The Learning Styles of Native American Students and Implications for Classroom Practice

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Introduction

There is no homogenous group of people that fits the term *Native American* (Love and Kallam, 2007). There are 564 federally recognized American Indian tribes and bands in the contingent 48 states (Bureau of Indian Affairs, 2009) and the authors cannot pretend to speak for or address the unique concerns of each within such a large and diverse group of people. Beyond the diversity due to affiliation, Native Americans have varying levels of acculturation. Some Native Americans lead a traditional lifestyle, while others are fully acculturated into mainstream America, and most are somewhere in between. A number of state and federal agencies use the term *American Indian/Alaska Native* (AI/AN). The authors of this paper use the term *American Indian* (AI), a term more often used among those who recognize that their ancestors were indigenous to this continent.

The purposes of this paper are to provide educators, who often try to use a *one-size-fits-all* approach to teaching this culturally diverse group, with some new elements to consider, and also to encourage the use of teaching styles and strategies that can lead to greater success for American Indian students. More than one-third of the American Indian service population resides in Oklahoma according to the Bureau of Indian Affairs (2009), making the need for culturally responsive teaching mandatory for educators in our region.

On a more practical level, Oklahoma school districts receive what amounts to millions in federal tax dollars every year to implement specialty education programs for Native American students under Title VII and the Johnson-O'Malley Act (*Great Source*, 2006). The suggestions provided here may assist teachers and administrators in changing classroom and school-wide instructional and pedagogical practices.

Achievement Gap

According to the National Center for Educational Statistics (NCES) (2008), American Indians generally demonstrated lower achievement scores as compared with *Whites* and *Asian/Pacific Islanders*. They were also less likely to have completed substantial credits in academic coursework when compared to the total population of students. The *National Assessment of Educational Progress* reports generally lower scores in reading and mathematics for AI students as compared to White and Asian/ Pacific Islander students (NCES). SAT scores followed this same pattern.

Dropout rates are often reported inadequately. American Indian students are often grouped in the "Other" category because the demographic category has been phased out and because of affiliation in more than one racial grouping. However, in Oklahoma the dropout rates for AI students are better than the national average. At last report, the graduation rate nationwide for AI students was 57%. Oklahoma reported a graduation rate of 68% (NCES, 2008). Considering the unacceptability of these statistics compared to White students, it is imperative that teachers adopt strategies that will lead to improved success in school for AI students.

Learning Styles

While there is no one standard definition of the term, a *learning style* is generally thought of as the method by which one comes to know or understand the world. It is the accustomed pattern used to acquire information, concepts, and skills (Swisher, 1991). Generally speaking, learners are not genetically predisposed to a learning style; rather they learn "how to learn" through socialization (Vygotsky, 1986). Learners are typically thought of as visual, who remember best by seeing or reading; auditory, who remember best by hearing; or tactile-kinesthetic, who remember best by writing or using their hands in a manipulative way, or in a combination of these strategies (Pewewardy, 2002).

Global learners initially require an overall picture when learning a task. In contrast, *analytic learners* are fact-oriented and proceed with learning a task in a sequential and step-by-step manner. Generally speaking, AI students are much more global learners than their White counterparts (Hilberg & Tharp, 2002).

Among these individual preferences regarding how a task might be approached, Hilberg and Tharp (2002) found other considerations. *Field-sensitive learners* enjoy working with others to achieve a common goal, and most often look to the teacher for guidance and demonstration. *Field-independent learners* enjoy working independently, like to compete, and ask for teacher assistance only in relation to the current task. *Impulsive learners* respond more quickly and usually with a higher rate of error. *Reflective learners* respond more slowly and have a lower rate of error. *Cooperative learners* excel in community projects and in group activities designed to encourage collaboration among students. *Individualistic learners* do best in more competitive and teacher-centered settings.

