

Science vs. Education: Indigenous Students in the Crossfire

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The statement of purpose of the No Child Left Behind (NCLB) Act of 2001 calls for “promoting schoolwide reform and ensuring the access of children to effective, scientifically based instructional strategies and challenging academic content.” However, the call for “scientifically based instructional strategies” belies the challenges faced in conducting educational research generally (see e.g., Lagemann, 2000; Berliner, 2013) and the cultural differences American Indian and other Indigenous students can exhibit (see e.g., Reyhner & Singh, 2013).

One only needs to look at the research on race used to support Jim Crow and anti-miscegenation laws by some of the greatest scientists of the day in the late 19th and early 20th century so well described in Stephen J. Gould’s *The Mismeasure of Man* to have doubts about putting our faith in science, especially when scientists study controversial issues surrounding race and ethnicity. The late Native American scholar Jack D. Forbes (2000, p. 8) argues,

there is reason to believe that the push for “standards” is actually an attempt to destroy multiculturalism, pluralism, and non-Anglo ethnic-specific curriculum by forcing all public schools to adhere to a curriculum approved by centralized agencies controlled by white people. The standards are to be enforced by means of constant testing of students (and often of teachers) based solely on the centrally approved curriculum.... What

standardized tests surely do is to force upon states, localities, and regions a collectivist “testing culture” that negates the unique heritages, dialects, and values of a particular area. Native nations and the schools serving their pupils will most likely become as assimilationistic as the pre-1928 BIA boarding and mission schools.

In addition, American Indians and other Indigenous students are rarely adequately represented in educational research to the point where there is real doubt as to whether the research conclusions can really be applied to them with confidence. Factors external to classrooms—especially living in poverty (see e.g., Berliner, 2005) and parents’ education level—also bear on educational outcomes regardless of teacher quality, curriculum, and instructional practices. The U.S. Census 2010 American Community Survey found 35% of American Indian students living in poverty and 20% growing up in families where the head of the household does not have a high school diploma (*KIDS COUNT*, 2012).

Terry Huffman (2010) in *Theoretical Perspectives on American Indian Education* examines research specifically targeting American Indians and discards older “cultural deficit” explanations used to explain the academic performance of American Indian students and scrutinizes newer theories that look at cultural discontinuity between home and school. His review of research supports the idea that American

Indian students with strong tribal identities can draw strength from them, giving those students the resilience and persistence needed to be successful in school and life. His study supports both/and, bilingual/bicultural educational approaches that support American Indian languages and cultures while also teaching students English and about the United States and the increasingly globalized world we all live in today. As Sioux teacher and author Luther Standing Bear wrote 80 years ago, Indigenous youth need to be “doubly educated” so that they learn “to appreciate both their traditional life and modern life” (1933, p. 252).

Huffman examines cultural discontinuity, structural inequality, interactionist, and transculturation theories and the evidence supporting them, seeking to understand American Indian student academic performance. Four chapters comprehensively exploring and critiquing the research supporting each theory follow an excellent overview of American Indian education scholarship in chapter one. Reprints of four seminal educational journal articles are included, each of which provides research backing for one of the theories. His concluding chapter examines emerging Indigenous/decolonization approaches to the study of American Indian education, including Tribal Critical Race Theory, the Family Education Model and the Medicine Wheel Culturally Intrinsic Research Paradigm.

All the theories Huffman examines along with the emerging approaches have implications about making classroom curriculum and teaching methods reflect and support the cultural/tribal background of American Indian students. A major researcher and proponent of the transculturation theory, Huffman supports the idea that American Indian students with strong tribal identities can draw strength from those identities, enabling them to persevere and be successful students. Much of the newer research Huffman describes supports constructivist instructional approaches that emphasize the importance of teachers utilizing and building on the background knowledge that students bring with them into the classroom from their home, community and previous school experiences. This constructivist approach is also supported more generally in the National Research Council's reports *How People Learn* (2000) and *How Students Learn* (2005) as well as in the assisted performance approach advocated by Roland Tharp and Ronald Gallimore in *Rousing Minds to Life* (1988).

Examining educational research and disaggregating test scores by ethnic group as mandated by NCLB makes a lot of sense. However, too often the research being used at most minimally involves Indigenous children and thus has very limited application

to them. The report of a national colloquium on improving academic performance among American Indian, Alaska Native and Native Hawaiian students published in 2006 in the *Journal of American Indian Education* (Vol. 45, issues 1 & 2) indicates the need for culturally and linguistically appropriate education for American Indian and other Indigenous students.

Innovative Indigenous language and culture immersion programs are showing success with students (Reyhner, 2010, 2013). It is critical that we get longitudinal research tracking the academic and social gains made by students in these programs at least into college as a means of supporting or rejecting anecdotal findings of lower dropout rates, positive identities, and greater academic success for Indigenous students who are in culturally appropriate educational programs.

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- American Indian / Indigenous Education
 - Teaching Indigenous Languages
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