Several states and districts are well down the road toward building data dashboards to help them track the indicators and outcomes they deem most important.

by Robert Rothman

Accountability for What Matters

For more than a decade, states have evaluated school performance largely through a single measure—test scores—and rated schools on whether they improved students' performance in reading or math. The idea was to focus schools' attention on the outcomes that mattered most and to focus states' attention on the schools that needed the most help in raising those outcomes.

Recently, though, that idea has come into question, and measures of school performance are getting a new look. With their newfound authority under the Every Student Succeeds Act (ESSA), states will be using a broader range of indicators of school performance and displaying them in ways that give school communities, parents, and district and state officials a clearer picture of how a school actually is doing.

These new systems, often called "data dashboards," function the way a car's dashboard does—by displaying multiple measures that affect how a school is performing. This collection of information enables educators to monitor their school's overall performance while simultaneously identifying specific problems, allowing them to focus resources toward individual needs and address all of the issues that affect school performance. Just as a driver will fill up his tank before the gas gauge turns to "E" to keep the car operating effectively, a school using a data dashboard can work on improving, say, school climate before it affects how well students learn.

At the same time, states are using dashboards to shift the focus of accountability from zooming in on low performance to developing a system of continuous improvement. A driver would never look at the E on a gas gauge and say that his car is failing.

State-level dashboards are relatively new, but education systems in other countries as well as a number of local US school districts have used dashboard-type systems for some time. This article will describe some of the issues involved in establishing dashboard systems, using examples from existing systems.

State of Flux

Although states have held schools accountable for student performance for decades, No Child Left Behind (NCLB) established a uniform system of accountability for the first time. It required states to test all students in grades three through eight and once in high school in reading and mathematics and to set standards that would indicate "proficiency" on the tests. The law also required states to set targets for test performance so that all students would reach proficiency by 2014. Schools that failed to meet annual targets—either for the school as a whole or for subgroups of students within the school—would be designated "in need of improvement" and subject to an escalating set of sanctions and interventions.

The law also authorized states to monitor additional measures of school performance (usually graduation rates for high schools), but performance on these measures could not compensate for low performance on tests.

According to most observers, NCLB successfully focused attention on previously underserved student subgroups, and student
achievement has risen somewhat since its passage in 2001, particularly in elementary school mathematics. But high school performance has remained flat, and relatively few students have been able to demonstrate the deeper learning competencies—using knowledge to solve novel problems, thinking critically, communicating effectively, and collaborating with peers—that are necessary for success in college and careers. Moreover, NCLB produced some unintended consequences, such as an overemphasis on tests. While the tests were tied to high stakes in order to drive instruction, they also failed to assess or encourage some of the most important skills students need.

The shortcomings of the system that NCLB built led state officials and advocates to consider new approaches to accountability, opening the door to ideas like data dashboards. In 2011, the US Department of Education began issuing waivers to states to allow them to develop their own accountability systems. Some 43 states received waivers, and their new systems vary in many ways from the NCLB model. For example, some states, such as Kentucky, broadened their measures of school performance significantly. In addition to test scores, Kentucky includes measures of teacher performance in its measure of school performance.

And California, which has not received a waiver, instituted a new accountability system for all districts. Under a state law that altered how the state funds schools, California required districts to develop their own accountability systems in addition to the state system. The law required districts to measure school performance along eight dimensions: student achievement, student engagement, college and career readiness, school climate, parent involvement, basic services (such as access to materials and adequate facilities), implementation of state standards, and access to rigorous coursework.

Under ESSA, states have more leeway on which indicators to incorporate, but they can’t use a single measure. They have more flexibility to decide how teachers will be evaluated and how to address low-performing schools. Regardless of the particulars of a state’s plan, there will be a fair amount of data for states to assess.

Why Dashboards?

Current state accountability systems have a number of advantages. They focus attention on outcomes and measure whether schools have achieved learning goals. They allow parents and policymakers to compare schools to one another easily. And they can be administered with available data systems.

