



Review of the Research Literature: A Strategy for Improving Academic Performance

Presented by: William Demmert, Ed.D.
Adjunct Professor of Education
Western Washington University
Bellingham, Washington

The Presentation

I am giving simultaneous presentations: First, an introduction and review of the research literature important to language development and the development of a culturally-based education program.

The Presentation

The second part is a pictographic history of my own people, the Tlingit of S.E. Alaska, as an example of using indigenous resources to build a cultural connection between community and school.

A connection necessary for schools to become more successful with an indigenous student's academic success as well as general-being.

Historical Perspective

There are those that still believe ignoring an indigenous student 's heritage language and traditional cultural background will provide them greater opportunity to succeed in school and in the competitive world of today.

Native Language and A Culturally Based Education Focus: Building a Strategy for Success

There are a set of basic operating principles that are researched based and that support the ongoing priorities of the partnership I am working with which includes six schools and a select number of organizations and researchers with experience in the education of Native American students (American Indian, Alaska Native, & Native Hawaiian).

Basic Operating Principles

Each of us possess a set of intelligences (cognitive skills) that an early stimulating environment and challenging experiences can influence (Sternberg, 1985; Gardner, Howard, 1985; Sousa, 1998).

Basic Operating Principles Continued

Early development of language and other literacy skills are closely associated with cognitive development and academic success in school ((Donovan et al., 2001; INAR, 1992).

Basic Operating Principles

Developing more than one language does not limit a person's ability to learn and may even enhance cognitive development (Ackerman, 2004; AFIFI, 2002; Au, 1992).

Basic Operating Principles Continued

Most young children are automatically programmed to use a certain section of the brain for learning a language and when they learn a second language early enough use that same part of the brain to learn second and other languages.

Basic Operating Principles Continued

Children learning another language later in life use a different part of the brain and it becomes a learning experience (and more difficult) rather than remaining a natural process (Mechelli, 2004).

Basic Operating Principles Continued

The influences of cultural environments are necessary for educators to understand because of the role this environment has on learning and what children become (Bruner, 1966; Demmert, 2001; Demmert & Towner, 2003; Gardner, 1985, 1995; Vygotsky, 1944).

Basic Operating Principles Continued

Learning to read in the second language should be delayed until the learner is able to develop his or her reading skills to an automatic level (automaticity).

Basic Operating Principles Continued

The transfer from reading in the first language to reading in the second language then becomes a natural transition (practical experience of LKSD, Pünana Leo, & Window Rock).

Basic Operating Principles Continued

Children who learn to read in one language are able to transfer the reading skills to reading in a second language (Bournot-Trites & Tellowitz, 2002).

Basic Operating Principles Continued

Children where the language of instruction is different from his or her first language, and where the testing of academic performance is in a second or third language, will not test well (Mullis, 2003; Rasmussen, 2003; Demmert, 2005).

Basic Operating Principles Continued

It takes children from 7 – 12 years to learn a language well (Devin, 1997; Devin & Bennett, 2002; Ontario Ministry of Education, 2001).

Entering the Country



Basic Operating Principles Continued

Dyslexic children use a different part of the brain than normal “readers” to read and if caught early enough can learn to develop that part of the brain that most of us use to read (Ackerman, 2004; Au, 1992).

Basic Operating Principles Continued

High quality teachers that know pedagogy, understand the different learning periods and preferences can be effective teachers (NCTAF, 1996; Cotton, 1995; Snow et al., 1998; Tharp, 2006).

Basic Operating Principles Continued

Physical activity develops a glucose important to cognitive development (building synaptic connections in the brain) and kinesthetic activity is necessary for the cognitive development of all young children (Bagley, 1996)

Basic Operating Principles Continued

Two of the most accurate predictors of a young person's ability to succeed in school are reading readiness (phonemic awareness, vocabulary, alphabet naming, and listening comprehension) and two dimensions of a youngster's social behavior:

Basic Operating Principles Continued

interpersonal skills (the quality of social relationships with peers), and

work-related social skills (a child's degree of independence, responsibility, and self-control) at 54 months of age (5 ½ years of age) (NICHD, 2004).

