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## ABSTRACT

This paper presents an overview of American Indian students' learning styles, world views, and communication styles, with implications for classroom techniques and teaching styles. Research has shown that American Indian and African American students are primarily right-brained in learning styles, while Anglo and Asian students are primarily left-brained. Characteristics of left-brained and right-brained learning are listed. Most standardized tests and classroom teaching strategies are left-brained in approach. Categorizing Gardner's seven intelligences, left-brained learning styles include linguistic, logical-mathematical, and intrapersonal learning, while right-brained learning styles include spatial, musical, interpersonal, and bodily-kinesthetic learning. Ethnic variations in learning styles can be partially explained in terms of world view. Western/scientific world view differs from tribal world view in terms of the relationship between God, man, and nature; denial of or belief in a spiritual realm; and objective versus subjective perspectives on events. Cultural differences also exist in communication styles. Different discourse patterns may cause confusion and frustration in the classroom, if the teacher is speaking/listening in a linear fashion and Indian students are communicating in a circular fashion. An equitable education for American Indian students requires appropriate teaching techniques, appropriate assessment tools, empowering school culture, student-centered strategies, and teacher awareness of the impact of their own culture and beliefs. (SV)

# Planning Academic Programs for American Indian Success

## Learning Strategies Workshop

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# PLANNING ACADEMIC PROGRAMS FOR AMERICAN INDIAN SUCCESS

By Linda Goin

## **The Traditional Education System**

Academic success of American Indian students has historically been lower than that of any other ethnic group, regardless of what tribe they originated from or what schools they attended. Only 65% have high school education's and only 9% have bachelor degrees or higher. Despite small advances in the 1990's they are still proportionately below the total population by 75%. There are a number of predictable reasons for these alarming statistics. Considering the historic origin of the traditional education system and differences in world view, communication styles, language registers, learning and teaching styles coupled with assessment methods one could only predict a high measure of academic failure.

The traditional education system as we know it in the United States was originally developed for and by the European upper class population:

“Instructional methods of the traditional classroom, were not invented all in one stroke, but evolved within an upper-class segment of the European population and thus were naturally shaped by the capacities, culture, and needs of those children whom the schools were primarily intended to serve.”

“At least implicit in the system as it originally developed was the expectation that not all children would succeed. We have accepted traditional instruction so completely that it is extremely difficult even to imagine much less to put into practice any radically different forms that the education of children could take.”  
(Harvard Education Review, Winter-1969)

The traditional education system currently being used in the United States was designed for the white European population to excel. This becomes more evident when you test the learning styles of different segments of the population and compare the results to the current teaching styles which are prevalent in the classrooms today.

## **Left-Brained Right-Brained Specialization**

Dr. Lloyd Elm (Onondaga) a principal at a mentor school in New York, brought in a testing firm to test all 800 of his students for left-brained and right-brained learning styles. The school was located in the heart of an Italian neighborhood, but served a large

segment of the American Indian population. These were the results reported back to him on the learning styles tests done by ethnic populations. Anglo and Asian students were primarily left-brained, and American Indian and African American students were primarily right-brained in learning styles. Latino students fell in the middle between left-brained and right-brained, and are divided between the two learning styles. Below is a chart that characterizes left-brained, right-brained learning characteristics:

**Left-Brained**

Speech  
 Reading  
 Writing  
 Computational  
 Sequencing  
 Logical  
 Analysis  
 Rational  
 Name Recognition  
 Focus on Detail  
 Time Oriented  
 Cause and Effect  
 Complex Motor Sequences  
 Part to Whole  
 Rules, Codes, Creeds  
 Verbal Communication  
 Rational  
 Male  
 Scientific Orientation

**Right-Brained**

Visual/Spatial  
 Musical  
 Artistic/Symbolic  
 Perception of Patterns  
 Holistic  
 Emotional (intonation)  
 Synthesis  
 Intuitive  
 Face Recognition  
 Recognition of Complex Figures  
 Timeless  
 Gestalt  
 New Kinesthetic Data  
 Whole to Part  
 Heart-level convictions  
 Non-Verbal Communication  
 Non-Rational  
 Female  
 Tribal Orientation

