultural norms and behaviors. After establishing the belief that cultural values do affect socialization practices and subsequent approaches to learning, it was necessary to isolate the values respondents felt were important in this process.*

*From a list of 27 values, cooperation and importance of the family were two which both groups selected for their effect on approach to learning and to a lesser extent, demonstration of learning. The literature supports the notion that children raised in a cooperative situation do exhibit a spirit of cooperation in their approach to learning (see review of literature by Swisher, 1990). The references in the literature are both speculative and empirical in nature; nonetheless, the cooperative approach is viewed as an attribute of American Indian children, so it was not surprising that a great deal of agreement existed on this value. Families, especially extended families, are often spoken of as the central segment of many American Indian societies; apparently the respondents concur with this notion.*

*Being pragmatic and patient, having respect for age and wisdom, and the tenets of cultural pluralism were not viewed as values which affect the ways in which American Indian students approach learning or demonstrate what they have learned. Of the four values, it is not surprising that importance of cultural pluralism was not selected; this value is not often attributed specifically to American Indians. However, pragmatism or thinking in concrete rather than abstract or theoretical terms is a value which is reflected in instructional practices with American Indian children; teachers provide concrete experiences in the belief that this is what American Indian students need. Patience or having the ability to wait is a value that is observable in many classrooms attended by American Indian students. Many American Indian children are deliberate in their responses and do not respond rapidly to questions; they often sense the impatience of their teachers who do not understand this value. Respect for (or veneration of) age and wisdom is a value which is also often manifested in the classroom in various ways. Many children of various tribes who come from traditional homes are taught that making eye contact with an older person or questioning an older person is a sign of disrespect. Evidently teachers attribute these behaviors to American Indian culture, but they may not regard them as values which have an effect on learning styles.*

*The nine values which produced significant differences between American Indians and non-Indians provide an interesting point of discussion. When considering which values affect socialization practice and subsequently one's approach to learning, the American Indian respondents selected discipline, group harmony, holistic approach to health, and spirituality to a greater extent than non-Indians. These values all speak to the integral aspects of one's life which communicate balance and respect and apparently affect the way in which one approaches a new learning situation. The values of careful listening and careful*

*observation reflect a belief held by many American Indians that it is virtuous to be a good listener and to learn as much as one can from studying the environment, including the messages that are transmitted by nonverbal behavior.*

*Non-Indians were more likely to consider indifference to work ethic and indifference to ownership as values which have a significant effect on either an American Indian student's approach to or demonstration of learning because of the perceived compatibility with the mainstream American work ethic and attitudes toward individual ownership. Apparently non-Indians also believe to a greater extent that caution is a value which is taught through socialization and manifested in an undemonstrative or aloof approach to new learning tasks.*

*The values of placidity or calm quietness and permissive child rearing were values selected by non-Indians that have apparent, although not statistically significant, effects on a student's approach to learning. The quiet (or silent) American Indian child once was (and in some cases continues to be) a stereotyped picture of an American Indian child reluctant to speak up or volunteer information in a typical classroom. Depending on cultural ties and individual personality, this phenomenon might still occur; however, it is not an assumption one should make. In fact, teachers are often surprised when American Indian children are openly verbal, inquisitive, and curious because they believe the reticence attributed to American Indian children to be general in nature.*

*Wax, Wax, and Dumont (1964,1989) in their now classic ethnographic study of education in an American Indian community discussed permissive child rearing which may not be viewed by mainstream America as a value. The authors give an example of how Sioux parents might be accused of spoiling their children by giving them what they want and not forcing them to attend school if they do not want to go. On the other hand, parents would do whatever they could to earn money if a child expressed a desire to enter postsecondary schooling. A permissive approach to child rearing encourages self-exploration and autonomy. In addition, American Indian children are often given a great deal of attention by family and relatives who represent close and extended relationships.*

