

REL Midwest Reference Desk

Meeting the Needs of American Indian/Native American Students

August 2013

Question

1. What educational practices are effective in closing the achievement gap of American Indian/Native American students?
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Background

A request for information on best practices to close the achievement gap of American Indian students was received from the Minnesota Department of Education.

Following an established Regional Educational Laboratory (REL) Midwest research protocol, we conducted a search for research reports as well as descriptive and policy-oriented briefs and articles on improving academic outcomes for AI students. The sources we searched included federally funded organizations, additional research institutions, several educational research databases, and a general Internet search using Google and other search engines.

Although we strive to include vetted resources, there are times when the research base is slim or nonexistent. Unfortunately, rigorous research dealing with effective practices in the education of American Indian students is one of these cases. We have, however, included the best resources we could find.

We also searched for appropriate organizations that may act as resources on this issue. We have not done an evaluation of these organizations or the resources themselves but offer this list to you for your information only.

1. What educational practices are effective in closing the achievement gap of American Indian/Native American students?

Demmert, W. (2001). *Improving academic performance among Native American students: A review of the research literature*. Charleston, WV: Clearinghouse on Rural Education and Small Schools. Retrieved from http://inpathways.net/Improving_Performance.pdf

From the report: “This literature review and annotated bibliography will help readers locate research projects that provide information on factors and programs associated with improved academic performance of Native students.”

Demmert, W., & Towner, J. (2003). *A review of the research literature on the influences of culturally based education on the academic performance of Native American students*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Northwest Regional Educational Lab. Retrieved from <http://www.eric.ed.gov/PDFS/ED474128.pdf>

From the ERIC abstract: “This review collects, reports on, and critically analyzes the research literature to determine whether a culturally based education (CBE) curriculum improves the school performance of American Indian, Alaska Native, and Native Hawaiian students. Introductory sections discuss events of the past three decades supporting development of CBE, three theories underlying CBE interventions, an operational definition of the elements of CBE, definitions of experimental and quasi-experimental research, and the difficulties in conducting such research. The review found only four studies that could legitimately be classified as experimental or quasi-experimental. Because of these limited numbers, a small number of non-experimental comparative studies were added. Only one research project was found that provides insights on how researchers might show a direct connection between CBE and improved academic performance. Recommendations are presented for improving the research base on CBE for Native Americans. Data tables summarize the studies examined. Appendices describe the resources used in the literature search and present a lengthy annotated bibliography.”

Hankes, J., Skoning, S., Fast, G., & Mason-Williams, L. (2013). Closing the math gap of Native American students identified as learning disabled. *Investigations in Mathematics Learning*, 5, 3.

From the abstract: “This article serves as an overview of activities and selected assessment findings of a three-year research study titled Closing the Mathematics Achievement Gap of Native American Students Identified as Learning Disabled Project (CMAG Project). Methods used were problem-based, consistent with those of Cognitively Guided Instruction, and culturally relevant. Teachers who participated in the study taught students in special education and inclusive education classrooms at Grades kindergarten through twelve. Findings of this study documented significant learning gains of the target students. Three classroom vignettes provide examples of project classrooms.”

Note: We were unable to locate a link to the full-text version of this resource. Although we typically limit our referrals to publicly available resources, based upon the abstract, we determined that this resource may be of interest to you. It may be found through university or public library systems.

Mackety, D. M., & Linder-VanBerschoot, J. A. (2008). *Examining American Indian perspectives in the Central Region on parent involvement in children's education* (Issues & Answers Report, REL 2008–No. 059). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL_2008059.pdf

From the summary: “A better understanding of American Indian parent involvement was considered as a possible solution to narrow the achievement gap for American Indian students. Five focus groups, consisting of 47 self-selected parents, were conducted in one state in the Central Region. Factors perceived to encourage parent involvement included a caring, supportive, and communicative school staff and culturally respectful environment; access to American Indian programs, resource centers, after school activities, and clubs; and the presence of an advocate or liaison in each school. Factors perceived to discourage parent involvement included feeling unwelcome or intimidated at the school and perceptions of racism and discrimination; experiencing scheduling, transportation, childcare, and financial difficulties; and having prior negative experiences in their own or their children’s education.”

National Caucus of Native American State Legislators. (2008). *Striving to achieve: Helping Native American students succeed*. Denver, CO: Author. Retrieved from <http://www.ncsl.org/print/statetribe/strivingtoachieve.pdf>

From the report: “Closing the achievement gap is of key importance to state legislators because 90 percent of American Indian, Alaska Native and Native Hawaiian students attend public schools, and state legislators ultimately are responsible for appropriations and policy that govern a state’s public schools. The National Caucus of Native American State Legislators (NCNASL—the Caucus), with assistance from education policy experts and other stakeholders, developed a series of policy recommendations. The recommendations provide options for all state legislators to consider as they contemplate policies to help close the achievement gap between American Indian, Alaska Native and Native Hawaiian students and their non-Native peers.”

