

Given the differences between the diversity of Native American cultures and the majority culture(s) which dominate most public and many private educational institutions, Native American researchers have hypothesized that when teachers use culturally congruent interaction styles with students, students are engaged more productively in learning (Demmert & Towner, 2003). The CBE model appears to be a series of interrelated theories that include (1) cultural compatibility theory, (2) cognitive theory, and (3) cultural-historical-activity theory. Cultural compatibility theory suggests that the more similar the students' school environment and experiences are to those of their home and community, the more they will respond to the educational goals of their school. Cognitive theory suggests a child's learning will be more successful when their relevant prior knowledge is used as a foundation for developing and learning new information. Cultural-historical-activity theory suggests that joint learning within a culturally-relevant context, with a knowledgeable partner, advances a child's language, cognition, and understanding of their community and culture.

It is not surprising then that a large majority of education research with Native American children has had a strong focus on their cultural background and identity. Unfortunately, there are few systematic examples of the development of actual measures of such children's cultural background and identity, or their level of assimilation into their Native culture or the majority culture, with most studies relying on geographic and Tribal identities as proxies. There are many qualitative and descriptive studies which begin to form the foundation for the development of more sophisticated measures in this domain, but they have not been widely adapted nor evaluated for use across a wide range of tribal groups or situations. Unfortunately, such limited assessment options of children's cultural heritage and their adaptation within it, particularly those features that might influence their understanding and motivations regarding school and academic learning, constrain our study and understanding of its influence on achievement outcomes.

A challenge in this regard will be to develop measurement approaches that can be utilized across the diversity of heritages represented within the Native American community. One would expect that any measurement of 'Native culture' would be very complex, but also critical in any research focused upon CBE-related theories or predictions. In addition, if one is interested in developing a more comprehensive model of the interrelationships between different levels of measurement (culture, institution, family, etc.) and their influence on academic outcomes, systematic measures of aspects of this cultural factor will be important. Without it, one will not be able to easily document whether its influence on academic outcomes is as crucial as is typically hypothesized, or is interactive with other predictors in unique ways.

Measuring Institutional Environments

A primary institution focused on academic achievement is the schools. Pavel, Thomas, and Summer (1997) have reported that schools with large Native American populations are mostly in rural areas, tend to have small enrollments,