*Identified as noninterference by Wax and Thomas (1961), this permissive attitude and respect for autonomy is often misunderstood. Noninterference means having respect for other persons' decisions (regardless of age) and refraining from interfering with their way of life. Many American Indian parents still ascribe to this practice in their teaching; they believe in the inherent ability of people to recognize the difference between good and bad. Left on their own, they will eventually do the right thing. Likewise, though not statistically significant, respect for nature is a value regarded by American Indians perhaps as being analogous to respect for wisdom and therefore learning. There is a certain mystery about nature and learning, and therefore both warrant respect.*

*While no statistical differences were found for some values, an interesting variation in distribution of responses between American Indian and non-Indian respondents did occur. In particular, more than 50% of the respondents did not select values like generosity, orientation to the present, bilingualism, indifference to saving, view of time as relative, and patience. More than 75% did not select values like autonomy and age. These findings are surprising in that some values, such as generosity and view of time as relative are stereotypical of American Indian values among American Indians as well as non-Indians. However, those who did select these values believed each affected the approach an American Indian student takes to learning.*

*Several limitations should be taken into account when interpreting the significance of the values which were*

*or were not selected by American Indian and non-Indian respondents. First, there were no within-group comparisons, so the results are reflective of individuals from 22 tribal groups about whom we know little in terms of traditionalism and acculturation. Since the American Indian sample was small (51 to 154), to draw conclusions about tribally-specific values would be misleading; therefore, comparisons could only be made between American Indians and non-Indians. It was not within the purview of this study to investigate differences in tribal values, but this is a consideration that could present itself in future study. Likewise, the responses of non-Indians do not represent the diversity of experiences of acculturation to American Indian lifestyles. Second, the directions for selection of values may not have been clearly understood; there may not have been a clear understanding of some of the terms such as placidity, and respondents may have found the selection from a list of 27 values tedious. Nevertheless, there is significance in the selections, and the analysis provokes interesting speculation about how commonplace it has become to refer to values as a reason for believing and behaving as we do often without question.*

*If there is a strong belief that values do affect how one approaches learning tasks or demonstrates competency, or the way in which one teaches, then it is imperative that we sort out which values cause an effect, so there is greater understanding and predictability of learning and teaching styles which may be manifested in relation to classroom learning tasks. Teacher behaviors will then have grounding because they will be activated in response to a known rather than a seat-of-the-pants reaction.*

*All of the respondents believe they have a good working knowledge of learning styles, and they consider learning styles of their students when they select teaching strategies. However, it is important to realize that a teacher's method of instruction must not be confused with teaching style. Bennett (1990) describes a teacher's method of instruction as lecture, small group work, or oral reports, whereas "teaching style refers to the teacher's pervasive personal behaviors and media used during interaction with learners. It is the teacher's characteristic approach, whatever the method used" (p.161).*

*The open-ended responses indicated that a majority of the respondents can provide a working definition of learning styles, and they can describe the ways in which they apply knowledge of learning styles to their teaching. However, only a few respondents provided a comprehensive definition which captures the belief that culture does influence learning style. Since there was a strong statement by a majority of the respondents that cultural values do affect learning styles, it is interesting that the definitions do not reflect this belief. Similarly, a small percentage provided a clear description of the application of knowledge to practice. One-fourth to one-third of the respondents, however, could not provide an adequate definition of learning styles, nor could they adequately explain how they apply knowledge of learning styles to teaching. Teachers are often reluctant to listen to theory; rather, they would like to know what to do. They tend to be action-oriented and want someone to tell them what works, rather than use what they perceive as valuable time to test theoretical frameworks.*

*The implications of the survey results indicate that teachers should have a balanced presentation of theory and practice in preservice and inservice education. They do need to understand the theoretical frameworks upon which good practice is based. Action without theory is like a trip without a map; you might get there by intuition, but you might not make it, or you might get lost and wander aimlessly until you finally reach your destination or give up and go back home. A common understanding and definition of learning styles is needed when a school or community members have decided that learning styles of their children present a priority focus for guiding teaching and learning. The definitions given by respondents in this survey demonstrate the disparity in understanding that apparently exists in schools attended by American Indian students across the country.*