Basic Operating Principles Continued

There are three environmental influences linked to levels of academic performance among young children. These influences include the following:

Basic Operating Principles Continued

- 1) *High quality parenting*: the degree to which a youngster is provided with an enriched warm and responsive learning environment (which includes appropriate control and discipline over children, each closely associated with both higher first grade reading and mathematic skills);

Basic Operating Principles Continued

- 2) *High quality child-care environments:* stimulating activity and nurturing as reflected in high quality parenting; and
- 3) *High quality first-grade classrooms:* with a focus on literacy instruction, evaluative feedback, instructional conversation, and encouraging child responsibilities (NICHD, 2004).

Northwest Regional Educational Laboratory National Study Report

Three established educational theories have emerged regarding Native peoples that are closely aligned with what we call “Culturally Based Education (CBE), including limited research evidence that shows a direct relationship between CBE and improved academic performance among Native students.

NWREL Report Continued

- 1) *Cultural Compatibility Theory*. Levels of congruence: the closer human interactions in the school and in the classroom are aligned with those of the community, the greater the likelihood that the goals of the school will be reached

NWREL Report Continued

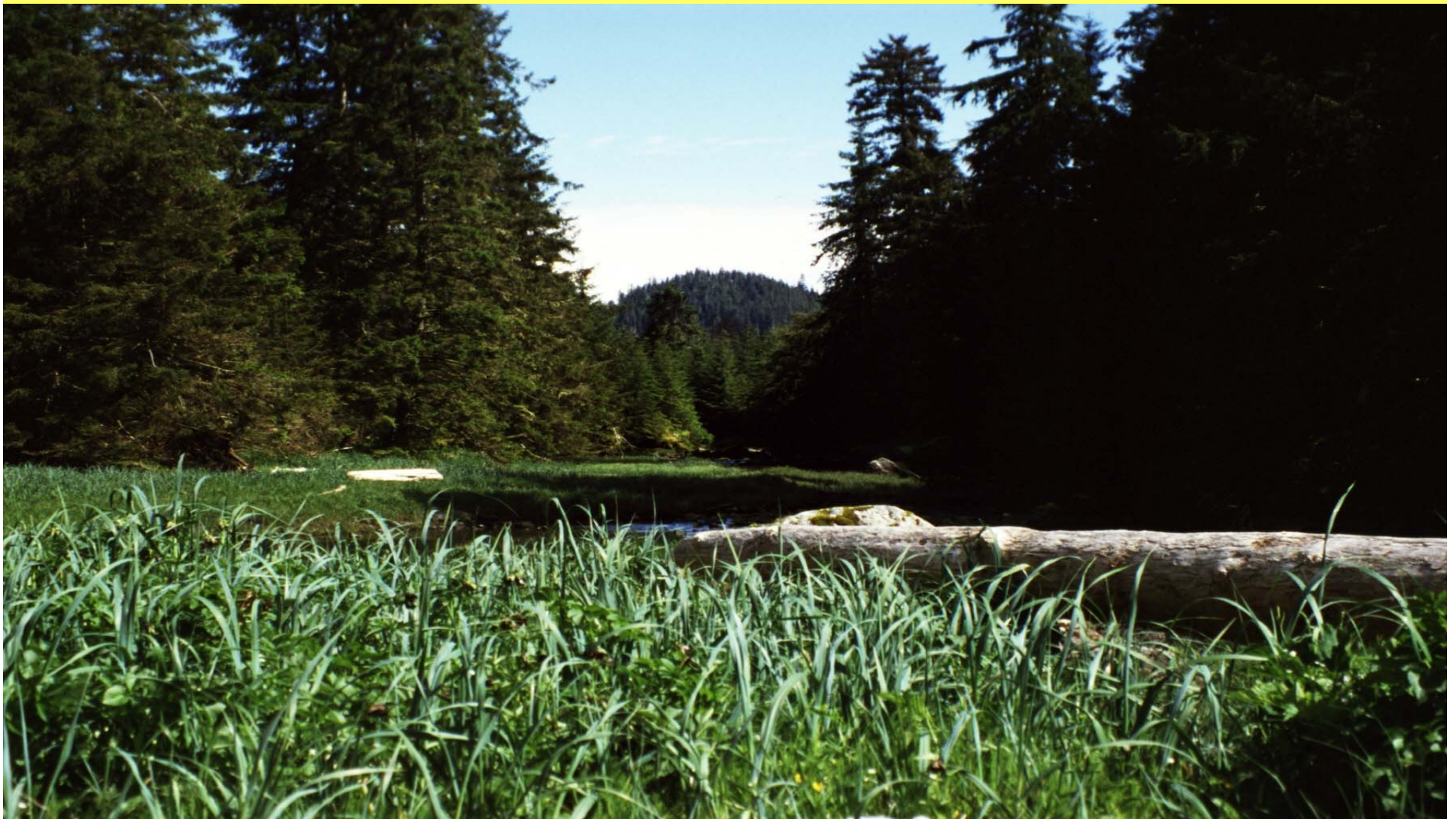
- 2) *Cognitive Theory*. Introducing new knowledge through an association with prior knowledge: for learning to occur, relevant prior knowledge in a person's long term memory must be stimulated or utilized, with new information undergoing some form of processing that focuses on conceptual characteristics of the new information (such as its meaning, personal and social relevance, or relationships to prior knowledge and experiences) as a means of improving learning and recall.

