Data Use Drives School and District Improvement

September 2006 *By Elizabeth Laird, National Center for Educational Accountability and Data Quality Campaign*

The momentum behind building high-quality data systems to harvest better information about student, school and district performance has never been stronger. Although *collecting* better data is essential, knowing how to *analyze and apply this information* is just as important for meeting the end goal of improving student achievement.

Policymakers and educators need longitudinal data systems that are capable of providing timely, valid and relevant data. Access to these data:

▶ Gives teachers the information they need, such as multiple years of information on the specific knowledge and skills mastered by their students, to tailor instruction to help each student improve;

▶ Gives administrators the resources and information to effectively and efficiently manage; and

▶ Enables policymakers to evaluate which policy initiatives show the best evidence of increasing student achievement.

Although the immediate focus of the Data Quality Campaign (DQC) is to assist states in their development of quality longitudinal data systems, the campaign's ultimate goal is to improve student achievement by promoting effective data use. In this brief, we look at ways leaders at all school system levels can use longitudinal data in addition to formative assessments to meet students' individual needs and improve performance.

Highlights

In this brief, find out more about:

▶ How to coordinate different types of data to improve performance.

▶ How teachers, schools, districts and states can use longitudinal data.

▶ Case studies of longitudinal data systems in action:

  ■ Knox County Schools, Knoxville, TN;

  ■ Aldine Independent School District, Houston, TX; and

  ■ Ohio Department of Education.

▶ Other schools, districts and states to watch.

▶ Further reports and resources you can use for additional information.

Using Longitudinal Data Systems To Improve District, School and Student Achievement

Increasingly, educators are using formative assessments on a regular basis to guide instruction, help teachers target interventions, help students self-monitor their progress and ultimately ensure all students are achieving satisfactory gains during the school year.

While formative assessment information is used directly in classroom and school management, longitudinal data

— which follow individual students over time — enrich these "snapshot" data and provide an opportunity for greater mining of the information. Using both formative and other longitudinal data leads to improved performance at the student, school and district levels. With longitudinal data, the following analyses are possible.[1]

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[1] Dougherty, Chrys, Elizabeth Laird, Nancy Smith. *Uses of Longitudinal Data.* Austin, TX: NCEA, forthcoming.

Conclusion

As the applications of various types of education data expand to meet the needs of diverse stakeholders, the data systems that support these practices must evolve as well. Longitudinal data systems provide teachers with multiple years of data on their entering students and enable them to use this information to anticipate student difficulties and adjust instruction in a timely manner to improve student achievement.

Schools, Districts and States To Watch

The following resources provide more information about districts and schools that are using data to improve student, school and district performance.

The Broad Prize for Urban Education — District Award Finalists
www.broadfoundation.org/flagship/prize.shtml
The Broad Prize for Urban Education is an annual $1 million award created to honor urban school districts making the greatest overall improvement in student achievement while reducing achievement gaps across income and ethnic groups. All Broad finalists over the past four years have shared a common approach: incorporating data analysis into their improvement strategies.

Cedar Rapids Community School District — Continuous Improvement
intranet.cr.k12.ia.us/ActionResearch/index_search.asp
The purpose of this site is to support the implementation of continuous improvement processes and tools in the Cedar Rapids Community School District. Data use is central to instructional decisions through classroom data centers, student data folders and quality tools, the outcomes of which are documented on a balanced scorecard that measures progress toward previously established goals.

Gainesville City Schools — Making Achievement Gains in the Classroom (MAGIC)
www.gcssk12.net
The MAGIC consortium is a dynamic group of Georgia school systems that have decided to pool their resources and work together to create a culture of high academic expectations; secure administrative agreement on an accountability plan; test students before and after material is covered; tailor instruction to meet student needs; and evaluate academic performance in several ways, including accountability reports on each school.

Just for the Kids Best Practice Studies and Institutes — Findings from 20 States
www.just4kids.org/jftk/twenty_states.cfm
Using the structure of the National Center for Educational Accountability's Best Practice Framework, this report presents the practices of high-performing schools in each state and highlights the central role of using data to target interventions and tailor instruction to improve results.

National Association of Secondary School Principals — Breakthrough High Schools
www.principals.org
Breakthrough High Schools is a unique project that features high-minority, high-poverty high schools from across the country that have been recognized for demonstrating significant increases in student achievement, as well as high graduation and college admissions rates. By using a continuous improvement model based on data analysis, consensus building, implementation of appropriate strategies and constant monitoring of the effects of each change, these schools have been able to translate the research on school reform into concrete actions.

Statewide Longitudinal Data Systems Grants — 14 States' Experiences
nces.ed.gov/programs/slds
In November 2005, the U.S. Department of Education's Institute of Education Sciences awarded grants to 14 states to help them design and implement statewide longitudinal data systems. This link provides information on these 14 states and on future grant availability.