Powers, K. (2005). *Promoting school achievement among American Indian students throughout the school years*. Retrieved from [http://www.thefreelibrary.com/Promoting school achievement among American Indian students...-a0136648569](http://www.thefreelibrary.com/Promoting+school+achievement+among+American+Indian+students...-a0136648569)

From the article: “Extant survey data collected from 240 urban American Indian youth (primarily Ojibwa, Lakota, and Dakota) from two large urban Midwestern cities, ages 9 to 18, were examined to identify educational variables that were negatively correlated with students' age (Geenen, 1998). Fifty-eight survey items were combined into 11 scales that measured 10 educational variables (e.g., student achievement, home-school home-school collaboration, and achievement motivation) and the respondents' affiliation with their Native culture.”

Richards, H. V., Brown, A. F., & Forde, T. B. (2007). Addressing diversity in schools: Culturally responsive pedagogy. *Teaching Exceptional Children*, 39(3), 64–68. Retrieved from <http://www.eric.ed.gov/PDFS/ED482325.pdf>

From the ERIC abstract: “Culturally responsive teaching cannot be approached as a recipe or series of steps that teachers can follow to become effective with American Indian and Alaska Native (AI/AN) students. Instead, it relies on the development of certain dispositions toward learners and a holistic approach to curriculum and instruction. This digest draws on a five-part conceptual framework first derived from the broader multicultural literature by Phuntsog and ties these concepts to recent research in AI/AN

education. This framework reflects elements that researchers found to be crucial to culturally responsive education: (1) cultural literacy (teachers' knowledge of Native cultures and history and awareness of Native learning styles); (2) teachers' self-reflection and analysis of their own attitudes, beliefs, and stereotypes; (3) caring, trusting, and inclusive classrooms; (4) actions of the school that model respect for diversity, Indigenous knowledge, and alternative ways of knowing; and (5) a transformative curriculum that promotes critical thinking and the advancement of society toward equality of opportunity and social justice.”

Stone, J., & Hamann, E. (2012). Improving elementary American Indian students' math achievement with inquiry-based mathematics and games. *Journal of American Indian Education, 51*, 1.

From the abstract: “Project Inquiry-Based Mathematics was a National Science Foundation Math-Science Partnership implemented in a Great Plains city school district with a significant K–12 Native American population. One goal of the project was to reduce the achievement gap between Native American and non-Native students enrolled in district. This gap reduction was to be achieved using inquiry-based mathematics curricula along with cognitively guided instructional strategies, particularly at the elementary level. This study focuses on whether inquiry-based mathematics strategies were consistently implemented in three fifth-grade classrooms at K–5 elementary schools with significant Native American student populations. Test results of Native American students at these three schools are compared with the test results of Native American fifth grade students at a fourth school considered by district leadership to be an exemplar of inquiry-based math instruction. Possible reasons for the performance disparity are explored.”

Note: We were unable to locate a link to the full-text version of this resource. Although we typically limit our referrals to publicly available resources, based upon the abstract, we determined that this resource may be of interest to you. It may be found through university or public library systems.

Additional Resources

Beesley, A. D., Mackety, D., Cicchinelli, L. F., Shebby, S., Rainey, J., & Cherasaro, T. (2012). *Profiles of partnerships between tribal education departments and local education agencies* (REL 2012–137). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from http://www.ies.ed.gov/ncee/edlabs/regions/central/pdf/REL_2012137.pdf

From the summary: “This study examines nine voluntary working relationships or partnerships between tribal education departments and local education agencies supporting American Indian students. Individual profiles describe how each partnership works, focusing primarily on collaborative activities intended to improve education outcomes for American Indian students.”

Nelson, S., Greenough, R., & Sage, N. (2009). *Achievement gap patterns of grade 8 American Indian and Alaska Native students in reading and math* (Issues & Answers Report, REL 2009–No. 073). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest, with contributions from REL Central, REL Midwest, REL Northeast and Islands, REL Pacific, REL Southeast, REL Southwest, and REL West. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/northwest/pdf/REL_2009073.pdf

From the report: “Focusing on student proficiency in reading and math from 2003/04 to 2006/07, this report compares gaps in performance on state achievement tests between Grade 8 American Indian and Alaska Native students and all other Grade 8 students in 26 states serving large populations of American Indian and Alaska Native students.”

