



Measuring School Turnaround Success

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Introduction

Successful school turnarounds—characterized by quick, strategic changes in school culture and systems that result in dramatic improvement in student achievement in persistently low-performing schools—are hard work and difficult to achieve and sustain. Further complicating the issue, few states and districts have a clear, robust definition of turnaround success, which would enable states, districts, and schools to:

- ◆ Identify successful turnarounds and examine factors that contribute to success, creating lessons useful to other schools.
- ◆ Determine as early as possible when a turnaround attempt is off-track in order to respond more quickly and effectively.

Several barriers stand in the way of such a clear, robust definition. First, the turnaround field does not agree about “how good is good enough.” What level of academic progress is sufficient for one to say a turnaround is successful? Second, while academic success is the ultimate marker of an effective turnaround, this outcome may be years in the making. In the meantime, states, districts, and schools do not consistently collect and use data on school-based practices and leading indicators. Without that data, they cannot monitor progress and determine if schools are on a trajectory for success in the early years of implementation. Finally, even if individual states or districts overcome these challenges, the nation would lack a *common* definition of

turnaround success. Each state has different criteria for measuring school performance and uses different state assessment tools, standards, and cut scores, making it difficult to define common measures and metrics of success that can be applied across states. As a result, policy-makers and leaders at all levels are hard-pressed to say whether their turnaround programs as a whole are getting the job done.

In October 2014, the Center on School Turnaround engaged Public Impact in a year-long project to develop a model for defining turnaround success with associated measures, metrics, and cut scores. Public Impact worked with other national turnaround experts to develop a research approach, collected and analyzed data from four states, gathered input from state leaders, and developed and refined the model.

Based on that work, this report sets out an approach to measure turnaround success that states, districts, and schools can adopt in their own contexts. The first section explains the

understanding of turnaround success that undergirds our proposed approach. The second section lays out the proposed approach. The third section delves into an analysis we conducted to test a critical part of the approach: measuring academic gains. The final section discusses the implications of our analysis, including the lessons learned, and next steps for the education community in defining turnaround success.

with the desired outcomes. Though approaches to school turnaround vary in different locations, most follow a theory of action like the one in Table 1. The approach starts with **inputs**: great leaders, great teachers, and the autonomy and funding those people need for success. These inputs will enable schools to put into action a set of **school-based practices** that will lead to success. If these practices work, the results will show up in **leading indicators**: adult and student behaviors. Finally, the **outcomes** will reflect academic success for students in turnaround schools.

Understanding Success in Turnarounds

To measure turnaround success—not only the ultimate academic outcomes, but also the steps along the trajectory—states, districts, and schools need a “theory of action” connecting those steps

To define and measure turnaround success, states, districts, and schools need to measure each part of this model: the ultimate outcomes and the steps along the way. This report focuses mostly on the model’s endpoint—dramatic academic gains—building out a full set of measures, metrics, and targets for that final component. While we provide a high-level outline of the other components—inputs, school-based

Table 1. Theory of Action

Inputs	School-Based Practices	Leading Indicators	Academic Achievement Outcomes
<ul style="list-style-type: none"> • Great leader/competencies • Great teachers/competencies • Autonomy: people, time, money, and programs • Funding • Support from state, district, and external providers 	<p>Turnaround Planning</p> <ul style="list-style-type: none"> • Leader actions • Instructional practices • Staffing • Scheduling • School culture and climate • Family and community engagement • Performance management 	<p>Adult Behaviors</p> <ul style="list-style-type: none"> • ↓ Teacher turnover • ↑ Teacher attendance • ↑ Teacher effectiveness • ↑ Leader effectiveness • ↑ Satisfaction <p>Student Behaviors</p> <ul style="list-style-type: none"> • ↓ Dropouts • ↑ Student attendance • ↓ Discipline incidents • ↑ Advanced courses • ↑ Satisfaction • ↑ Enrollment 	<p>Short-Term Outcomes</p> <ul style="list-style-type: none"> • Mid-year/interim achievement <p>Intermediate Outcomes</p> <ul style="list-style-type: none"> • Achievement and growth on annual state assessments • College and career readiness <p>Long-Term Outcomes</p> <ul style="list-style-type: none"> • College and career success

IF schools and districts hire great leaders and teachers with turnaround competencies and provide them with adequate autonomy, funding, and support; and *IF* they implement effective school-based practices; *THEN* leader and teacher effectiveness and student engagement, behavior, and learning will increase; and *THEN* student achievement, graduation rates, and college and career success will improve.

practices, and leading indicators—subsequent work will be needed to build out measures, metrics, and targets for those as well.

