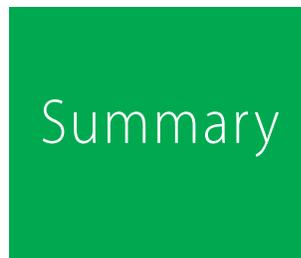




Achievement gap patterns of grade 8 American Indian and Alaska Native students in reading and math



Institute of Education Sciences
U.S. Department of Education



Achievement gap patterns of grade 8 American Indian and Alaska Native students in reading and math

Summary

July 2009

Prepared by

Steven Nelson, Ph.D.

Northwest Regional Educational Laboratory

Richard Greenough

Northwest Regional Educational Laboratory

Nicole Sage

Northwest Regional Educational Laboratory

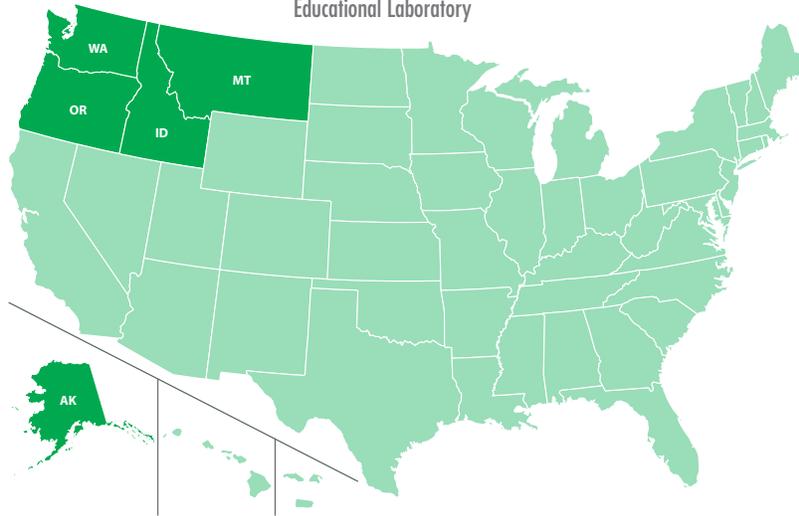


Institute of Education Sciences

U.S. Department of Education



REL
NORTHWEST
At Northwest Regional
Educational Laboratory



Issues & Answers is an ongoing series of reports from short-term Fast Response Projects conducted by the regional educational laboratories on current education issues of importance at local, state, and regional levels. Fast Response Project topics change to reflect new issues, as identified through lab outreach and requests for assistance from policymakers and educators at state and local levels and from communities, businesses, parents, families, and youth. All Issues & Answers reports meet Institute of Education Sciences standards for scientifically valid research.

July 2009

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-06-CO-0016 by Regional Educational Laboratory (REL) Northwest administered by Northwest Regional Educational Laboratory. Seven other regional educational laboratories—Central, Midwest, Northeast and Islands, Pacific, Southeast, Southwest, and West—also participated in the study. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

This report is in the public domain. While permission to reprint this publication is not necessary, it should be cited as:

Nelson, S., Greenough, R., and 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 www.ies.ed.gov/ncee/edlabs.

This report is available on the regional educational laboratory web site at www.ies.ed.gov/ncee/edlabs.

Achievement gap patterns of grade 8 American Indian and Alaska Native students in reading and math

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.

The No Child Left Behind (NCLB) Act of 2001 requires that all students reach proficiency in reading and math by 2014. The law further requires states to provide annual assessment results for all students and student subgroups, including racial/ethnic subgroups. Studies examining differences in the achievement of student subgroup populations during the first two years of NCLB implementation reveal that American Indian and Alaska Native students were performing lower on state and national assessments than other students were. Recognizing the unique needs of American Indian and Alaska Native students, President George W. Bush signed an executive order in 2004 to assist these students in meeting the challenges of the NCLB Act.

An interagency working group established to implement the order conducted a multiyear study on the status of such students. The National Indian Education Study documented the

performance of American Indian and Alaska Native students in grades 4 and 8 on the 2005 and 2007 National Assessment of Educational Progress (NAEP) in reading and math. Results show achievement gaps between American Indian and Alaska Native students and all other students at both grade levels in both reading and math. In reading, the achievement gap in grade 8 was 14 percentage points in 2005 and 18 percentage points in 2007—an increase of 4 percentage points. The achievement gap in math in grade 8 increased 3 percentage points, with a 16 percentage point difference in 2005 and a 19 percentage point difference in 2007. Trend analyses on the achievement gap between these student subgroups suggest that such gaps persist, though study limitations make it difficult to judge whether the gaps have widened or narrowed.

In response to a request by the Council of Chief State School Officers (CCSSO), this study reports on the gap between American Indian and Alaska Native students and all other students on state achievement tests beginning in 2003/04, shortly after implementation of the NCLB Act. It describes achievement patterns for grade 8 American Indian and Alaska Native students and all other grade 8 students between 2003/04 and 2006/07, focusing on student proficiency in reading and math on state assessments in 26 states serving large

populations of American Indian and Alaska Native students.

Staff at eight regional educational laboratories—Central, Midwest, Northeast and Islands, Northwest, Pacific, Southeast, Southwest, and West—collected data on statewide assessment results, number of students tested, and annual measurable objectives for states with grade 8 state assessment data for 2003/04 (20 CCSSO network states and 6 other states that served at least 4,000 American Indian and Alaska Native students). Using annual measurable objectives, the researchers analyzed proficiency rates in each subject against NCLB goals by state. Proficiency rates were graphically arrayed for each state and subject across the four years to show patterns in the achievement gaps between American Indian and Alaska Native students and other students. This revealed changes in the performance of these students relative to all other students and to the annual measurable objective.

Two research questions guided this study:

- What were the achievement gaps in reading and math on the state academic assessment between grade 8 American Indian and Alaska Native students and all other students in 2003/04 for individual states?
- What was the direction of the achievement gaps across 2003/04, 2004/05, 2005/06, and 2006/07 in each state?

The results indicate that in most states both American Indian and Alaska Native students and all other students experienced achievement gains across the study period. Although achievement gaps were generally found to persist, the American Indian and Alaska Native students were at least keeping pace by increasing in achievement along with all other students. The majority of states with three or four years of continuous data saw an increase in the proficiency rates of American Indian and Alaska Native students—with either a decrease in their performance deficit or, in states where their performance was above that of other groups, an increase in their performance lead over other students. For reading, they decreased the gap by which they trailed or increased the gap by which they led in 11 of the 19 states with three or four years of continuous data. For math, American Indian and Alaska Native students either decreased the gap by which they trailed other students or increased the gap by which they led in 14 of the 18 states with three or four years of continuous data.

July 2009