

Leading Indicators for School Improvement

A Review of State Education
Agency Practices

August 2015

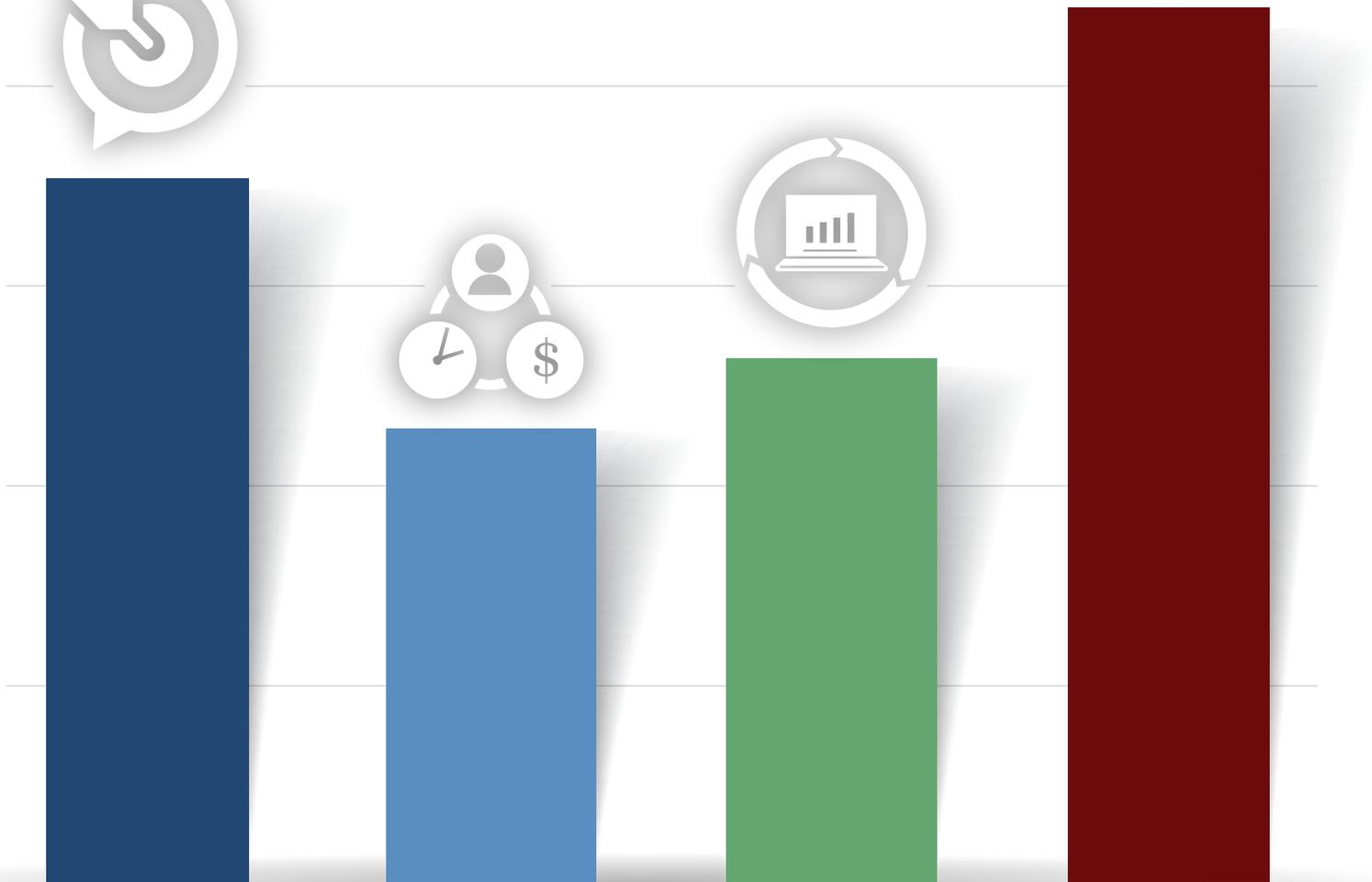


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Introduction

Over the past decade, national initiatives have shifted States' attention to the challenge of turning around low-performing schools. Federal programs such as Race to the Top, School Improvement Grants (SIG) and Elementary and Secondary Education Act (ESEA) flexibility waivers have spurred States to increase the level of resources for and attention to persistently low-performing schools. While there have been numerous success stories of school turnaround¹ reform efforts, early results from an assessment of two cohorts of schools receiving SIG awards indicate only modest gains in student achievement for SIG-awarded schools overall.²

The lack of consistent, dramatic improvements in the lowest-performing schools reflects the severity of the school turnaround challenge, but also suggests the need to continuously evaluate and refine turnaround strategies. Studies indicate that it can take three to five years for turnaround efforts to impact overall student achievement, but leading indicators provide early evidence that can be used to gauge whether a school is on track to improve and to guide mid-course corrections that can increase the success rate of the turnaround effort.³

This brief examines current State education agency (SEA) practices for collecting and using leading indicators, describes how current practices can be strengthened, and identifies emerging promising practices in select States. This brief can be a useful resource for States working to improve their use

¹ For this brief, the term "turnaround" refers broadly to low-performing schools that are seeking dramatic improvements in student academic performance by implementing significant school improvement efforts, including schools that implement one of the four "turnaround models" defined by the U.S. Department of Education.

² U.S. Department of Education. 2014. *School Improvement Grant (SIG) National Assessment Results Summary: Cohorts 1 and 2*. U.S. Department of Education. Retrieved from: <http://www2.ed.gov/programs/sif/assessment-results-cohort-1-2-sig-schools.pdf>.