Proposed Definition

The proposed approach to defining school turnaround success includes four parts. The following section describes how each of these elements is incorporated into the turnaround definition.

Part 1: Inputs that Create Conditions for Success

The first step in the turnaround process is for districts to create the necessary conditions for schools to achieve rapid, dramatic improvement in student achievement. Inputs needed include selecting a strong principal who exhibits turnaround leader competencies (Public Impact, 2015b) and providing the principal with adequate autonomy and resources to make substantive changes. The school leader needs to be able to select a team of effective teachers who exhibit competencies required for turnaround and make decisions about how the school will structure time, allocate money, and choose programs to support teaching and learning. In addition, turnaround schools need support from state and district leaders, and oftentimes from external providers, to ensure that turnaround efforts succeed.

Part 2: School-Based Practices

In addition to conditions for success, the turnaround definition includes evidence of school-based practices that are common among successful turnaround schools. School-based practices are essential to the turnaround definition because they provide early evidence that a school is taking actions needed to dramatically increase student achievement.

School-based practices are organized into the following categories: turnaround planning, leader actions, instructional practices, school culture and climate, and performance management routines. The following lists of school-based

practices were identified through prior research and input from state and national leaders.

Multiple sources were used to identify school-based practices, including the Elementary and Secondary Education Act (ESEA) turnaround principles (U.S. Department of Education, 2012), research on turnaround leader actions (Brinson, Kowal, & Hassel, 2008; Public Impact, 2015a), research on high-yield instructional strategies (Marzano, Pickering, & Pollock, 2001; Schon, 2014), research on school improvement grants (Redding, Dunn, & McCauley, 2015), the Reform Support Network's (RSN) School Turnaround Performance Management Framework (RSN, 2014) and Toolkit (RSN, 2015a), and feedback from state education leaders on which school-based practices would be most meaningful in measuring turnaround success.¹

Turnaround Planning

- ♦ Create a **turnaround plan** with clear implementation goals and success metrics.
- ♦ Identify a strong principal with the necessary **competencies** to lead school turnaround.
- ♦ Provide the principal with **operational flexibility** in scheduling, hiring staff, developing curriculum, and budgeting.

Turnaround Leader Actions

- ♦ **Collect and analyze data:** Successful turnaround leaders are focused, fearless data hounds. Initially, turnaround leaders personally analyze data about the organization's performance to identify high-priority problems that can be fixed quickly.
- ♦ **Make an action plan based on data:** Turnaround leaders make an action plan that includes annual goals and major steps with enough detail so that each group in the school community knows specifically what they need to do differently. This information allows people to focus on changing what they do rather than worrying about impending change.

¹ Members of the Council of Chief State School Officers' (CCSSO's) State Collaborative on Assessment and Student Standards (SCASS) and Strategies and Interventions (S & I) groups were surveyed to provide input on which school-based practices and leading indicators should be included in a more robust turnaround definition.

- ◆ Focus on **a few early wins** in Year 1: Successful turnaround leaders choose a few high-priority goals with visible payoffs and use early success to gain momentum. Although limited in scope, these “wins” are high-priority, not peripheral elements of organization performance, and they are bold in speed and magnitude of change. Early wins are critical for motivating staff and disempowering naysayers.
- ◆ Communicate **a positive vision**: Turnaround leaders start their turnaround campaign by communicating a clear picture of success and its benefits, which motivates others to contribute their own efforts.
- ◆ Gain **support of key influencers**: Turnaround leaders gain support of trusted influencers among the staff and community, and then they work through these people to influence others.
- ◆ **Silence critics** with speedy success: Turnaround leaders use early wins not just for success in the efforts, but to cast doubt about vocal naysayers. This approach reduces leader time spent on “politics” and increases time spent managing for results.
- ◆ Help **staff personally feel problems**: Turnaround leaders use various tactics to help staff empathize with or “put themselves in the shoes of” those whom they serve, to truly feel the problems that the status quo causes and feel motivated to change.
- ◆ Require **all staff to change**: When turnaround leaders implement an action plan, they make the change mandatory, not optional, beginning with accountable team leaders in the organization.
- ◆ Make necessary **staff and leader replacements**: Successful turnaround leaders typically do not replace all or even most of the staff, but they often replace team leaders who hinder change efforts. After initial turnaround success, staff who do not make needed changes either leave or are removed by the leader.
- ◆ **Measure and report progress** frequently: Turnaround leaders set up systems to measure and report interim results often, which enables them to rapidly discard failed tactics and increase the successful tactics essential for fast results.
- ◆ Require decision-makers to **share data and solve problems**: Turnaround leaders report key staff results visibly and often. All key staff, starting with team leaders, must share periodic results in open sessions, shifting discussions from excuse making and blaming to problem solving.
- ◆ **Break organization norms**: In a failing organization, existing practices contribute to failure. Successful turnaround leaders break rules and norms to achieve success. Deviating to achieve early wins shows that new action gets new results.
- ◆ **Focus on successful tactics, halt others**: Successful turnaround leaders quickly discard tactics that do not work and spend more money and time on tactics that do. This pruning and growing process focuses limited resources where they will best improve results.
- ◆ **Resist touting progress** as ultimate success: Turnaround leaders are not satisfied with partial success. They report progress but keep the organization focused on high goals. When a goal is met, they are likely to raise the bar. Merely better is not enough.

