



# Comparing the achievement patterns of Native Hawaiian and non-Native Hawaiian grade 8 students in reading and math





# Comparing the achievement patterns of Native Hawaiian and non-Native Hawaiian grade 8 students in reading and math

Summary

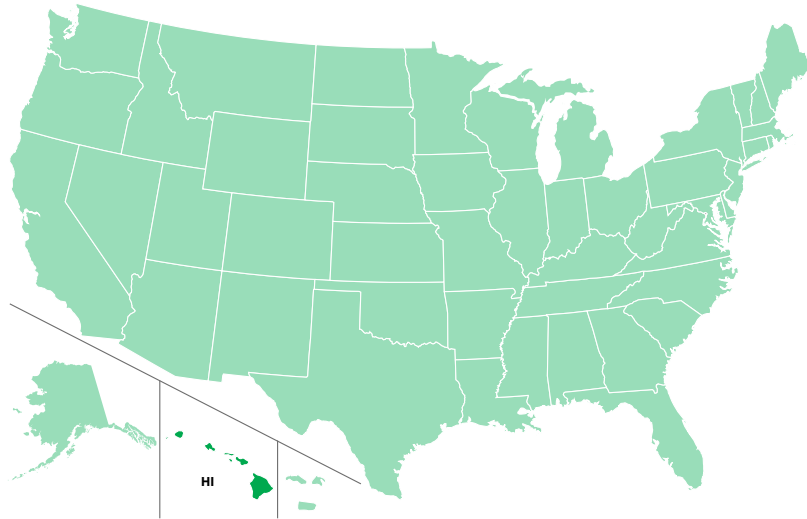
**December 2011**

**Prepared by**

**Ormond W. Hammond, Ph.D.**  
**Regional Educational Laboratory Pacific**

**Melly Wilson, Ph.D.**  
**Regional Educational Laboratory Pacific**

**Corrin Barros**  
**Regional Educational Laboratory Pacific**



**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.

December 2011

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-06-CO-0024 by Regional Educational Laboratory Pacific administered by Pacific Resources for Education and Learning. 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:

Hammond, O., Wilson, M., and Barros, C. (2011). *Comparing the achievement patterns of Native Hawaiian and non-Native Hawaiian grade 8 students in reading and math*. (Issues & Answers Report, REL 2012–120). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Pacific. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

This report is available on the regional educational laboratory website at <http://ies.ed.gov/ncee/edlabs>.

# Comparing the achievement patterns of Native Hawaiian and non-Native Hawaiian grade 8 students in reading and math

**Over 2003/04–2008/09, grade 8 Native Hawaiian students had lower proficiency rates than non-Native Hawaiian students in both reading and math. The achievement gap narrowed in reading but widened in math from 2004/05 to 2008/09.**

Unlike Native American groups in other states, Native Hawaiian students represent the largest single ethnic group in Hawaii, at 27 percent of the student population in 2008/09. Since at least the 1980s, the achievement of Native Hawaiian students on state assessments has lagged behind that of other students in the state (Kana'iaupuni, Malone, and Ishibashi 2005). Identifying trends in achievement gaps between these students and others is important for improving overall achievement.

This study parallels a recent study by 8 of the 10 Regional Educational Laboratories on the achievement of grade 8 American Indian and Alaska Native students in 26 states (Nelson, Greenough, and Sage 2009). Initially, that study was to include Native Hawaiians, but since Hawaii was the only state that collected data at the level necessary to analyze achievement trends for these students, this separate study was conducted for Hawaii. This study reports the reading and math proficiency rates of grade 8 Native Hawaiian and non-Native Hawaiian public school students and whether

proficiency rates have changed from 2003/04 to 2008/09.

To assess reading and math proficiency, the Hawaii Department of Education administers the standards-based Hawaii State Assessment (HSA) each spring to public school students in grades 3–8 and 10. Performance on the HSA is reported at four levels: well below proficiency, approaches proficiency, meets proficiency, and exceeds proficiency (see table A1 in appendix A of the main report). Each level is defined by a score range. Students are considered proficient if they achieve either the meets proficiency or exceeds proficiency level.

This study's inclusive definition of "Native Hawaiian" as anyone identified in the Hawaii Department of Education system as either Hawaiian or part-Hawaiian is consistent with definitions in federal legislation (Hammond 1988). Although the Hawaii Department of Education collects data on the race/ethnicity of all students, it does not report HSA results by race/ethnicity, instead including Hawaiian and part-Hawaiian in the category "Native Hawaiian and other Pacific Islander" (which also includes Chinese, Filipino, Indo-Chinese, Japanese, Korean, and Samoan students). For this study, the Hawaii Department of Education provided HSA data for Hawaiian and part-Hawaiian students as one group and for

all other (non-Native Hawaiian) students as another group.

The following research question guided this study:

- How did the reading and math achievement of grade 8 Native Hawaiian students attending public schools in Hawaii differ from that of non-Native Hawaiian students, and how did achievement gaps between Native Hawaiian and non-Native Hawaiian students vary from 2003/04 to 2008/09?

Key findings include:

- In each study year, grade 8 non-Native Hawaiian students had higher proficiency rates than did Native Hawaiian students in both reading and math.

- From 2004/05 to 2008/09, the achievement gap narrowed in reading (from 19.5 percentage points to 15.6) and fluctuated in math (from a high of 20.7 percentage points to a low of 14.4).
- The proficiency rates of both Native Hawaiian and non-Native Hawaiian students increased from 2003/04 to 2008/09, rising 31.3 percentage points for Native Hawaiian students and 28.4 for non-Native Hawaiian students in reading and 16.7 percentage points for Native Hawaiian students and 19.9 for non-Native Hawaiian students in math.
- Both Native Hawaiian and non-Native Hawaiian students had higher overall proficiency rates in reading than in math in each study year.

**December 2011**

## References

Hammond, O. (1988). Needs assessment and policy development: Native Hawaiians as Native Americans. *American Psychologist*, 43(5), 383–387.

Kana'iaupuni, S.K., Malone, N., and Ishibashi, K. (2005). *Ka Huaka'i: Native Hawaiian Educational Assessment*. Honolulu: Kamehameha Schools, Pauahi Publications.

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 and Answers Report, REL 2009–073). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Educational Evaluation and Regional Assistance, Regional Educational Laboratory Northwest. Retrieved August 10, 2009, from [www.ies.ed.gov/ncee/edlabs](http://www.ies.ed.gov/ncee/edlabs).