St. Charles and Costantino (2000) determined that American Indian learners typically (1) value and develop acute visual discrimination skills in the use of imagery, (2) value cooperative behavior and excel in cooperative environments, (3) perceive globally, and (4) are reflective learners. In contrast, it is believed that White middle-class learners typically (1) value and develop refined verbal skills, (2) value competition among individuals and excel as independent learners, (3) perceive analytically, and (4) are impulsive learners. Generally speaking, there appears to be a disconnect between the "learning styles that many AI students come to school with and the learning styles that are supported and rewarded in typical U.S. classrooms" (St. Charles & Costantino, 2000, p. 45). They also noticed that AI students tend to learn how to perform an activity by

repeatedly observing the activity being done by another, practicing in private, and not performing publicly until confident that it can be done well.

Communication Styles

Kallam, Hoernicke, and Coser (1994) noticed another unique challenge to the learning process for AI students arising from communication styles. Many tribal people have a long tradition of self-determination that is implemented in communication styles. Rather than use what Goin (1999) would refer to as *linear communication*, which is European in origins and would be viewed as uncreative in format since people say exactly what they mean and what they want you to believe, Indian peoples would communicate in parable, allegory, and through tales of examples and allow the listener to come to the correct conclusion. This *circular communication* is more creative, but less certain that meaning has been shared as intended by the speaker. The speaker speaks around the subject and allows the listeners to come to their own conclusions. Circular communication is a tribal form of communication. It follows the belief that each person can have a different perspective on the same incident or conversation. Problems arise when the speaker and listener are communicating in different styles.

Language Registers

Goin (1999) states the importance of considering language registers in the educational process, which not only teaches a person how to speak, but also how he/she is to act in certain social situations. Types of language registers include:

- Frozen: these very formal styles of language are used for ceremonies and legal occasions.
- Formal: this style would typically be used in meetings and classes.
- Consultative: discussions with colleagues and informal meetings would utilize this style.
- Casual: this would be used at home and on the street.
- Intimate: this register is used by spouses or intimates when they are alone.

Goin discusses how differing behavioral beliefs and practices can cause problems. A disconnect can happen when one person uses a language register that seems far too informal for the other participant(s) in the situation. Many AI individuals do not display affection in public, but rather show respect for each other. Those of European descent may hug, kiss, or hold hands in public. If two people from different cultural registers are working together, they may insult each other rather than show respect.

Student Silence

Typical whole-class discussions or open forums are sometimes at odds with what many AI students are familiar with in their family or community of association. Native American people laugh and talk and have a sense of humor. However, when among outsiders this may not be displayed. St. Charles and Costantino (2000) note that publicly

displaying knowledge during whole-class discussion is not in keeping with community or group norms of appropriate behavior for students from many AI groups, since another student within one's sphere of identification might not know an answer and this could lead to his/her embarrassment. Many AI groups encourage the student to show attention by avoiding eye contact and being silent. Oftentimes a teacher will mistake student silence or failure to make eye contact for a lack of knowledge, participation, and/or respect, when in fact, the student is displaying behaviors that were meant to show the highest levels of respect and attention (Kallam, Hoernicke, & Coser, 1994).

Storytelling

The oldest written Native American language in current usage, Cherokee, is still less than 200 years old (Kallam, Hoernicke, & Coser, 1994). To this day, some information among Indian peoples is not transmitted in any format except oral language, lest it be used incorrectly outside of the tribe. Stories are used by elders to connect the past to the present, to teach heritage, to teach important social skills, life lessons, and mores. Children are taught that listening is sacred and that there is much to be learned from the lessons that are shared by their elders. The idea of storytelling is to share the wisdom rather than force it (Meyer & Bogdan, 2001).

Storytelling and oral language transmission of information is on an equal footing with graphic representation through pictures, pottery, video, or drawings of information. Reading, another form of graphic representation, might be a distant third form of communication among Indian peoples. This mode of instruction may be used with great benefit to the participants. It may also be noticed as a source of difference between the majority culture and Native American students. For example, if a group of Native American students were to sit and tell a story, it could be passed along through the ingenuity and creativity of each storyteller and go on and on. If this same ability were measured in something like the *Picture Completion* subtest of the *Wechsler Intelligence Scale for Children* or an equivalent measure, the truly gifted student could make a story without rearranging into "correct sequence" any set of pictures, and the result would be a low or invalid score on the subtest (Kallam, Hoernicke, & Coser, 1994).