Instructional Practices

- ◆ **Align research-based instructional program with rigorous academic standards**: Ensure quality curriculum and high learning expectations for every student.
- ◆ **Use research-based instructional strategies** to engage students: Engage students in learning, and monitor and adjust instruction based on student learning needs. (See High-Yield Strategies text box.)
- ◆ **Use formative assessment data**: Use the data to inform instructional planning and for continuous improvement.

High-Yield Strategies

The following instructional strategies were identified by research as high-yield strategies:

- ◇ Setting objectives/providing feedback
- ◇ Encouraging engagement/student discussion
- ◇ Establishing learning groups/supporting reciprocal teaching
- ◇ Asking higher-order questions/creating advance organizers
- ◇ Requiring homework/practice
- ◇ Calling for self-assessment/self-grading

(Marzano et al., 2001; Hattie, cited in Schon, 2014)

Staffing and Scheduling

- ◆ **Redesign the school day, week, or year:** Include additional time for student learning and teacher collaboration.
- ◆ Create a **transparent teacher evaluation process:** Provide opportunities for observation, feedback, coaching, and collaboration.
- ◆ **Ensure that teachers are effective** and able to improve instruction:
 - Review the quality of all staff and **retain** only those who are determined to be effective and have the ability to be successful in the turnaround effort.
 - Prevent ineffective teachers from **transferring** to these schools.
 - Provide job-embedded, ongoing **professional development** informed by the teacher evaluation and support systems and tied to teacher and student needs.

School Culture and Climate

- ◆ Establish a **safe and positive environment** conducive to student learning.
- ◆ Foster a school culture that supports **social, emotional, physical, and cognitive development.**
- ◆ **Engage families and community members** in the school.

Performance Management Routines

- ◆ **Communicate clearly expected outcomes and theory of action:** Establish and widely communicate priorities and set ambitious, clear, and measurable goals and outcomes with aligned strategies and activities.
- ◆ **Align resources:** Direct or redirect resources (time, money, and people) to priority efforts that produce results and establish clear roles and responsibilities.
- ◆ **Collect and use data:** Establish and implement routines and processes for collecting, analyzing, and monitoring data, including leading and lagging indicators, to inform continuous improvement, provide feedback, and make decisions.
- ◆ **Be accountable** for results: Make decisions to continue improvement or end practices based on data, implement incentives tied to performance, and engage and communicate results with internal and external stakeholders.

Further study is needed to determine the highest-leverage, school-based practices; how practices can be measured; and performance levels that are associated with successful turnaround schools.

Part 3: Leading Indicators

The proposed turnaround definition goes beyond student achievement on state assessments to include leading indicators of increased student, parent, and teacher engagement; teacher and leader effectiveness; and short-term learning outcomes. Leading indicators provide clear, measurable evidence that schools are on

Examples of Leading Indicators

Improved Instructional Quality

- ◇ Teacher effectiveness
- ◇ Leader effectiveness
- ◇ Distribution of teacher quality
- ◇ Number of students taught by highly effective teachers
- ◇ Number of instructional minutes
- ◇ Number of Advanced Placement/ International Baccalaureate/ dual-enrollment classes

Increased Participation in School

- ◇ Teacher attendance
- ◇ Teacher turnover rate
- ◇ Student attendance
- ◇ Student truancy rate
- ◇ Student turnover rate
- ◇ Dropout rate
- ◇ Participation on state assessments

Improved School Culture

- ◇ Discipline incidents
- ◇ Student waiting list
- ◇ Student, teacher, and parent satisfaction

Early Achievement Gains

- ◇ Short-cycle assessments
- ◇ Year 1 state assessment gains
- ◇ Early years assessments

track to achieve dramatic improvement in academic achievement. Leading indicators of school turnaround success (see Examples of Leading Indicators text box) were identified through prior research (Kowal & Ableidinger, 2011; RSN, 2015b) and input from state and national leaders.²

To develop a more robust description of school turnaround success, further analysis is needed to determine the most predictive leading indicators and to identify targets along the trajectory to reaching achievement goals.

