This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.
Summary

The upcoming reauthorization of the ESEA, combined with other recent education policy trends, such as improvement to the quality of state data systems and a growing emphasis on data-driven decisionmaking, provides an opportunity to reconsider what factors school performance-reporting systems should include. Critics of NCLB have pointed to the narrowing effects of the law’s focus on mathematics and reading achievement, and they have called for efforts to broaden the measures used to rate schools. In this report, we pose and address the following questions regarding expanded measures of school quality:

• What alternative measures of school performance do states currently use in their own accountability systems (in addition to the measures used for NCLB)?
• What are the emerging trends outside the school accountability context in the types of performance measures that districts and states employ to help principals and teachers improve schools?
• What guiding principles can research offer public education agencies about trade-offs to consider when adopting new measures, given limited evidence about whether various school performance measures ultimately lead to improved student outcomes?
• In what ways might the federal government encourage the development and expansion of alternative measures of school performance?

To answer these questions, we convened a panel of five experts on school accountability policies, scanned published research about expanded measures of school performance, conducted ten semistructured phone interviews with staff from local or state education agencies and research institutions, and reviewed the measures employed in each state that publishes its own school ratings in addition to those required under NCLB. After classifying the measures state education agencies (SEAs) use to develop their own school ratings, we then describe categories of measures that research indicates are the most rapidly growing in usage by SEAs and local education agencies (LEAs). We supplement our categories of measures with more detailed examples of localities that have adopted them, examining why they adopted the measures and how the measures are employed.

Rationale for Expanding School Measures

NCLB has focused public attention on student performance on statewide, standardized math and reading exams and, to a lesser extent, the other elements of states’ accountability formulae, such as graduation rates. Yet public schools are expected to promote a variety of outcomes, of
which academic achievement as measured by standardized tests is only one. Additional goals of schooling include the preparation of students for life after school, which includes not only readiness for college or the workplace but also social and behavioral outcomes, such as displaying self-regulating behavior, taking personal responsibility, and demonstrating an ability to work in teams. Schools are also expected to promote civic-mindedness (e.g., political knowledge and participation, tolerance, propensity to vote or engage in civic life) and other positive outcomes, such as good physical health and the avoidance of drugs. The adoption of measures that pertain to these other areas of schooling could provide useful information to school-based staff and to the public about how well schools are meeting these collective goals. Further, an expanded set of measures could increase the validity of inferences about schools’ effectiveness and offer relevant information to principals and teachers about how to improve their schools’ performance.

Additional Measures Currently in Use

In response to NCLB, in 2002, states either established new school accountability systems, revised their existing ones to comply with federal requirements, or operated dual accountability systems that included their own measures as well as those required by federal law. We identified a total of 20 states that publish their own ratings of schools as of the 2008–2009 or 2009–2010 school year that were in addition to the federal annual accountability ratings. Among these 20 states, the most common categories of school performance that were included in state ratings and went beyond NCLB include the following:

- student performance in additional tested subjects (most often, history or social studies)
- measures of growth in student performance over time
- indexes to assign increasing weight to test scores along the entire spectrum of low to high performance instead of the NCLB focus on only proficiency or above
- college-readiness measures, such as American College Testing (ACT) scores or Advanced Placement course taking and test scores.

Although almost all 20 states also included information on their school report cards about school inputs, such as student demographics or school resources, and three states provided information about school processes, such as the quality of student life as reported on student surveys, in almost all cases, state accountability ratings were based exclusively on student outcomes, such as test scores, dropping out, or course taking.

In addition to considering the measures used by states in their own accountability ratings of school performance, we also identified three categories of measures that are rapidly becoming more common in state reporting:

- establishing a safe and supportive school environment
- identifying students who are at risk of failing
- improving student outcomes through more frequent assessments or advanced coursework.

Examples of measures within these categories include students’ perceptions of their schools’ climate and indicators to predict which students are at greatest risk of failing to com-
complete high school on time. A number of public education agencies are also expanding their measures of student outcomes beyond annual, summative math and reading scores to include additional measures of college readiness, such as advanced course taking, and scores from periodic assessments intended to provide timely information to school-based staff to allow for instructional adjustments during the school year.

Collectively, these measures indicate the additional aspects of school performance to which public education agencies most commonly attend. A number of the measures, such as periodic assessments, at-risk indicators, and student satisfaction, are designed as leading indicators of student achievement or graduation, which are currently the primary measures that determine a school’s rating under NCLB. As such, they illustrate the profound influence the federal accountability system has had not only on the development of data systems that have enabled the creation of additional measures but also on the prioritization of certain aspects of schooling that align with NCLB outcomes.