³ Kowal, J., & Ableidinger, J. (Public Impact). 2011. *Leading Indicators of School Turnarounds: How to Know When Dramatic Change Is on Track*. Charlottesville: University of Virginia's Darden/Curry Partnership for Leaders in Education. Retrieved from: <http://www.DardenCurry.org>.

of leading indicators to monitor and support improvements in low-performing schools. Key takeaways from the analysis of State practice include the following:

- States collect a similar set of leading indicators to track progress, but they use this data in very different ways to monitor and support local educational agencies (LEAs) and schools.
- Many States try to track the quality of implementation for the purposes of monitoring and supporting LEA and school interventions,⁴ but few are collecting data and establishing processes to evaluate the impact of interventions on leading and long-term indicators for turnaround success.
- Leading indicator data are useful only when they are made actionable with strong routines for data analysis, planning and accountability. SEAs have established varying levels of rigor and consistency in their routines for monitoring turnaround progress and supporting LEAs and schools in a process of continuous improvement.
- SEAs can build the capacity of LEAs to support turnaround schools by establishing and modeling strong performance management practices in the collection and use of leading indicators.

What are Leading Indicators?

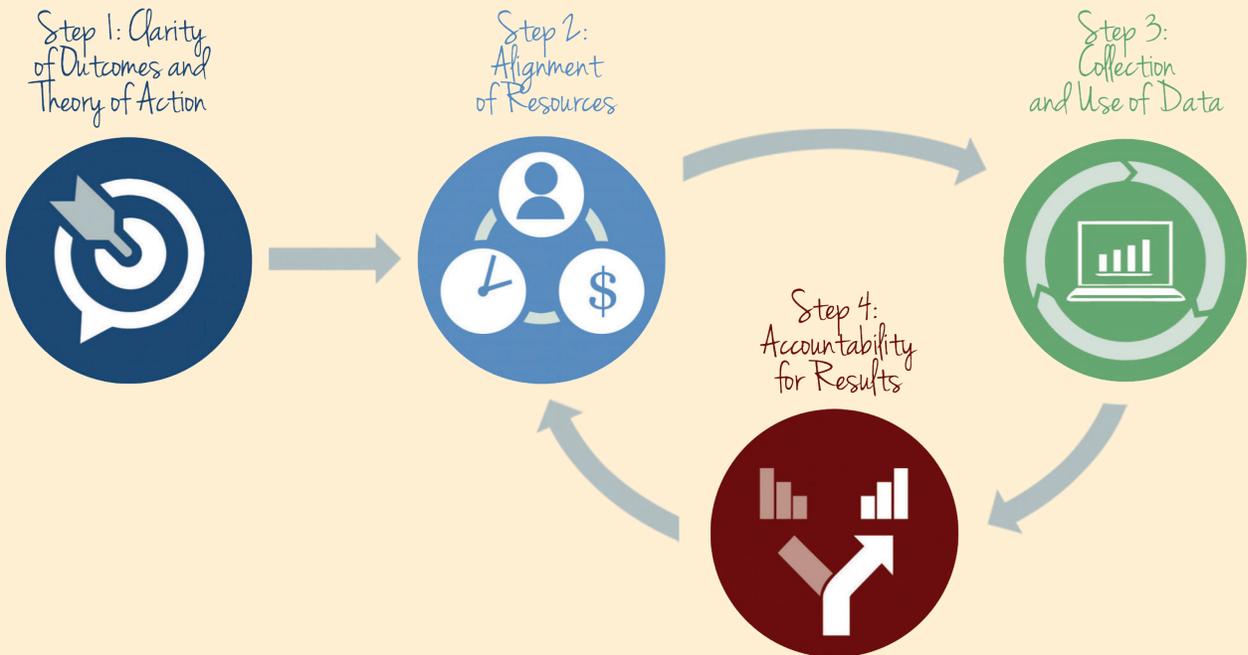
Leading indicators are performance measures that provide early signs for determining if an organization is on track for achieving a goal.⁵ In the school turnaround context, leading indicators, such as student attendance and observations of teachers implementing an instructional intervention, help school officials monitor implementation fidelity and early signs of progress in order to adjust strategy as needed. When these data are used to identify and address early implementation

⁴ Note that the terms "interventions" and "strategies" are used somewhat interchangeably throughout the brief, with "interventions" often referring to school-level activities to improve the quality of school operations.

⁵ Kowal, J., & Ableidinger, J. (Public Impact). 2011. *Leading Indicators of School Turnarounds: How to Know When Dramatic Change Is on Track*. Charlottesville: University of Virginia's Darden/Curry Partnership for Leaders in Education. Retrieved from: <http://www.DardenCurry.org>.

What is Performance Management?

In an effort to support the success and sustainability of State turnaround efforts funded through the Race to the Top program, the Reform Support Network (RSN) began working with several SEA turnaround divisions in July 2013 to examine and strengthen their performance management practices. RSN defines performance management as a "systemic approach to ensure quality and progress toward organizational goals by methodically and routinely monitoring the connection between the strategies underway and the outcomes sought." The collaboration across States was guided by the **RSN School Turnaround Performance Management Framework**. The **Framework** is organized into four core components that establish a cycle of continuous improvement: goal setting, resource alignment, performance data tracking and accountability for results.