**Teaching and Assessment Biases**

Specialization of the right and left hemisphere are extreme opposites. Obviously the same teaching techniques and assessment methods are not going to be appropriate for both. Yet, most standardized tests and classroom teaching methods are extreme left-brained in approach. The other problem with standardized tests, is that they don't measure what was taught in the classroom. Assessment should follow or be incorporated into the teaching process. Assessment methods should vary according to the concepts taught, and the approach used in teaching the concepts to be tested. Standardized tests are usually have only one correct answer. Several of the answers could be correct, but there is only one right answer. These types of tests are at the lowest level of Bloom's Taxonomy:

## Bloom's Taxonomy

Evaluation  
Synthesis  
Analysis  
Application  
Comprehension  
Knowledge

Repeating basic facts back on an exam are at the knowledge level on Bloom's Taxonomy. Comprehension and application might be used on some standardized tests. Right-brained learners must be able to see the application of the knowledge before they will accept it as valid and useful to them. They are functioning at the evaluation, synthesis and analysis level on Bloom's. To be forced to accept one right answer would be difficult, because each answer would have to have a qualifying statement.

### **Learning Styles - An Overview**

Recent research identifies that students have seven different learning styles. Howard Gardner has identified these learning styles and used them to explain how and why students will excel in one area and have difficulty in another. This theory has been published since 1985, and yet very few institutions have used this information to change classroom teaching and assessment techniques, and many educators have a difficult time putting this theory into practice. If we divide Gardner's Seven Intelligence's into left-brained and right-brained categories it helps us understand cultural differences and their educational implications:

#### **Left-Brained**

Linguistic  
Logical-Mathematical  
Intrapersonal

#### **Right-Brained**

Spatial  
Musical  
Interpersonal  
Bodily-Kinesthetic

**Left-brained learning styles are explained as follows:**

Linguistic: Learns new words easily. good at reading, writing and spelling. Loves word and word puzzles.

Logical-Mathematical: Thinks in a logical mathematical manner. Easily sees the logical sequence that occurs in a mathematical problem. Easily sees the abstract thought through the math process.

Intrapersonal: Prefers to work alone. frequently competitive.

**The right -brained learning styles are as follows:**

Spatial: Is very artistic and can imagine the other side of an object not visible. Best at drawing rather than writing down directions. Can follow a diagram better than written instructions.

Musical: Is very musical and expresses themselves through music. Can keep a beat and remembers math and grammar rules better when put to a rhythm or beat.

Interpersonal: Learns best in a group. Learns by interacting with others.

Bodily-Kinesthetic: Well coordinated. can copy a physical action of another, good athletes.

Ethnic variations in learning styles can partially be explained by world views.

**World View**

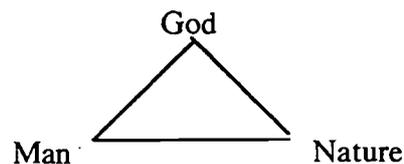
A person's world view is the way in which they perceive themselves, and how they fit into the universe. The way a people characteristically look outward upon the universe. The Tribal (primitive) world view is just the opposite of the Western (scientific) world view:

**Western World View**

no God

Nature as thing (manipulate)

**Tribal World View**



Nature as person

no mysticism/No spiritual world	Mysticism/ Spiritual realm
The end justifies the means	Immanent Justice
Objective	Subjective

When we compare and contrast these two world views, it becomes obvious why one educational system cannot be appropriate for all. It also validates the concept that the traditional education system is Scientific or Western in its philosophy.