However, research has revealed a number of shortcomings in the systems. For example, states that use only test scores to measure school performance create incentives to focus on the relatively low levels of performance the tests tap. Alternatively, states that combine multiple indicators into an index or letter grade mask low performance on individual indicators.

In addition, the accountability systems tend to provide limited guidance to schools and districts. They might show that a school is low performing but then fail to tell educators what to do about it. Moreover, they tend to rely solely on state measures, such as tests and graduation rates, that are calculated too late to allow schools to address problems before they worsen.

Data dashboards can alleviate some of the problems with current systems. They provide an array of indicators in a transparent way so that school staff, parents, and public officials know how schools are performing on all important measures. They also can include measures of school operations and practices so that schools know what to address if performance is low. And they can allow districts to add “real-time” measures to supplement the state data and enable local leaders to monitor performance throughout the year.

Toward a Data Dashboard

Creating a data dashboard is not as simple as collecting and displaying all available information. Districts that have used the systems effectively suggest there are at least four important considerations that must go into the development of the systems:

Choosing the right indicators. Designers of dashboard systems believe that, in order to drive improvements in performance, the indicators in a dashboard need to reflect the most significant measures of a school’s performance. To that end, they rely on what they consider the most critical outcome measures, as well as research on the factors that contribute to high performance.

“It helps focus attention,” says Maggie Glennon, a former assistant superintendent in Monroe County, Georgia, who is now a consultant with the Georgia Leadership Institute for School Improvement. “You have to prioritize. You can’t do everything.”

www.nasbe.org
Many dashboards group their indicators into a handful of categories, which show clearly the areas of focus. In many cases, these categories include so-called inputs, as well as traditional student outcomes. For example, Monroe County’s “balanced scorecard” provides indicators in four categories: student learning outcomes, organizational effectiveness, public engagement, and professional learning. Altogether, the scorecard comprises 70 measures of performance, but grouping them in these categories enables school and district leaders to see areas they need to address that might result in lower student performance down the road, according to Glennon. “You can't improve student learning if the classrooms are dirty and teachers don't get their paychecks on time,” she says. “If teachers are not happy, they will not do their best job teaching.”

Similarly, school reports in Alberta, Canada, provide measures in six categories: safe and caring schools; student learning opportunities; student learning achievement; preparation for lifelong learning, world of work, and citizenship; parental involvement; and continuous improvement. The indicators within those categories include a mix of outcome measures (like test scores and graduation rates) and survey results (e.g., teacher and parent satisfaction with parental involvement in decisions about their children's education).

School districts in California include resource measures as well in their local accountability plans. For example, the reports include measures of basic services, such as access to materials and adequate facilities, and access to coursework needed for college and career readiness. In that way, districts hold themselves accountable for providing the resources necessary for schools to succeed.

The measures of student performance on dashboards tend to be broader than test scores alone. For example, the districts in California’s CORE (California Office to Reform Education) network, a group of 10 large districts that won a waiver from NCLB, include measures of social and emotional well-being in their accountability system. This reflects the growing body of research on the importance of student motivation and academic mind-sets in student learning, according to officials from the network. Indicators in that category include results from surveys on school climate, suspension and expulsion rates, and chronic absenteeism.

Districts such as Dallas Independent School District, the School District of Philadelphia, Pittsburgh Public Schools, San Jose Unified, and New Visions schools in New York City, meanwhile, have participated in the College Ready Indicator Systems (CRIS) project to develop and report indicators of college readiness on three dimensions, based on a framework developed by David Conley, the former director of the Educational Policy Improvement Center and an expert on college readiness. The dimensions include academic readiness, academic tenacity, and “college knowledge,” or an understanding of how to navigate the admissions process and make a smooth transition to higher education. The districts collect data on these dimensions at the student, school, and district levels.

**Identifying the most critical indicators for special scrutiny.** While the dashboard systems include an array of indicators, administrators often focus on a few key indicators to ensure that schools continue to monitor them and address the most critical problems in school performance.

For example, Monroe County Schools monitors attendance each year, even if schools continue to perform highly on that indicator, so that it won’t slip off the radar, according to district officials.