While all variables in the **Framework** are critical to establishing an organization's performance management system, the collection and use of data to monitor progress against goals and evaluate the effectiveness of turnaround strategies allows SEAs, LEAs and schools to continuously refine and improve turnaround efforts, even in the face of shifting priorities, resources and performance expectations.

problems and make mid-course corrections or intervene when schools are not making adequate progress, leading indicators have the potential to significantly increase the success rate of turnaround efforts. Existing research highlights four key strategies for using leading indicators to support low-performing schools:

- Begin with known success factors and develop leading indicators that have a demonstrated impact on success.
- Monitor frequently to allow for mid-course corrections.
- Act on early indicators of success or failure, implementing interventions as necessary to reach your goals.
- Collect a wide range of data and then narrow the most predictive data over time.⁶

⁶Kowal, J., & Ableidinger, J. (Public Impact). 2011. *Leading Indicators of School Turnarounds: How to Know When Dramatic Change Is on Track*. Charlottesville: University of Virginia's Darden/Curry Partnership for Leaders in Education. Retrieved from: <http://www.DardenCurry.org>.

Leading indicators are most effective when the SEA, LEA or school has established measurable goals for school turnaround that are aligned to a clear theory of action and corresponding set of focused interventions that address root causes of school performance challenges. For States, leading indicators can be an integral part of a strong performance management system that enables the SEA to both monitor progress against established school improvement goals and assess the extent to which specific turnaround strategies are accelerating progress toward these goals.

Leading Indicators: What Nine States are Doing

RSN identified nine States for analysis: Colorado, Delaware, Florida, Hawaii, New Jersey, New York, North Carolina, Rhode Island and Virginia. RSN facilitated conversations with SEA leaders and reviewed relevant documents in fall 2013 to assess each State's collection and use of leading indicator data. The conversations focused on three guiding questions:

- *What leading indicators are SEAs using to track pre-conditions for student learning and student achievement against multi-year school turnaround goals?*
- *What indicators are SEAs using to track implementation of school turnaround strategies at the State, district and school level?*
- *What routines/processes are SEAs using to collect data, monitor performance and support interventions in turnaround schools?*

States Track Common Performance Indicators

LEAs that administer SIG grants to low-performing schools are required to gather and report a number of leading indicators based on federal guidelines. Although there is variation across States, these

guidelines have led to a fairly consistent set of leading indicators that address the following four categories of school improvement:

- Improved student academic achievement, including interim assessments, standardized State test scores and college readiness indicators.
- Improved instructional quality, including teacher quality indicators, the percentage of students taught by highly effective teachers, the number of instructional minutes and the number of students enrolled in advanced or dual-enrollment courses.
- Increased participation in school, including student/teacher attendance and teacher attendance, dropout rates and participation on State assessments.
- Improved school climate, including measures of discipline incidents, truancy, and levels of student, parent and teacher satisfaction.

States are formally tracking and communicating statewide a very consistent set of leading indicators, largely influenced by federal SIG reporting requirements. A few of these leading indicators — such as student attendance, student discipline incidents and benchmark assessments — may show dynamic change during the school year that can reflect mid-year progress. However, most of the other indicators are fairly static during the school year and do not provide actionable data to inform mid-year adjustments.

The table on the following page highlights the leading indicators identified across States, followed by brief descriptions of the four categories of leading indicators, with highlights of differentiated practice.

Table 1: Leading Indicators Across States⁷

Leading Indicators	CO	DE	FL	HI	NC	NJ	NY	RI	VA
Student Academic Achievement									
State assessments**					✓ All States	✓			
Graduation rates**					✓ All States	✓			
Interim/benchmark assessments	✓	✓		✓	✓	✓		✓	✓
9th-grade promotion				✓			✓		
National norm-referenced tests (MAP, ACT, etcetera)				✓			✓	✓	
Instructional quality									
Distribution of teacher quality (based on State evaluation systems)*					✓ All States	✓			
Number of instructional minutes*					✓ All States	✓			
Participation in advanced or dual-enrollment courses*					✓ All States	✓			
Participation in school									
Student attendance*					✓ All States	✓			
Teacher attendance*					✓ All States	✓			
Dropout rates *					✓ All States	✓			
Participation in State assessments*					✓ All States	✓			
Chronic absenteeism								✓	
School Climate									
Student discipline incidents/suspensions*					✓ All States	✓			
Student truancy*					✓ All States	✓			
Parent, student and teacher satisfaction	✓	✓	✓			✓			
Teacher retention				✓					

* Required *leading* indicator for SIG reporting
 ** Required *lagging* indicator for SIG reporting⁸

Student academic achievement

While student achievement indicators such as State test scores and college readiness indicators (for example, graduation rates, college matriculation rates) are most often associated with lagging indicators of student outcomes, they also can represent leading indicators of turnaround progress, demonstrating “quick wins” that are associated with success. Some States also have incorporated 9th-grade promotion rates and performance on the ACT assessment for high schools as important, interim metrics to predict high school graduation and college enrollment outcomes.

Most States also review interim benchmark assessment data as a leading indicator for school progress to

measure improvements in academic achievement during the school year. Many conduct some form of quarterly monitoring reviews, and results from benchmark assessments are frequently a primary focal area for assessing progress. While most States do not mandate the use of specific interim benchmarks in low-performing schools, many schools incorporate these assessments into their State-monitored school improvement plans. New Jersey has taken a somewhat unique approach by requiring all

⁷Inventory of leading indicators collected by States based on interviews with SEA administrators and review of SEA websites.

⁸Guidance on fiscal year 2010 School Improvement Grants under section 1003(g) of the Elementary and Secondary Education Act of 1965. U.S. Department of Education, March 1, 2012. Available at: <http://www2.ed.gov/programs/sif/sifguidance03012012.doc>.

Priority Schools⁹ to implement interim benchmark assessments, and by providing a benchmark testing system for these schools. Priority Schools and LEAs can choose to opt out and use their own assessments, but most choose to implement the State-supported tests. While implementing uniform benchmark assessments across Priority Schools can provide better cross-State data for SEA monitoring and improvement planning, it also increases the burden on the SEA. The State must provide high-quality assessments that are aligned to the State standards and school curriculum, and an adequate data reporting system to facilitate school-level data analysis and action planning.