NWREL Report Continued

3) Cultural-Historical-Activity Theory (CHAT).

Issues of culture, language, cognition, community, and socialization are central to learning: primary socialization of infants and young children (as well as all later socialization into new communities of practice) is accomplished through joint, meaningful activity with guidance by more accomplished participants, principally through language exchanges or other semiotic processes.

The Site of a 9000 Year Old Village



NWREL Report Continued

Language vocabularies and routines acquired by learners through these processes are the elements that account for community, linguistic, and cultural continuity, and are the primary cognitive tools for individual and group problem solving and adaptations (e.g., culturally-based secondary socialization processes like schooling can be facilitated by activating the learners' cognitive and linguistic tools laid down by community socialization).

NWREL Report Continued

Primary to this hypothesis is that activity (primarily joint activity) is the setting in which language and cognition are developed, and that patterns of activity have a cultural basis.

Critical Elements of Culturally Based Education

Recognition and use of Native American (American Indian, Alaska Native, Native Hawaiian) languages as the language of instruction, as a bilingual approach to learning, or as a first or second language.

Critical Elements of Culturally Based Education

Pedagogy in which teaching strategies are congruent with the traditional culture as well as contemporary ways of knowing and learning (opportunities to observe, opportunities to practice, and opportunities to demonstrate skills); that traditional cultural characteristics and adult-child interactions are stressed as the starting place for one's education (mores that are currently practiced in the community, and which may differ community to community).

Critical Elements of Culturally Based Education Continued

Curriculum that is congruent with the culture of the community; curriculum which recognizes the importance of Native spirituality, and that places the education of young children in a contemporary context (e.g., use and understanding of the visual arts, legends, oral histories, and fundamental beliefs of the community).

Critical Elements of Culturally Based Education Continued

Strong Native community participation (including partnering with parents, elders, other community resources) in educating children and evident in the curriculum, planning, and operation of school/community activities supporting the use and knowledge of the social and political mores of the community.

Culturally-Based Methods of Assessing Student Performance in the language of instruction.

Summary Statement

According to Jerome Bruner “....*culture shapes mind, ...it provides us with the tool kit by which we construct not only our worlds but our very conceptions of our selves and our powers.*”

Summary Statement

He further states that *“....you cannot understand mental activity unless you take into account the cultural setting and its resources, the very things that give mind its shape and scope. Learning, remembering, talking, imaging: all of them are made possible by participating in a culture.”*

(Bruner, 1996)

Summary Statement

Jonathan Cohen and makes the argument that schools, and a youngster's education, must include social, emotional, and ethical competencies as well as academic priorities. A growing number of schools serving indigenous communities agree with these premises conceptually. The task as we envision it is to accomplish this in a culturally compatible and supportive environment.

(Harvard Educational Review, Cohen, 2006)