San Jose's OPSTAT system (for “opportunity statistics”) measures school performance on 11 indicators, but individual schools are particularly responsible for four key indicators—one for elementary schools (third-grade reading), one for middle schools (eighth-grade mathematics), and two for high schools (Advanced Placement and International Baccalaureate performance and completion of coursework required for admission into the University of California system). Regardless of school performance on other indicators, schools must develop plans for improving results on those measures, according to Jason Willis, assistant superintendent for accountability and community engagement. These indicators encourage broader access to high-quality learning opportunities as well as tracking how students are doing when they receive these opportunities.

**Setting appropriate targets or benchmarks.** In addition to presenting information on the current status of school performance, data dashboards also contribute to school improvement by showing how well schools raise their performance over time. In order to show progress, leaders set targets for improvement and hold
themselves accountable for meeting the targets. In Monroe County, the scorecard’s color-coding scheme is based on whether schools meet targets in each of the categories. When schools meet or exceed a target, the indicator is marked in green. If schools are close to a target, it is marked in yellow. If schools fall short, it is marked in red.

Target setting is based on negotiations between principals and district leaders. District officials want to set ambitious but reasonable targets, according to Glennon. The district wants schools to show steady gains but does not want to set targets that are so out of reach that teachers and principals grow discouraged. So, for example, the district seldom sets a 100 percent target in any category because leaders recognize that any student could have a bad test day and cause the school to miss that goal. On the other hand, district leaders insist that schools raise their targets if a principal’s initial proposal is too low.

**Using the tools for improvement.** In addition to presenting data in a different way, districts using dashboard systems have transformed the way they approach accountability. Rather than simply present data or threaten intervention, district officials work with schools to improve performance.

Philadelphia’s school report cards show how dashboards can contribute to improvement. The school report card scores each category of indicator (achievement, progress, climate, and college and career readiness) at one of four levels: model, reinforce, watch, and intervene. The schools with “model” levels of performance are showcased throughout the city. But the district provides assistance only to the schools at the “intervene” level and does so only to address the aspects of the school that appear problematic. The district and the schools monitor performance at the “reinforce” and “watch” levels.

San Jose also shifted from accountability as finger pointing to accountability for improvement, according to Willis. Since the district shifted to its OPSTAT system in 2013, principals regard it much more favorably, he says. Principals and district leaders develop improvement plans together based on the data and report regularly on progress on the plans.

“It’s the polar opposite of the culture of mistrust” that characterized the previous system, Willis says. “It’s not intended to fire principals or label schools. There is an ongoing dialogue.”

### A Comprehensive System

States are entering a new era in accountability. Under ESSA, states will be experimenting with systems aimed at providing information to schools and communities that can help them improve performance for all schools. This information is particularly important for state boards of education. They need valid, reliable information on how states are progressing to determine if policy shifts are warranted. And boards are in an important position to gather public input on the measures states should be held accountable for.

As they revise their systems, states are showing a growing interest in data dashboards. However, those are not the only elements of new systems. States also are creating school quality review processes, in which educators examine a school’s practices in depth to get a better picture of teaching and learning and recommend improvements. Such systems are already in place in a number of states, including Rhode Island and Georgia.

In addition, states are developing and adopting performance assessments to supplement state tests. These assessments provide students and teachers with a broader view of student performance by tapping abilities end-of-year tests seldom measure, such as the ability to write extended essays in a variety of genres or solve complex, multistep mathematics problems. The assessments also support instruction by providing information on student performance during the year—while teachers can act on it—instead of waiting until the end of the year.

States also are creating professional growth systems and tying them to their accountability systems by connecting teachers and school leaders who are struggling in particular areas with other educators who have demonstrated success in those areas. The CORE districts in California suggest one way this can work. Under their plans, if a school dashboard suggests that a school is having difficulty with the reading performance of its English learners for instance, the district will link that school’s teachers with those from another school that performs well in that area.

At best, these elements should work in tandem. Together, they can transform an accountability system from one aimed at singling out low-performance schools to one that supports continuous improvement for all schools.

---