Instructional quality

As required by SIG, all States track data related to increased learning time (instructional minutes), distribution of teachers by “effectiveness ratings” and advanced course completion numbers.

Increased learning time is a requirement for the implementation of the “transformation” and “turnaround” models defined by the U.S. Department of Education.¹⁰ Federal SIG guidance¹¹ requires additional time for 1) instruction in core academic subjects, 2) additional time for other subjects and provision of enrichment activities for students, and 3) additional time for teacher collaboration, planning

⁹“Priority School” is defined by the U.S. Department of Education through the ESEA flexibility waiver as “a school that, based on the most recent data available, has been identified as among the lowest-performing schools in the State. The total number of Priority Schools in a State must be at least five percent of the Title I schools in the State.” Based on federal guidelines, States establish criteria for identifying and supporting Priority Schools. See *ESEA Flexibility Policy Document* at: <http://www2.ed.gov/policy/elsec/guid/esea-flexibility/index.html>.

¹⁰Schools designated as low-performing through the Race to the Top and SIG programs were required to implement one of four school intervention models: Turnaround, Restart, School Closure or Transformation. Note, additional models were added in 2015 to include a State-determined model, evidence-based, whole school reform model and early learning model (See reference below).

¹¹U.S. Department of Education. 2015, March. *Guidance on School Improvement Grants* (p. 1). Washington, DC: Office of Elementary and Secondary Education. Retrieved from: <http://www2.ed.gov/programs/sif/sigguidance032015.doc>.

and professional development. Although all States in this report track the provision of increased learning time as an indicator for low-performing schools, they do not systematically track more detailed information about the specific use of increased learning time, nor its impact on the quality of teaching and learning. In this sense, the metric primarily serves a compliance function for adherence to required turnaround models, rather than as a leading indicator to assess turnaround progress. North Carolina provides a notable exception and requires LEAs and schools to identify specific goals for increased learning time for each of the three focal areas (for example, core subjects, enrichments, teacher collaboration).

Student enrollment and completion of Advanced Placement (AP), International Baccalaureate (IB) and dual-enrollment coursework are widely recognized as relevant measures to determine if high school students are exposed to rigorous academic content that will prepare them for success in college. The intensity and quality of a student’s high school curriculum is a strong predictor of bachelor’s degree completion.¹² All States report data on this metric as a reporting requirement of SIG implementation.

Teacher effectiveness measures, which have just recently become available as SEAs and LEAs implement new systems for teacher evaluation and support, are a potentially valuable leading indicator for school turnaround progress. Teacher effectiveness is measured differently in each State and is usually a composite rating of multiple measures, including student academic growth, individualized performance goals and qualitative measures of teacher practice (for example, observations and surveys). The Race to the Top program and the ESEA flexibility waivers created an impetus for the majority of States to enact significant reforms to teacher evaluation systems since 2010. Research indicates that teacher quality is the

¹²Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns, and bachelor’s degree attainment*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. (pp. 8-9) Retrieved from: <http://eric.ed.gov/?q=Academic+Intensity%2c+Attendance+Patterns&id=ED431363>.

most significant factor to affect student learning.¹³ Teacher effectiveness ratings, designed to measure the impact of teaching on student learning, can therefore be an important indicator for assessing whether a school turnaround effort is on track. But as a leading indicator, its utility to guide mid-course corrections is compromised because the metric is typically measured and reported annually and thus remains static over the course of the school year. Furthermore, depending on the frequency at which teachers are evaluated, school measures of teacher effectiveness can remain relatively unchanged from year-to-year unless associated with dramatic turnover of staff.

In addition to measuring teacher effectiveness, States' guidance on the school improvement planning process typically requires schools to evaluate and identify improvements for strengthening the quality of school leadership. However, none of the States profiled in this brief collect specific indicators related to principal effectiveness, nor is this a SIG reporting requirement. This is a notable absence given that a highly effective principal can contribute an additional seven months of learning in a single academic year versus an average principal, that school leadership factors in to most federal turnaround models and that many SEA turnaround units cite "effective leadership" as a primary component of their theory of action for school turnaround. Although States have been quicker to adopt and implement new teacher evaluation and support systems, many States also are implementing new principal evaluation and support systems that can provide more actionable data for assessing principal effectiveness in turnaround schools. However, these new systems will take time to become valid and reliable measures of principal quality, and may not be sufficient to assess the leadership competencies and actions necessary for success in a turnaround environment.

One report on leading indicators in school turnaround identifies a range of indicators that could be used to assess research-based turnaround leader competencies and actions that are correlated with

¹³Eric A. Hanushek, Steven G. Rivkin, and John F. Kain, "Teachers, Schools, and Academic Achievement," *Econometrica*, 73, 2 (2005), 417–458. Available at: <http://www.econ.ucsb.edu/~jon/Econ230C/HanushekRivkin.pdf>.

turnaround success.¹⁴ SEAs and LEAs may consider the extent to which their principal evaluation system can provide accurate and early indicators of turnaround progress, and if supplementary measures, such as demonstrated evidence of "turnaround leader actions," can better assess principals' ability to lead dramatic school improvement.

School climate

Successful turnaround leaders often identify the transformation of school climate and culture as a prerequisite for achieving dramatic and sustainable improvements in student academic achievement. States appear to collect a similar set of leading indicator data related to school climate, and consistently track metrics related to student/teacher attendance, student drop-out rates, and student discipline incidents and truancy. Our brief scan of SEA-collected data indicate that many of these metrics change significantly over the course of the turnaround effort, and therefore provide dynamic and actionable data for tracking school and LEA turnaround progress.

