Beating the odds: Finding schools exceeding achievement expectations with high-risk students

Sharon Koon
Yaacov Petscher
Barbara R. Foorman
Regional Educational Laboratory Southeast
at Florida State University
The National Center for Education Evaluation and Regional Assistance (NCEE) conducts unbiased large-scale evaluations of education programs and practices supported by federal funds; provides research-based technical assistance to educators and policymakers; and supports the synthesis and the widespread dissemination of the results of research and evaluation throughout the United States.

May 2014

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-IES-12-C-0011 by Regional Educational Laboratory Southeast administered by the Florida Center for Reading Research, Florida State University. 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 REL report is in the public domain. While permission to reprint this publication is not necessary, it should be cited as:


This report is available on the Regional Educational Laboratory website at http://ies.ed.gov/ncee/edlabs.
Many state education leaders are interested in finding schools that have demonstrated success in improving the achievement of students at the highest risk for difficulties. These schools are typically identified by comparing observed performance on an exam, such as a state assessment exam, with expected performance based on demographic characteristics, including the percentage of students classified as economically disadvantaged (proxied by eligibility for free or reduced-price lunch), as a racial/ethnic minority, or as an English language learner.

This study used data from the Florida Department of Education on public elementary schools for 2012/13 to demonstrate methods for answering two general research questions:

- Which schools are exceeding student achievement expectations, given the demographic characteristics of their students?
- What demographic similarities exist between schools that are exceeding expectations and other schools?

Using a multiple regression analysis, the study demonstrated that of Florida’s roughly 2,000 public elementary schools, 43 (about 2 percent) are exceeding expectations in grade 3 reading (schools “beating the odds”). These schools had between 14 percent and 29 percent fewer students scoring at the lowest achievement level (level 1) on the statewide assessment than would be predicted when controlling for the demographic characteristics of their students. And in 2012/13 the average difference between a school’s observed and expected percentage of students scoring at achievement level 1 was about ±7 percent, with a range of 29 percent fewer students observed than expected to 73 percent more students observed than expected.

Profile analysis was used to illustrate that the number of schools beating the odds in Florida varied by school demographic profile, with most having above-average percentages of Black students and economically disadvantaged students.