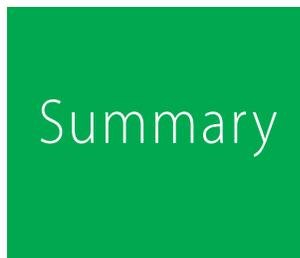




Performance patterns for students with disabilities in grade 4 mathematics education in New York State



Institute of Education Sciences
U.S. Department of Education



Performance patterns for students with disabilities in grade 4 mathematics education in New York State

Summary

August 2008

Prepared by

Katie Buckley
Education Development Center, Inc.

Stacy Ehrlich
Education Development Center, Inc.

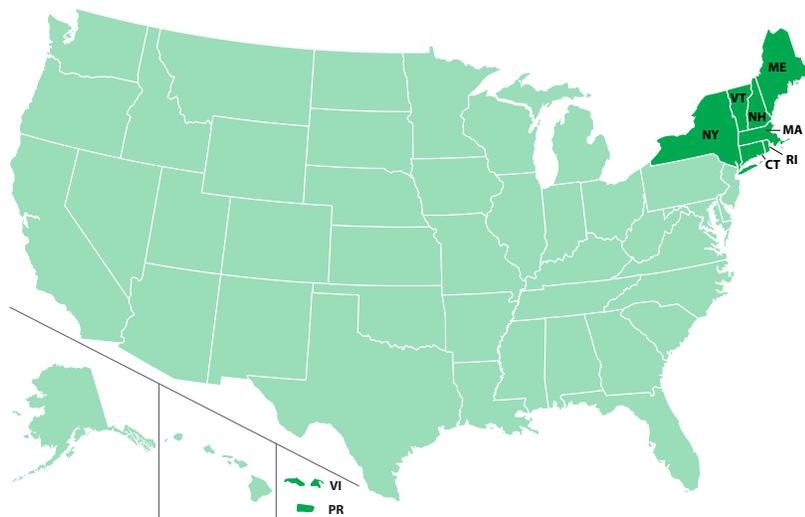
Emily Midouhas
Education Development Center, Inc.

Amy Brodesky
Education Development Center, Inc.



Institute of Education Sciences

U.S. Department of Education



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.

August 2008

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-06-CO-0025 by Regional Educational Laboratory Northeast and Islands administered by Education Development Center, Inc. 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:

Buckley, K., Ehrlich, S., Midouhas, E., and Brodesky, A. (2008). *Performance patterns for students with disabilities in grade 4 mathematics education in New York State* (Issues & Answers Report, REL 2008–No. 050). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

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

Performance patterns for students with disabilities in grade 4 mathematics education in New York State

This report describes the mathematics performance of grade 4 students with disabilities across schools categorized by need-to-resource capacity and compares their performance by school with that of general education students across New York State from 2003 to 2005. It finds that the percentage of students with disabilities scoring proficient increased over time and that the proficiency gap between this subgroup and general education students narrowed by 1 percentage point.

Across the country states and school districts need to improve the mathematics performance of students with disabilities. Not only has this population of students increased considerably since the 1970s, but education expectations and accountability for this subgroup of students have changed under the mandates of the Individuals with Disabilities Education Acts of 1997 and 2004 and the No Child Left Behind (NCLB) Act of 2001. NCLB requirements, in particular, have cast light on the generally low mathematics performance of many students with disabilities and on the large proficiency gaps between this subgroup and general education students. Performance trends in the Northeast and Islands Region mirror those of the country.

To clarify this complex issue, this report presents descriptive analyses of mathematics performance patterns for grade 4 students with disabilities and general education students in New York State. It examines performance overall and using the state's categorization of need-to-resource capacity, a measure of school district need and resources. Three research questions are examined:

1. What is the mathematics performance of public school grade 4 students with disabilities in New York State?
2. How has the performance of grade 4 students with disabilities and grade 4 general education students changed over time?
3. What is the gap in proficiency percentages between grade 4 general education students and grade 4 students with disabilities?

Findings indicate that 57 percent of grade 4 students with disabilities scored proficient on the state test in 2005. There was variation across need-to-resource-capacity index categories, with a 30 percentage point difference between the highest scoring need-to-resource-capacity category and lowest scoring category. Across all schools those whose performance

was above the 90th percentile of the distribution of school-level performance of students with disabilities had 100 percent proficiency rates for their students with disabilities. Included in this group were 45 high need-to-resource-capacity schools, 66 average need-to-resource-capacity schools, and 70 low need-to-resource-capacity schools.

From 2003 to 2005 the percentage of students with disabilities scoring proficient rose by 7.8 percentage points and that of general education students rose by 6.8 percentage points. Within similar school categories the improvement in proficiency was greatest in need-to-resource-capacity category 1 (New York City schools) and lowest in need-to-resource-capacity category 6 (low need schools). Across the state more than half (59 percent) of schools exhibited improved performance from 2003 to 2005, with an average gain of 23.2 percentage points.

From 2003 to 2005 there was a slight narrowing (about 1 percentage point) of the gap in proficiency between students with disabilities and general education students for the state

overall. Nearly 45 percent of the schools in the dataset had reductions in the proficiency gap from 2003 to 2005 without any decline in the performance of general education students. Of these schools more than a quarter had reductions in the gap of at least 30 percentage points.

In addressing the research questions, this report illustrates the types of analyses that state and district leaders can conduct with publicly reported data, along with the ways the findings can be interpreted. Limitations of the analyses include examining cross-sectional data on the percentage of proficient students rather than examining longitudinal data on actual student scores, lacking information on types and severity of disabilities, and applying the district-level need-to-resource-capacity categorization at the school level. This report's findings and limitations are important as states move forward in analyzing subgroup performance and proficiency gap data and in making data-driven decisions.

August 2008