Several States require turnaround schools to collect survey data from staff, parents and/or students to assess stakeholder satisfaction and conditions for teaching and learning in schools. Both Colorado and Delaware administer the Teaching, Empowering, Leading and Learning (TELL)¹⁵ survey of teachers to assess teaching conditions at the school, district and State level. Although neither State identifies performance targets for survey data, survey results are reviewed as part of the SEA performance monitoring

¹⁴Kowal, J., & Ableidinger, J. (Public Impact). 2011. *Leading Indicators of School Turnarounds: How to Know When Dramatic Change Is on Track*. Charlottesville: University of Virginia's Darden/Curry Partnership for Leaders in Education. Retrieved from: <http://www.DardenCurry.org>.

¹⁵The TELL survey is developed and supported by the New Teacher Center (<http://www.newteachercenter.org>). The New Teacher Center works with more than a dozen States to customize and administer anonymous, online surveys to all teachers, principals and other licensed educators in the State. The TELL survey is an anonymous statewide survey of licensed school-based educators to assess teaching conditions at the school, district and State level. With the leadership of Governor Jack Markell, Secretary Mark Murphy, and the Delaware Department of Education, a coalition of education stakeholders, working with the New Teacher Center, administered the Delaware Teaching, Empowering, Leading and Learning (TELL Delaware Survey) from January 22 to February 25, 2013.

routines with low-performing schools. Florida and Illinois also administer a statewide educator survey, the 5 Essentials Survey,¹⁶ to all schools and incorporate survey data into SEA monitoring routines for low-performing schools. New Jersey administers parent, teacher and student satisfaction surveys in Priority Schools that include performance targets for survey participation (95 percent for teachers and students and 25 percent for parents) and stakeholder satisfaction (80 percent of responders indicate their school “meets expectations”).

Teacher retention and turnover are other important indicators of school climate and culture. However, surprisingly few States collect data on teacher retention or on retention by teacher effectiveness ratings. Although school improvement efforts often prioritize recruitment of and professional development for teachers, recent studies suggest that highly effective and ineffective teachers typically leave schools at about the same rate.¹⁷ A brief from the RSN highlights emerging State practices for incorporating “selective retention” as a measure of principal effectiveness.¹⁸ Such measures can also be a useful leading indicator for assessing the extent to which schools are establishing a culture that retains talented, highly effective faculty.

States Use Many Approaches to Monitor Implementation

SEAs focus significant time and resources to ensure that LEAs and schools are implementing turnaround strategies that comply with grant requirements and mandated State requirements for low-performing schools. Compliance monitoring is a traditional role of the SEA, and it continues to be an important and necessary requirement for ensuring transparency in the use of public dollars. This form of monitoring

¹⁶The Illinois 5 Essentials Survey (<http://www.isbe.net/5essentials/default.htm>) is developed and administered to all Illinois schools on behalf of the Illinois State Board of Education. Other States, including Florida, have adopted the tool.

¹⁷The New Teacher Project (TNTP). 2012. *The Irreplaceables: Understanding the Real Retention Crisis in America's Urban Schools*. Brooklyn, N.Y.: TNTP. Retrieved from: <http://tntp.org/irreplaceables>.

¹⁸Reform Support Network (2015). Incorporating Retention of Effective and Highly Effective Teachers in Principal Evaluations. (Washington, D.C.). <http://www2.ed.gov/about/inits/ed/implementation-support-unit/tech-assist/incorporatingretention.pdf>.

allows States to ask LEAs, “Did you do what you said you were going to do?” Beyond compliance, monitoring implementation can also help States evaluate the extent to which strategies might correlate to reaching student achievement goals. Measuring and monitoring implementation can help States and schools determine whether the strategies in place are in fact helping the school make progress toward intended goals.

In order for these implementation measures to be useful leading indicators, they must not only measure compliance with required and planned activities, they must also answer the following questions related to the quality and impact of strategies:

1. Were the strategies implemented with fidelity? (inputs/fidelity measures)
2. Did the implemented strategies lead to positive changes in adult behaviors or practices? (outputs/quality measures)
3. Did the strategies lead to measurable improvements in student behavior and/or achievement? (outcomes/impact measures)

Monitoring fidelity of implementation

All States track district and school fidelity in implementing school improvement strategies. The intensity and routines for monitoring vary across States. But each State has established a process to determine if schools are implementing the interventions identified in their school improvement plans (or SIG/Race to the Top applications), and to what extent federal and State funds are used for activities identified in the school improvement plan and/or grant application. The Delaware School Turnaround Unit adopted a monitoring system for Priority Schools in 2013–2014 that uses a Red/Yellow/Green implementation status update that the SEA collected quarterly or bimonthly. In previous years, these data were only collected at the end of year, limiting the SEA’s ability to collaborate with schools in mid-year corrections. North Carolina and Virginia are two of 24 States plus the District of Columbia that use Indistar[®],¹⁹ a Web-based tool, to support planning,

¹⁹What Is Indistar? Retrieved from: <http://www.indistar.org/whatis>.

implementation, monitoring and coaching on school improvement activities. The tool requires schools to prioritize and establish detailed implementation plans tied to “indicators of evidenced-based practices at the district, school and classroom level to improve student learning.” Although the assessment and tracking of implementation progress is primarily conducted at the school level, as a Web-based tool, Indistar® helps the SEA track progress, provide remote feedback and facilitate meetings focused on effective implementation of turnaround strategies.