Motivation

Incentives that work for many students in mainstream school (e.g., good grades, enjoyment of competition, etc.) are not operationalized in the same manner for many AI students. Increasing intrinsic motivation is of particular importance for AI students. They tend to prefer to learn information that is personally relevant and interesting to them. The use of personal and community-based experiences is a key to student success. Successful teachers connect content to students' lives and engage in active learning. Students are encouraged to interact with peers, teachers, and their environment, and to be participants in their education (St. Charles & Costantino, 2000). St. Charles and Costantino suggest:

1. Provide a multicultural curriculum
2. Provide instruction that is sensitive to both sociolinguistic differences and diverse learning styles
3. Increase the curriculum's personal relevance to the students by contextual-izing instruction in the learners' experience or previous knowledge
4. Give students a choice in how and what they learn
5. Connect academic endeavors to real purposes valued by the students
6. Generate products for real audiences
7. Replace passive teaching methods with active learning in which students are encouraged to interact with peers, teachers, and their environment and in which students are encouraged to be active participants in their educations

Implications for Educators

It is apparent that many teachers do not have an understanding of the degree to which culture affects learning. Many teachers are not able to identify the learning style differences and to employ culturally responsive techniques to address the needs of diverse populations. Often teachers view differences in approach to learning as problems inherent in the students. They may be noticed as oppositional and defiant, inattentive, and under-motivated (Kallam, Hoernicke, & Coser, 1994). In order to help students learn, teachers need to adapt their teaching to support a variety of learning styles (St. Charles & Costantino, 2000).

St. Charles and Costantino (2000) reported that cooperative learning appears to be more successful than competitive structures with AI students because they often feel more comfortable learning in small cooperative groups vs. whole-class instruction. These authors also suggested multisensory instruction that would include demonstrations, visual aids and manipulatives, use of videotapes, lesson outlines, role-playing, creative dramatics, and hands-on activities. They further recommended that teachers provide a better balance between global and analytical styles by incorporating thematic units into the curriculum. Teachers can describe to students the overall purpose and structure of a task, as well as allow them to view the completed task, before explaining the series of steps required to perform it.

Teachers who learn about their students' backgrounds and communities can use their insight to reduce miscommunication and difficulties for students (St. Charles & Costantino, 2000). This finding is so well established that it has been incorporated as a required component under federal funding legislation for American Indian education such as the Johnson-O'Malley Act, which specifically requires advisory committees. The use of parents, grandparents, elders, and members of the community, such as residents of assisted living centers, in routine, intergenerational interactions with preschool and elementary students have been found to be innovative and promising practices, since much more personal attention and one-on-one interaction can be provided (Love & Kallam, 2007).

St. Charles and Costantino (2000) assert that another way to minimize socio-linguistic discontinuities is to increase *wait time*. Wait time is thinking time. Increased wait time results in: (1) significantly longer student responses, (2) significant increase in number of student-student comparisons of data, (3) more active verbal participation of usually low-verbal students, (4) decrease of students failing to respond, and (5) students tending to contribute unsolicited but appropriate responses and to initiate appropriate questions. (Boseker, 1998, p. 48, as cited in St. Charles & Costantino, 2000).

Teachers may be able to increase participation by AI students by wording more speech in the form of comments rather than questions, as well as by encouraging student-to-student verbal interactions (Swisher, 1990). Often a very able student will hide academic competence to avoid seeming superior. The behavior is common enough to be termed as *masking* (Kallam, Hoernicke, & Coser, 1994). Many AI students are embar-rassed at being singled out for public praise by a teacher. They are just as reluctant to be noticed in an unfavorable light. Public reprimands become an assault on the child's status before his/her peers. Teachers who scold AI children in public also diminish their own stature, since elders among AI tribes typically control their tempers and instruct in a quieter manner with patience (St. Charles & Costantino, 2000).