In the Tribal world view the person believes that there is a unique triangular relationship between God, man and nature. Each component of the triangle impacts the other, and they cannot be separated. For example, if a man kills an animal needlessly, there will be consequences. Nature is a person, not a thing that can be manipulated. Nature and animals have feelings and follow an ethical code. What happens in one realm impacts the other two realms. The ultimate goal for man is to live in harmony and balance with nature and God. This is because tribal people believe in a spiritual world that impacts man, nature and God. They believe in the concept of “immanent justice” if they break a tribal rule, then whether they are caught or not, they will be punished. This is because of the belief in the triangular relationship between man, God and nature and recognition of a spiritual realm. Everything that happens to man, and nature is viewed in a very subjective manner. There is a story that explains why a certain thing happened the way it did. For example, if a traffic delay prevents a person from getting to a meeting on time and they pass an accident on the way to their meeting, they would explain the traffic delay as a life-saving incident that prevented them from being part of the accident ahead on the road. No need to explain the delay or apologize for their tardiness is necessary. Everything happens for a reason and it is the person’s responsibility to figure out why it happened and the significance behind it.

The Western world view is just the opposite. There is no recognition of God or a spiritual realm. If something cannot be explained by the scientific methods it does not exist or is a mystery that still needs to be solved by a scientist using the scientific method.

However, the belief is that there is a scientific explanation. There is no spiritual realm, or spirits that have any impact on man or the world in general. There is a prominent belief that one race and sex is superior over another. The better educated and affluent members of society have a right to control and manipulate nature, man and religious beliefs.

It is important here to note that there is a difference between religion and spirituality. Religion is a series of beliefs that a person has that identifies God, man and their relationship. Religion is man's collective beliefs about God and man's relationship to God. Many religious sects and organizations have formed as a result of differences in philosophy, beliefs and practices. With each religion a particular man or men have established the rules behind the beliefs. With spirituality, a persons' beliefs result from a personal encounter(s) with the spiritual realm or a spirit (s). No man can establish the rules, however a common shared experience in the spiritual realm teaches the individual what they need to know about this realm and personal beliefs follow. Many religions base their beliefs on one man's experience with the spiritual realm, yet most do not recognize or identify a spiritual realm at all, however have a ridged set of rules and regulations that must be followed. Everything that happens is objective. If a person is late for a meeting because of a traffic delay, they rush in and apologize for the delay. They don't see any significance in the fact that their was an accident further down the road that they passed on the way to their meeting. In the Western world view people believe that they have a right, possibly a duty to control man and nature. This is a prominent characteristic of this belief system.

### **Communication Styles**

Discourse patterns, logically speaking our thoughts is divided into two basic categories, linear or circular communication. These are opposite types of communication.

Linear communication is uncreative in format. A person says exactly what they mean and what they want you to believe. They come directly to the point, there is no doubt about what they are saying or what they believe. Linear communication is historically Western in origin and structure.

Circular communication is creative. The speaker speaks around the subject and allows the listener to come to their own conclusion. At times this means that what the speaker is saying and what the listener believes as a result of the conversation may be different. 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 in communication arise when the speaker and the listener are communicating in different discourse patterns. One is speaking in a linear fashion the other is speaking and/or listening in a circular fashion. Obviously this can result in miscommunication and a great deal of confusion and frustration.

Let me give you an example of how this may happen in the classroom. My daughter, Kari speaks in a circular manner. At the first parent-teacher conference Kari's third grade teacher was very frustrated at the fact that it took Kari fifteen minutes to tell her she didn't have a report. When I asked her what she had said, she told me what had happened. Kari told me who sat at the table with her, what books she had used for her report, who had helped her with parts of her report, and where she had put the report when she finished with it.

I had to explain to the teacher, that Kari spoke in a circular manner and why. I further explained that had she only told her she didn't have the report what would she have thought. She may have thought Kari never did a report, she only did part of the report, she lost the report, or she had done a poor job on the report. The manner in which Kari had told her that she did not have a report, lead her to believe that the report was done correctly and she had followed the teachers directions, and when she went back to get her report to turn in, it was missing.

Because people write the way they speak, their writing is circular as well, and doesn't follow the conventional pattern of English grammar.