Measuring quality of implementation and impact on performance outcomes

While States have adopted a wide range of practices to measure compliance in implementing school turnaround strategies, most States have not

established explicit metrics or systematic processes that attempt to measure the impact of strategies on school turnaround goals. If “outcomes” are the ultimate student achievement goals established for turnaround schools, “outputs” can be used to define the changes in instructional practice, school climate or other leading indicators that are achieved through implementation of turnaround strategies, and which may ultimately lead to improved student learning (outcome). “Inputs” are the intervention strategies and resources that are implemented to improve the leading indicators associated with ultimate student achievement outcomes. For example, new selection practices (input) for hiring teachers in a turnaround school are intended to increase the number of highly effective teachers in the school (output), which should result in higher student achievement (outcome).

	Inputs	Outputs	Outcomes
Designed to track ...	Fidelity of Implementation	Quality	Impact
Answer question of ...	Was the strategy implemented?	Did the strategy result in changes to adult behaviors?	Did the strategy lead to measurable improvement in student behavior or achievement?
Example 1: Teacher selection	<i>Implementation of new teacher selection practices for turnaround schools.</i>	<i>Increase the number of highly effective math teachers in the school.</i>	<i>Increase in student achievement in mathematics on State assessments.</i>
Example 2: Behavior management professional development	<i>Number of minutes of professional development provided to teachers and staff during the school year.</i>	<i>Staff survey on the effectiveness of professional development <u>and</u> Observed changes in teacher response to student behavior.</i>	<i>Decrease in number of student discipline referrals.</i>

Identifying clear outputs and outcomes for turnaround strategies is not always so straightforward. Several State turnaround leaders identified this as a next step in strengthening performance management practices. Leaders in Delaware said that linking strategies to improvement metrics was more manageable with Focus Schools,²⁰ where interventions are targeted to reducing achievement gaps for specific student subgroups. Making causal connections in their Priority Schools is more challenging because schools are implementing a much wider range of school-wide and targeted school improvement strategies and looking for measurable improvements across a broader range of indicators and student subgroups.

Virginia also cited “output” measures linked to turnaround strategies as an area for development. While Indistar® helps the State monitor detailed information about fidelity of strategy implementation, the implementation data are not explicitly linked to measureable improvements in instructional practice or other leading indicators that signal progress toward goals.

Further complicating the challenge of linking intervention “inputs” to “outputs” is the sheer volume of interventions that SEAs implement and track. SEAs and LEAs are addressing this challenge by encouraging schools to narrow in on a discrete set of interventions and corresponding leading indicators, and by explicitly linking interventions to output indicators and measures of student outcomes. In Florida, for example, the Bureau of School Improvement modified its SIG application and monitoring process to narrow the number of turnaround interventions that are the primary focus for LEAs and schools. Florida identified five “Areas of Focus” from the U.S. Department of Education requirements that the State identified from

²⁰ “Focus School” is defined by the U.S. Department of Education through the ESEA flexibility waiver as “a Title I school in the State that, based on the most recent data available, is contributing to the achievement gap in the State. The total number of focus schools in a State must equal at least 10 percent of the Title I schools in the State.” Focus Schools have the “largest within-school gaps between the highest-achieving subgroup or subgroups and the lowest-achieving subgroup or subgroups.” Based on federal guidelines, States establish criteria for identifying and supporting Focus Schools. See *ESEA Flexibility Policy Document* at: <http://www2.ed.gov/policy/elsec/guid/esea-flexibility/index.html>.

research and experience as being vital to continuous school improvement.²¹ Focal areas include multi-tiered system of supports, standards-based instruction, increased learning time, data-differentiated instruction and professional development. The SIG application process directs LEAs and schools to provide specific action plans and performance targets about the implementation of interventions aligned to these focal areas, and deprioritizes planning and reporting associated with other interventions required in the federal school turnaround models.

Rhode Island’s quarterly monitoring process of School Reform Plans (SRPs) represents a very intentional approach to assess the impact of school turnaround strategies.²² (*See excerpt of Rhode Island SRP Process for Tracking Impact of Turnaround Strategies*). For each major improvement goal established in the SRP (for example, increase student proficiency rates on reading assessment), schools must identify a discrete set of interventions/“inputs” and a corresponding set of implementation process leading indicators (adult behavior “outputs”), and impact leading indicators (student “outcomes”) that are expected to occur as a result of the intervention. Schools establish specific metrics for these indicators and self-assess progress. Each quarter, schools submit data from the measurement tools to help the school, LEA and SEA understand whether the behaviors and outcomes are occurring with the frequency and quality intended.

Colorado also differentiates leading indicators based on inputs, outputs and outcomes for turnaround intervention strategies. As part of the school improvement planning process, Colorado schools are required to identify “implementation benchmarks” for each improvement strategy that includes indicators to measure fidelity of implementation (for example, professional development sessions held) and impact

²¹ Florida Department of Education, “School Improvement Grant Proposal Design and Structure Presentation.” Accessible through the School Turnaround Performance Management Toolkit at: <https://rtt.grads360.org/?p=rtt#communities/pdc/documents/7556>.

²² See Rhode Island’s Facilitator’s Guide to Quarterly Monitoring of School Reform Plans For Priority and Focus Schools (October 2014): <http://www.ride.ri.gov/Portals/0/Uploads/Documents/Information-and-Accountability-User-Friendly-Data/Transformation/Facilitators-Guide-Quarterly-Monitoring-Fall-2014.pdf>.

Rhode Island’s SRP Process for Tracking Impact of Turnaround Strategies

Rhode Island’s quarterly monitoring process for School Reform Plans (SRPs) highlights a promising State example for tracking the impact of specific turnaround interventions (inputs) on changes in adult behavior (outputs) and student improvement (outcomes). The table below demonstrates how indicators are connected to specific school’s interventions.