Smiley, R., & Sather, S. (2009). *Indian education policies in five Northwest Region states* (Issues & Answers Report, REL 2009 No.081). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/northwest/pdf/REL_2009081_sum.pdf

From the summary: “This study examines state policies that govern the education of American Indian and Alaska Native (referred to collectively as Native American) students in the five Northwest Region states of Alaska, Idaho, Montana, Oregon, and Washington. This investigation is the most comprehensive effort to date to study Indian education policies. The study focuses on three dimensions of Indian education policies:

- Identification of key Indian education policies in the literature.
- Adoption of key Indian education policies by the five Northwest Region states.
- Specific mechanisms states have employed to adopt Indian education policies.

The goal of the study is to provide state policymakers and organizations representing Native Americans with a comprehensive summary and analysis of state-level policy initiatives.”

Additional Organizations to Consult

- Association of Community Tribal Schools
<http://www.acts-tribal.org/ACTS/Welcome.html>

From the website: “Mission: To assist Community Tribal Schools towards their mission of ensuring that when students complete their schools they are prepared for lifelong learning and that these students will strengthen and perpetuate traditional tribal societies.”

- Indian-Ed.org: Tribal Sovereignty in Washington State
<http://www.indian-ed.org/>

From the website: “This site houses resources, materials, lessons, and entire units to support the teaching of tribal sovereignty, tribal history, and current tribal issues within

the context of OSPI [Office of Superintendent of Publish Instruction] recommended units for Washington and U.S. history in the elementary and middle school levels and U.S. history and Contemporary World Issues in the high school level. Each unit is aligned with National Common Core State Standards, state standards and builds toward the successful completion of a Content-Based Assessment, or CBA.”

- Mid-Continent Comprehensive Center—The American Indian Education Knowledge Base

<http://www.mc3edsupport.org/community/knowledgebases/Project-7.html>

From the website: “The American Indian Education KnowledgeBase is an online resource to aid education professionals in their efforts to serve American Indian students and close the achievement gap American Indian students have faced in public, Bureau of Indian Affairs, and other schools.”

- National Caucus of Native American State Legislators

<http://www.ncsl.org/issues-research.aspx?tabs=951,70,389#389>

From the website: “The Caucus promotes a better understanding of state-tribal issues among policymakers and the public at large. In addition, members hope to encourage a broad understanding of state-tribal issues across the country and raise the profile and awareness of tribal issues throughout the state legislative arena. The effectiveness of the Caucus, and of individual Native American state legislators, can increase the ability of the state legislatures to appropriately address tribal issues and develop public policy in cooperation with tribal governments.”

- National Indian Education Association

<http://www.niea.org/About.aspx>

From the website: “The National Indian Education Association [NIEA] advances comprehensive educational opportunities for American Indians, Alaska Natives, and Native Hawaiians throughout the United States. The premiere organization advocating for educational excellence, opportunity, and equity for Native students, NIEA focuses on helping tribes and communities control and choose excellent education for our Native students, promoting culturally based education that allows Native students to preserve languages and traditions of their tribes and nations, and expanding equal educational opportunity for every Native student regardless of where they live.”

Keywords and Search Strings Used in the Search

- Native American OR American Indian AND Achievement gap
- Native American OR American Indian AND students AND effective practices AND academic achievement OR student support OR improved outcomes

Search of Databases and Websites

Institute of Education Sciences Sources: REL Program, Doing What Works (DWW), National Center for Education Statistics (NCES), Institute of Education Sciences (IES), IES Practice Guides

Other Federally Funded Sites: Center on Innovations in Learning, Center on Instruction, Center for Great Teachers and Leaders, Clearinghouse on Rural Education and Small Schools

Additional Data Resources: Education Development Center, ERIC and EBSCO databases, JSTOR database, FirstSearch (OCLC), ProQuest, Educator’s Reference Complete, Google Scholar, Google, general Internet search

Criteria for Inclusion

When Reference Desk researchers review resources, they consider—among other things—four factors:

- **Date of the Publication:** The most current information is included, except in the case of nationally known seminal resources.
- **Source and Funder of the Report/Study/Brief/Article:** Priority is given to IES, nationally funded, and certain other vetted sources known for strict attention to research protocols.
- **Methodology:** Randomized controlled trial (RCT) studies, surveys, self-assessments, literature reviews, and policy briefs are consulted. Priority for inclusion generally is given to RCT study findings, but the reader should note at least the following factors when basing decisions on these resources: numbers of participants (Just a few? Thousands?); selection (Did the participants volunteer for the study or were they chosen?); representation (Were findings generalized from a homogeneous or a diverse pool of participants? Was the study sample representative of the population as a whole?).
- **Existing Knowledge Base:** Although we strive to include vetted resources, there are times when the research base is slim or nonexistent. In these cases, we have included the best resources we could find, which may include newspaper articles, interviews with content specialists, organization websites, and other resources.

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