Because of the diversity of cultures we need to also teach language registers. Language registers not only teach how a person is to speak, but how they are to act in certain social situations. These are the basic Language Registers:

Frozen : formal, legal ceremonies

Formal: meetings, classes

Consultative: discussions, informal meetings

Casual: back home, on the street

Intimate: husband/wife alone

Telling an Indian student a traditional myth or legend will teach the child a value, or basic knowledge about a situation. It does not need to be explained, the meaning is inherent within the story itself. Most teachers would try to dissect the story to use it's various components in a European style classroom activity, which would demean and invalidate its cultural relevance.

Behavioral beliefs and practices can also cause problems. American Indians do not display affection in public. This is their way of showing respect for the other person. On the other hand Europeans do show respect for each other by hugging, kissing and holding hands in public. Imagine the confusion if two people are functioning on two different cultural registers. Both are trying to respect each other, but are insulting each other instead.

### **An Equitable Education For American Indians**

In order for the education system to be equitable to all students, significant changes must be made. These are some areas of concern:

1. Appropriate classroom teaching techniques.
2. Appropriate assessment tools
3. Empowering school culture and social structure
4. Knowledge content and process appropriate
5. Equity Pedagogy

Each of these aspects of education must be appropriately addressed in order to provide an equitable education for all students. Cultural differences should be celebrated not put down as wrong. There are specific educational considerations under each category.

Appropriate classroom techniques should include the use of Gardner's Seven Intelligence Theory, put into practice correctly. This would not force any student into a position of failure when they have the intelligence, knowledge and ability to learn.

Assessment should be appropriate for the student and subject taught. Most standardized tests are not accurate assessments of student knowledge, but rather a measure of how European they are in culture and beliefs. The SAT and Stanford Binet IQ Test were developed by individuals who believed in eugenics. Obviously these tests and test results would be biased against minority populations. Yet, these tests are widely used today nationally to determine what educational track a student will be put in and whether they are college material or not.

An empowering school culture and social structure are essential. Schools that advocate one culture or belief system over another cannot be equitable. Teacher populations should mirror student populations. It's important to note here, that minority teachers should be able to integrate culture and curriculum into sound bi-cultural educational theory. The social structure of a school can limit the free participation of minority students, as can the bell schedules, classroom setting and teacher interaction with students. Nonverbal cues can have the same impact as verbal cultural cues. The way a teacher interacts with each student says much about their beliefs about that student, their cultural and social background.

The knowledge taught as well as the process used to teach that knowledge must be appropriate for the student. Traditionally in the Western process of educating students, the teacher has all the knowledge and can share what they choose. Students must repeat back to the teacher, what they feel the teacher wants them to know. An equitable educational system allows the students to learn what they think is important and share that knowledge back with the teacher in a way that is relevant to them. Student centered teaching and

assessment is critical in an equitable educational system. The approach to teaching the knowledge should be culturally appropriate and the student should be able to tie the new knowledge to realistic situations at home.

Equity pedagogy assures that all student can receive an education without having to change or compromise their cultural values or beliefs in order to receive that education. At this point it is important for teachers to reflect on their own beliefs and values and how they impact the students they teach. Each child becomes culturally oriented during childhood. If the schools do not recognize or validate the child's world view (values, culture) then the child is forced to reject/change their own culture, or reject the school and what it stands for. Or, a child may compromise their values, until they have no values at all. The school system or school culture helps to create at-risk students.

### **Conclusion**

All children have a right to an equitable, culturally appropriate education. For too long schools have ignored the research available that documents the need for change. It's time that schools start doing what's right for students, instead doing what's always been done in the past.

Haim Ginott sums it up nicely:

“I've come to a frightening conclusion that I am the decisive element in the classroom. It's my personal approach that creates the climate. It's my daily mood that makes the weather. As a teacher, I possess a tremendous power to make a child's life miserable or joyous. I can be a tool of torture or an instrument of inspiration. I can humiliate or humor, hurt or heal. In all situations, it is my response that decides whether a crisis will be escalated or de-escalated and a child humanized or de-humanized.”

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