<p>Improvement Goal: By 2015, 60 percent of all students will meet or exceed a student growth percentile (SGP) ranking of 50 according to the STAR Reading Assessment and of the remaining students, 75 percent will have an SGP between 35 and 49.</p>	
<p>Strategy / Intervention (“Input”): Our reading coaches and English Language Arts (ELA) professional development will improve STAR reading proficiencies through three major strategies:</p> <ul style="list-style-type: none"> • Lesson Planning: Coaches will review lesson plans for observed lessons, scoring them on a school-designed Lesson Plan Rubric from 1 to 5, with 5 being the highest quality. Coaches will work with teachers as needed, one-on-one to improve lesson plan quality. • Behavior Management: Conduct school-wide professional development on improving student behavior by using effective behavior management strategies. Coaches will record incidents of misbehavior and how often those misbehaviors are effectively responded to. • Research-based instructional strategies: Conduct ELA-specific professional development sessions during common planning time to focus on discrete set of Marzano’s research-based instructional strategies, to be determined on a quarterly basis. 	
<p>Implementation Process Leading Indicator (Adult Behavior “Output”)—<i>for Lesson Planning intervention</i></p> <ul style="list-style-type: none"> • Increase average scores on lesson plan rubric. 	<p>Impact Leading Indicator (Student Outcome)—<i>for Lesson Planning intervention</i></p> <ul style="list-style-type: none"> • <i>For teachers with lesson plans scoring 4 or higher on lesson plan rubric, percentage of their students on target to meet STAR growth goals.</i>

on adult behaviors (for example, new instructional strategy implemented). To measure student outcomes, schools are required to identify “interim measures” for each major performance goal that are based on local data and are available at least twice during the year to measure process against annual performance targets. Teams review implementation benchmarks and interim measures at least quarterly to determine if “improvement strategies are being implemented with fidelity and are having the desired effects.”²³

States Use the Information in Different Ways

While States differ somewhat in the range of leading indicators collected for tracking turnaround progress

²³ See Colorado Department of Education’s Unified Improvement Planning Handbook: http://www.cde.state.co.us/uiip/uiip_handbook_v40.

and strategy implementation, SEAs vary significantly in how they use these indicators to monitor, support and intervene in school turnaround efforts.

The **RSN School Turnaround Performance Management Framework** includes a range of evidentiary statements on effective practices in the collection and use of performance data, and highlights the need for SEAs to establish regular routines and systems that:

- Align the data collection process with routines for monitoring progress;
- Facilitate discussions with LEAs and schools on the impact of turnaround strategies against leading indicators and long-term student outcome goals;
- Support LEAs in the improvement of their own performance management routines.

The States analyzed in this report use various methods to collect and analyze leading indicators. Some States utilize frequent, monthly meetings to review data progress with LEAs, while others use bi-annual meetings. The depth of analysis also varies, with some States primarily focused on fidelity measures and others utilizing structured protocols for reviewing academic benchmark data and other indicators of intervention progress. This variation is driven by different levels of SEA capacity, differences in underlying strategies for supporting low-performing schools, and the extent to which the SEA has incorporated strong performance management practices into its system of monitoring, support and accountability. Several of the States profiled in this brief provide useful examples about challenges and promising practices for establishing strong monitoring routines.

Aligning data collection processes with SEA routines to monitor progress

For several States in this brief, the quality and consistency of progress monitoring routines are compromised by the SEAs' limited access to timely, quality data. For example, as part of Colorado's Unified Improvement Plan process, for example, schools and LEAs are required to set targets for implementation of major improvement strategies. However, the systems for tracking implementation are focused on individual school tracking, and the SEA does not have a centralized database or data collection process that aggregates data across LEAs and schools. The SEA reports that some LEAs have established performance management practices that incorporate structured routines to regularly (monthly) collect and analyze implementation data and interim student measures. However, the SEA has played a limited role in conducting or influencing LEA adoption of strong monitoring routines, in part because the relevant data is simply not available to engage in these conversations. Starting in the 2014–2015 school year, Colorado addressed this data gap challenge for a subset of Priority Schools. Colorado schools that opt-in to Colorado's Network Schools initiative will submit self-reported data on turnaround progress through

an online platform to guide monitoring and support conversations with the SEA.

In New Jersey, the SEA established Regional Achievement Centers (RACs) in 2012–2013 to provide school improvement monitoring and support to the State's Priority and Focus Schools. During the launch of the RAC system of support, the State also was implementing a data collection and analytics software to support the creation and tracking of school intervention plans. The system was designed to link interim assessment data with school improvement activities in order to enable schools and RACs to assess the impact of turnaround interventions on leading indicators of student outcomes. However, delays and problems with system development and implementation significantly restricted access to timely and accurate data, and compromised the ability of the RACs to establish effective monitoring routines.

New York's engagement with the RSN Performance Management workgroup focused on establishing strong performance management routines to intentionally shift SEA-LEA conversations from a compliance exercise to data-focused problem-solving meetings that rigorously tracked progress toward goals and assessed the impact of turnaround strategies. The shift in focus has required a significant change in mindset for both the SEA and LEAs, but also exposed gaps in the data that the SEA collects and reviews from LEAs and schools. In order for the SEA to implement data review and analysis protocols with the LEAs, it first created internal shared online spreadsheets that SEA staff used to populate LEA and school-level, longitudinal data from disparate sources (including State system and LEA-provided data points).²⁴ While this approach provided a short-term solution to support the new data review routines, New York is now building a Web-based platform that will facilitate direct LEA input of data to provide a more sustainable model for the State.