Part 4: Dramatic Gains in Academic Achievement Outcomes

Measures

Our definition of dramatic gains in academic achievement is based on three measures over four years. The measures are:

- ◆ Proficiency in reading and math on state assessments
- ◆ Growth in reading and math on state assessments
- ◆ Graduation rate (for high schools)

Proficiency. The goal of school turnaround is to dramatically increase student performance in persistently low-performing schools. With this in mind, a successful turnaround school shows substantial improvement in student proficiency as measured by a significant increase in the school's statewide percentile ranking for proficiency on state assessments.

Growth. A successful turnaround school also achieves repeatedly high student growth, putting students on a trajectory to close achievement gaps and reach rigorous academic standards. A successful turnaround involves a consistently high statewide percentile ranking on the state's growth measure.³

² Participants at the June 2015 Council of Chief State School Officers convening provided feedback and input on the proposed definition of turnaround success. Members of the SCASS and S & I groups reviewed the proposed definition and provided feedback on the measures and metrics, and on which school-based practices and leading indicators should be included in a more robust turnaround definition.

³ Emerging research has identified instability in school-level growth scores derived from a commonly used method for measuring student growth — the student growth percentile model (see, for example, Lash, Makkonen, Tran, & Huang, 2016; Lash, Peterson, Vineyard, Barrat, & Tran, 2013). However, the authors of this paper and those offering input on a definition of school turnaround success concluded that student growth is important enough an indicator that it must be included in the definition and that current growth measures should be factored in, albeit as only one of multiple measures.

Graduation Rate. In a high school, turnaround success is defined by increased proficiency and high student growth rates as well as increased graduation rates. Successful turnaround high schools have a high percentage of students graduating on time. Ideally, they also have a high percentage of students exiting high school prepared for college and career, though strong measures are still under development in most states to track that critical outcome.

Metrics and Targets

When selecting metrics and targets to define academic success, we considered several approaches. First, we considered defining success based on an aspirational goal. For example, Tennessee's Achievement School District (ASD) set an aspirational goal to move schools from the bottom 5 percent to the top 25 percent of schools in the state based on proficiency measured by standardized assessments (Walker, 2015). The challenge of this approach is that if the aspiration is too high, the definition becomes meaningless as a guide. The ASD has seen success in improving school performance, but has not reached the lofty goal of moving schools into the top 25 percent.

We also considered defining success based on the real experiences of chronically struggling schools. The challenge of this approach is that, nationally, we have not achieved a substantial amount of turnaround success, and so rooting the definition in today's reality means tying ourselves to past lackluster results, which have not been robust enough to make meaningful change for students across the nation.

The approach we chose for this project defines success based on a set of rigorous but attainable targets. The approach accounts for the reality of the difficulty of school turnaround, but is also grounded in the expectation that schools make meaningful and dramatic improvements to enable all students to learn at high levels.

Our academic metrics focus on how high the school rises in the statewide percentile rankings on proficiency; the school's position in the statewide percentile ranking for growth; and, for high schools, the graduation rate. Percentile rankings

allow us to create a model that can be implemented in any state, regardless of assessment tools or cut scores. Percentile rankings also allow us to compare school performance from year to year relative to all other schools in the state and to the statewide average, even when assessment tools change from one year to the next.

The turnaround definition metrics include a series of targets in proficiency, growth, and graduation rates. The targets were set to quantify the amount of improvement a school needs to achieve to provide evidence of progress toward turnaround success.

As more data become available, the field should consider even more fine-tuned targets, especially related to student proficiency. Even within the ranks of chronic low achievement, schools differ in the degree to which students enter the school behind grade level. As a result, two schools may have similar proficiency rates but vastly different student populations. School-specific targets that take into account students' starting points could provide an advance over the methods proposed here.

Why These Targets?

Targets were set after reviewing how states and other researchers defined schools in need of turnaround interventions and schools identified as turnaround successes (see Table 2 on page 8).