*This study was exploratory; it is a beginning point for discovering what teachers know about learning styles. It is a topic which is given considerable attention in the milieu of topics related to the education of American Indian youth. The topic is regarded with optimism as an important key for understanding the behavior of American Indian young people in education settings. Frameworks or paradigms such as the one set forth by Ramirez and Castaneda (1974) provide a window through which to view the topic of learning styles. We must look from the general, i.e., American Indian, to the specific, for we know that while there are similarities, there are important differences between and among tribal cultures. It has been said that "Native cultures differ so fundamentally from European cultures that they will hold certain things in common--concept of time, spatial relationships, a unified awareness of what we call the spirituality and physical realms" (Lopez, 1978, p.109). Furthermore, while there seems to be some universality in cultural values such as generosity and cooperation among American Indians, there is diversity within groups which must not be forgotten when we are tempted toward generalizations.*

## **REFERENCES**

- Bennett, C. I. (1990). Comprehensive multicultural education, theory and practice. Boston: Allyn and Bacon.*
- Browne, D. B. (1990). Learning styles and Native Americans. Canadian Journal of Native Education, 17(1), 23-25.*
- California State Department of Education. (1982). American Indian education handbook. Sacramento, CA: California State Department of Education, American Indian Education Unit.*
- Cox, B. G., & Ramirez, M., III (1981). "Cognitive styles: Implications for multiethnic education." In J. A. Banks (Ed.), Education in the '80s: Multiethnic education (pp. 61-71). Washington, DC: National Education Association.*
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research.. Hawthorne, NY: Aldine.*
- Kleinfeld, J., & Nelson, P. (1991). Adapting instruction of Native Americans' learning styles: An iconoclastic view. Journal of Cross-Cultural Psychology, 22(2), 273-283).*
- Lopez, B. (1978). The American Indian mind. Quest (September-October), 109-124.*
- More, A. J. (1989). Native Indian learning styles: A review for researchers and teachers. Journal of American Indian Education, August, 15-28.*
- Padilla, R. V. (1991). HyperQual Version 3.0 [Computer Program]. Chandler, AZ: Author. (Address: 3327 N Dakota, Chandler, AZ 85224, U.S.A.)*
- Philips, S. (1972). "Participant structures and communicative competence: Warm Springs children in community and classroom." In C. Cazden, V. John, & D. Hymes (Eds.), Functions of language in the classroom. New York: Teachers College Press.*
- Ramirez III, M., & Castaneda, A. (1974). Cultural democracy, bicognitive development, and education. NY: Academic Press.*

*Strauss, A. L., & Corbin, J. M. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury, CA: Sage.*

*Swisher, K. (1990). Cooperative learning and the education of American Indian/Alaskan Native students: A review of the literature and suggestions for implementation. Journal of American Indian Education, 20(2), 36-43.*

*Wax, R. H., & Thomas, R. K. (1961). American Indians and white people. Phylon, 22(4), 305-318.*

*Wax, M. L., Wax, R. H., & Dumont, R. V., Jr. (1964/1989). Formal education in an American Indian community . Prospect Heights, IL: Waveland Press.*

**Appendix A**

*List of Tribal Groups Represented by American Indian Respondents*

Aleut	Hopi
Apache	Navajo
Assiniboine	Pagago (now Tohono O'odham)
Blackfeet	Quapaw
Cherokee	Salish
Cheyenne	San Felipe Pueblo
Chippewa	Sioux, Cheyenne River Sioux, Oglala
Choctaw	Sioux, Sicangu Sioux, Standing Rock
Cree	Three Affiliated Tribes (Arikara, Hidatsa, Mandan)
Crow	
Hidatsa	

**Appendix B**

*List of American Indian Values*

Cooperation	Permissive Child Rearing
Group Harmony	View of Time as Relative Orientation to the Present
Modesty	Pragmatism
Autonomy	Veneration of Age
Placidity	Respect for Nature
Patience	Spirituality
Generosity	Discipline
Indifference to Ownership	Importance of the [extended] Family
Indifference to Saving	Importance of Cultural Pluralism
Indifference to Work Ethic	Avoidance of Eye Contact
Moderation in Speech	Holistic Approach to Health
Careful Listening	Importance of Bilingualism
Careful Observation	Caution

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