For Virginia and North Carolina, the Indistar® system provides a ready-made solution for tracking a large amount of data to monitor implementation of

²⁴See New York State Education Department's Web-Based Data Collection Tool: <https://docs.google.com/spreadsheets/d/1VZ2w6QGuB4dnLSYZ82isMwX7oB0Vnwg7WxyKbhtxqVA/edit#gid=0>.

turnaround interventions. Coupled with effective State data warehouses, the challenge to implementing strong performance management routines may not be the absence of data, but perhaps the ability to focus on the highest priority indicators and establish routines with schools and LEAs that facilitate problem-solving to meet goals. North Carolina recognized this challenge in describing its lessons learned about the importance of establishing clear targets for school improvement, and narrowed its focus with LEAs and schools to the highest-priority interventions and indicators. North Carolina first identified a subset of 28 indicators (from the 80+ indicators within the Indistar® system) that schools need to implement over a 3-year school improvement cycle, and further narrows its focus by concentrating SEA feedback on 3–5 indicators that are prioritized by schools for the academic year.

Facilitating discussions about the impact of turnaround strategies on leading indicators and long-term goals

While few States have explicitly and consistently incorporated implementation “outputs” into their data collection processes, several have established data monitoring routines that are designed to replace the SEA’s traditional role of compliance monitoring with a new focus on helping LEAs and schools answer the question, “Did our turnaround strategies have a measurable impact that will result in improved outcomes for students?”

Rhode Island, for example, has established promising practices for facilitating these discussions with LEAs and schools as part of its “Quarterly School Monitoring” meetings. The facilitator’s guide to the quarterly meetings²⁵ is driven by the specific objectives to “increase understanding of the relationship between current measures of performance indicators and the processes of implementation” and to “identify and prioritize next steps to better assess and/or better implement interventions.” Rhode Island implemented new protocols and data collection processes during the 2013–2014 school year, with

²⁵ See Rhode Island’s Facilitator’s Guide to Quarterly Monitoring of School Reform Plans For Priority and Focus Schools (October 2014): <http://www.ride.ri.gov/Portals/0/Uploads/Documents/Information-and-Accountability-User-Friendly-Data/Transformation/Facilitators-Guide-Quarterly-Monitoring-Fall-2014.pdf>.

the intent of increasing the level of collaboration, mutual accountability, and LEA capacity to analyze and respond to progress monitoring data. The SEA took the additional step of internally evaluating how effectively the new routines were meeting established objectives, and worked with the RSN to conduct an external observation and review of the routines. The external review used a scoring rubric to assess different dimensions of the meeting protocol, with the goal of supporting continuous improvement of SEA-LEA school data routines. The external review identified many strengths, as well as some areas for improvement that could be broadly applied to States looking to implement stronger data routines:

- **Focus on two to three strategies per school for the entire year.** It can be difficult to understand progress over time at schools if the focus of the routine changes quarter to quarter. Aim to focus on a consistent set of strategies (up to three) for each routine at the school level. This will help to focus the conversation around implementation, evidence and problem-solving for those specific strategies.
- **Focus on effective data use in schools.** Strive for effective data use to inform implementation of the two to three strategies at the school level, not just to inform the routine. If the school is using data effectively at the teacher and leadership team levels, the school and district will then have more accurate and robust data available to inform ongoing performance management routines.
- **Train and follow a standard set of effective facilitation practices.** Strong facilitation practices can enhance the school experience at the meeting (for example, practices such as posting objectives, reviewing next steps and encouraging co-facilitation of meetings).
- **Model strong problem-solving.** Incorporate intentional and structured problem-solving protocols into the monitoring routines of all schools and use end-of-year meetings to set focus areas for the start of the following year.

Helping LEAs improve their own performance management routines

Several States view the development of effective data-monitoring routines as serving multiple purposes: improving the SEAs’ processes for monitoring,

supporting LEA and school-level turnaround efforts, and strengthening the performance management capacity of LEAs. Most of the States analyzed for this brief have incorporated “LEA capacity building” as an explicit component of their theory of action for school turnaround. This has been a shift for some States, as their experience with implementation of Race to the Top and SIG initiatives have underscored the essential role that LEAs must play in supporting low-performing schools, and as SEAs plan for reduced resources with the phase-out of federal grants.

Florida, for example, has taken a particularly robust approach to building the performance management practices of LEAs in support of school turnaround. Florida’s strong emphasis on continuous improvement (performance management) is guided by a focused theory of action: *“If we increase the automaticity and efficacy with which districts and schools problem-solve around barriers to improved student achievement, then outcomes for all Florida students will improve.”* Florida’s Bureau of School Improvement is implementing its theory of action by training LEA leaders on an Eight-Step Planning and Problem Solving process²⁶ to guide the development and implementation of SIG applications, including a multi-day professional development convening of LEA leaders.

Conclusion

The lack of consistent, dramatic improvements in the lowest-performing schools reflects the severity of the school turnaround challenge, but also suggests the

²⁶ Florida Department of Education, “A Guide to Eight-Step Planning and Problem Solving.” Accessible through the School Turnaround Performance Management Toolkit at: <https://rtt.grads360.org/#communities/pdc/documents/7555>.

need to continuously evaluate and refine turnaround strategies. Leading indicators can provide early evidence to measure progress against ambitious school turnaround goals and identify opportunities for mid-course corrections that can accelerate the rate of turnaround success.

While States annually track and report a similar set of leading indicators, there is significant differentiation in how SEAs track implementation and impact of school improvement interventions, and in the routines that SEAs regularly use to engage with LEAs and schools to evaluate school progress and facilitate continuous improvement. The RSN’s work with SEA turnaround divisions to strengthen performance management practices resulted in several States adopting more rigorous and intentional practices for using leading indicators to support problem-solving and data-driven decision-making.

While there is much room for all States, districts and schools to improve their practices, several States analyzed in this brief have established promising performance management practices that provide useful insights and practical tools to guide other States in the years ahead.

For additional resources to support States’ performance management practices, see the RSN’s



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