What We Know from Research on Measures of School Performance

Although we identified considerable descriptive information about types of measures and their uses, we found, with a few notable exceptions, almost no published research about the technical quality of the measures,¹ the theories of action that instigated their adoption, the utility of the measures for promoting improved decisionmaking, or the effects of the measures on school practice or student outcomes. Admittedly, assessing their quality, utility, or effects is complicated because these measures are typically used in combination with other new and existing measures and because of other constraints on their use (e.g., the inability to identify or create an appropriate comparison group that is not included in the measurement system). As a result, there is no consensus yet regarding the overall quality of most measures or their utility for improving school performance. However, there is research on the effects of test-based accountability that provides a rationale for developing and adopting additional measures.

Research on test-based accountability systems reinforces the common-sense notion that what gets tested is what gets taught. In particular, high-stakes testing can lead to a narrowed curriculum and other potentially undesirable consequences (such as a focus on students at the threshold of proficiency, in the case of NCLB). But research on the effect of adopting additional measures to broaden ratings of school performance is quite limited, partly because many of the systems adopting such measures are in their early stages. The potential benefits of an expanded set of measures are that they could do the following:

• Allow for a more accurate assessment of the school characteristics widely valued.
• Promote more valid inferences about school performance by offering opportunities to compare performance on multiple overlapping dimensions.
• Provide a more balanced set of incentives to teachers and principals to improve performance in multiple areas.

¹ Exceptions include technical documentation on achievement tests and some surveys.
But there are also risks and trade-offs associated with the adoption of new measures. For example, the proliferation of measures could be a costly reform that could potentially dilute rather than focus attention on core aspects of schooling.

Ultimately, the selection of measures should be informed by the purposes of the measurement system—e.g., whether it will be used solely for monitoring, in a diagnostic or prescriptive way to guide school improvement decisions, or whether it will be included in an accountability system with explicit stakes attached to results. Aside from technical considerations about the construction of measures, the major decisions to make when adopting new measures of school performance include how narrowly the system should be focused, how to balance complexity versus transparency, how to create an affordable system that is still reasonably comprehensive, whether to allow flexibility in choice or use of measures across units, how much to emphasize formative and summative purposes, and whether to adjust for differences in school inputs.

Recommendations for a Federal Role to Promote Improved Measurement of School Performance

The federal government has traditionally played a limited role in shaping state and local education policy, but the NCLB experience provides an example of how the federal government can exert a powerful influence on state and local policy and practice through new accountability requirements. To prompt policymakers’ thinking about actions the federal government might take to encourage the development of more comprehensive school measurement systems, we offer three recommendations:

- In the ESEA reauthorization, incorporate a broader range of measures as a basis for accountability decisions than is currently mandated under NCLB. Although there is currently insufficient evidence to make specific choices about which measures should be used, evidence from research on high-stakes testing indicates that educators tend to shift their focus away from what is not measured and toward what is. A federal mandate that states (or state consortia) select their own measures within a broader set of predefined categories might mitigate this risk and might allow stakeholders to draw more valid inferences regarding school performance that better reflect the multiple goals of schooling. We suggest the following five domains of expanded measures as places to start:
  - Expand the measures of achievement and attainment to account for both status and growth and to capture a broader range of academic outcomes in subjects besides math and English and language arts (ELA), as well as in advanced course taking.
  - Promote a positive school culture, including indicators, such as student and teacher satisfaction, academic challenge, engagement, safety, or orderliness.
  - Adopt leading indicators, such as measures of being on track for high school graduation, that provide schools information about students as they progress toward college and career readiness.
  - Promote positive behavioral, emotional, and physical health outcomes for students, including indicators of suspensions, expulsion, and physical health.
  - Augment unadjusted performance indicators with indicators that adjust for discrepancies in resources that children and, by extension, schools have available.
• Avoid creating an immediate new federal mandate to adopt specific measures. As states begin to validate additional measures, these can be gradually integrated into a refined federal system for measuring school performance. States should be required to conduct an evaluation of the technical quality and the effects of the inclusion of new measures within an ESEA accountability framework on student outcomes and school resource allocation. For that, they might require technical assistance or collaboration, which leads to our third recommendation.

• Incorporate the development and evaluation of additional school performance measures as an area of focus within existing competitively awarded federal grants. In light of the variance in state capacity to develop and test new measures and the desirability of developing measures that are consistent across states, offering federal grants for such development could create incentives for states to coordinate their efforts, as through interstate consortia.

The reauthorization of ESEA should be informed by lessons learned from NCLB and other efforts to promote school-level measurement and accountability. Although there are a number of limitations to the NCLB approach, the path toward improving federal reporting and accountability provisions is not always clear. This report describes promising directions for expanding the set of measures that schools have at their disposal while acknowledging the need for more research on the effects of new policies and for a careful consideration of trade-offs involved in designing a new system.