Hankes (1996) advocates constructivism-based instruction for AI students. Lessons that rely heavily on textbooks and workbooks will not be as easily understood and remembered, so the use of real problems is essential to student engagement and understanding. Topical thematic approaches to instruction typically work better, so that students can read about bicycles through bicycle safety rules, for example, and then do bicycle math, ride a bike, repair one, and paint it with a new color scheme. The concept of *bicycle* would be taught in a deeper way than the all-too-typical multiple-choice/fill-in the-blank format so frequently employed in many mainstream classes. Instruction should be time-generous rather than time-driven. Exactness of time is of little importance; when an activity should be done is determined by when the activity that precedes it is completed (Hankes, 1996).

It is very important for teachers to provide multiple means of assessment. Portfolio assessment, paper-and-pencil tests, non-standardized tests, and criterion-referenced tests used in conjunction with norm-referenced, formal standardized assess-ment provide the teacher with a better view of the learners' capabilities (Swisher, 1991; Pewewardy, 2002). Low achievement scores do not necessarily reflect lack of knowledge or motivation. Instead, testing procedures may be incompatible with learning style preferences as well as language and culture (Murk, Place, & Giever, 1994).

Culturally Responsive Educators

St. Charles and Costantino (2002) advocate the use of culturally responsive teaching that uses the child's culture to build a bridge to success in school achievement. The application of cultural literacy and awareness needed is often absent in mainstream classrooms, where the vast majority of AI students are taught by non-Native teachers. These usually well-meaning teachers frequently teach to a generic *Indian* standard that

thinks in terms of Thanksgiving Indians assisting Pilgrims over 350 years ago, war paint, teepees, and feathers from once popular television programs, or commonly associated food items that can supplement show-and-tell activities (Kallam, Hoernicke, & Coser, 1994). Overcoming ethnocentric outlooks is hard work and must be viewed as an ongoing process. Recognizing the need to know is even more difficult. St. Charles and Costantino (2002) assert that teachers should use instructional methods that support a variety of learning styles. This increases students' flexibility and prepares them for success in schools that are controlled by the dominant society. In this way, students can receive comfort from learning in familiar ways while learning new ways to learn. More (1990) recommends the use of his four-step model in cross-cultural settings:

1. Identify learning styles of individuals.
2. Match teaching styles to stronger learning styles for difficult, important learning tasks.
3. Strengthen weaker learning styles, since some tasks require a particular style.
4. Help students learn to select appropriate learning styles, since appropriateness depends on both the learner and the task.

Identity for Indian peoples is built through cultural activities. Because of the homogenizing and assimilating of many native peoples, especially into large cities and away from traditional homes, this generic *Indian* identity may be all that is available to some. Sharing, cooperation, and the existence of an extended family culture are all strengths that can help support the AI student. Culturally responsive teaching is at the heart of all good teaching. It meets the needs of each individual in the classroom, and respects each not just for his/her diversity but also for the expertise one brings to the classroom (Pewewardy, 1998).

Teachers need to understand learners' interpersonal skills, including nuances of body language, idiosyncrasies of eye contact, applications of silence and touch, usage of public space, and facial expression. Pewewardy (1998) reminds educators that humor is very important and can serve well in the classroom; however, the teacher must never forget that humor and sarcasm are worlds apart and frequently misunderstood as someone laughing *at* the student rather than laughing *with* him/her. Sarcasm is a dangerous implement to wield in any classroom. A demanding, but warm style of interaction is suggested as being more successful with AI learners. Culturally responsive education assures that all students can receive an education without having to change or compromise their cultural values or beliefs in order to receive that education. Pewewardy (2003) reminds us that culturally responsive teachers are willing to change their ways of teaching to help students be more successful in school. They are warm and caring and have a genuine respect for diversity. They help their students learn to "walk in two worlds" (Sorkness & Kelting-Gibson, 2006).

Conclusions

Further research is needed, particularly among AI learners who live in the main-stream culture and apart from extended family and tribal members. A question remains to

be answered regarding the learning styles of Native peoples as they assimilate into the tapestry of American culture.

It is also essential that we work with future and current educators to ensure that they utilize a more culturally responsive teaching style and prepare AI students to "move comfortably among different cultures while valuing the unique cultural assumptions of their home, community, and heritage" (Jacobs & Reyhner, 2002).

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