Each target represents a specific milestone along a school's turnaround trajectory:

- ◆ If a school meets the **threshold** target, it is no longer among the very lowest performing in the state (at a level that would identify the school as needing turnaround), but the school is not considered successful in dramatically increasing student performance.
- ◆ If a school meets the **minimum** target, it has made significant achievement gains, narrowing the gap with the average achievement for schools in the state. It is on track for reaching high levels of performance, but is not yet at a level most would call "successful."
- ◆ If a school meets the **ambitious** target, it has made enough progress to be considered

Table 2. Four-Year Targets

FOUR-YEAR TARGETS	Threshold Target*	Minimum Target	Ambitious Target
Change in PROFICIENCY over time	School moves from below the 10th percentile to the 10th percentile or above in statewide ranking AND moves up 5 or more percentiles.	School moves from below the 10th percentile to the 25th percentile or above in statewide ranking.	School moves from below the 10th percentile to the 50th percentile or above in statewide ranking.
<p>Relative student GROWTH over time</p> <p>School exceeds the 50th percentile in statewide ranking, 2 of 3 years.</p> <p>School exceeds the 75th percentile in statewide ranking, 2 of 3 years.</p> <p>School exceeds the 90th percentile in statewide ranking, 2 of 3 years.</p>			
GRADUATION rate (high school)	60% and above	80% and above	95% and above

*Note: Reaching the threshold target would not be considered a turnaround success, but would effectively move the school out of the identification as one of the lowest performing in the state.

high performing, exceeding the median achievement for schools in the state.

Exclusions: Changes in Demographics

To account for the possibility that changes in a school’s student population, rather than turnaround efforts, may have led to dramatic changes in academic performance, a definition of turnaround success must flag schools for closer analysis and possible exclusion if changes of 15 percent or more are found in the following:

- ◆ Number of students served
- ◆ Percent of students receiving free and reduced-price meals
- ◆ Percent of students of color
- ◆ Percent of school population classified as students with disabilities
- ◆ Grades served
- ◆ Mobility rate

Inclusions: New Schools Serving Same Students

If a state or district uses a new school or restart to replace a failing school, the new school can be rated in this approach to defining success, as long as the new school serves a similar demographic population of students as the school that it replaces.

Testing the Success Model for Academic Gains

To develop, test, and refine the model described above for defining dramatic academic gains, we applied the evolving framework to actual data on low-performing schools in three states and shared the model with experts in school turnarounds nationally. This section has two parts: our methodology and our findings.

Methodology

This project followed the steps below to create, test, and refine the turnaround success definition model:

- (1) Identified **sample cohorts of low-performing schools** based on school-level data.
- (2) Set threshold, minimum, and ambitious **targets for school performance** on academic outcomes, which included state measures of proficiency, growth, and graduation rate (for high schools).
- (3) **Analyzed school data** to identify schools that met the targets.
- (4) **Gathered feedback** from state and national thought leaders to refine the definition.

Definitions of School Performance

The methodology began with determining which schools would be included in the analysis and what school data would be analyzed to identify successful turnaround schools. Research on failing schools and how low-performing schools (see Table 3 on page 10) are identified informed the criteria for selecting the sample cohort for analysis. A review of how states and organizations identify successful schools informed the metrics and targets for the turnaround success model.

Definitions of Failure

To create the school cohort for this analysis, we examined various approaches to identifying low-performing schools. The approaches included state school performance evaluation criteria, federal School Improvement Grant (SIG) criteria, and statewide rankings on standardized assessments.

School Performance Evaluation Criteria

Our first approach was to identify low-performing schools through the state's school performance evaluation criteria. The benefit of this approach was that state criteria were closely aligned to state identification criteria for school turnaround. However, our initial state analysis surfaced two challenges associated with using state criteria for identifying the state's

lowest-performing schools. First, as the sample state refined and modified its criteria, it changed the metrics for each performance level, making it impossible to compare the criteria from year to year. Second, criteria vary greatly from state to state, making it difficult to create a turnaround definition that could be consistently applied across states. With these limitations in mind, and with input from state and national leaders, we determined that state school performance evaluation criteria would not be a reliable approach to measuring school turnaround success across states over time.

School Improvement Grant Criteria

Our second approach was to use the state's SIG eligibility criteria to identify low-performing schools for turnaround analysis. Schools eligible for SIG funding fall in the bottom 5 percent of schools in the state or meet other U.S. Department of Education criteria. The benefits of this approach were that SIG criteria were designed to identify schools in need of turnaround, and all states applied the federal SIG criteria, creating commonalities across states (a major limitation of the school performance evaluation approach). However, federal SIG criteria also presented some challenges. States still maintained some flexibility regarding which schools were eligible for SIG funding, so schools were not necessarily comparable across or even within states. For example, in one state, many high schools that met the state's SIG eligibility criteria were significantly higher achieving—closer to the state average—than other schools identified for turnaround. Additionally, similar to the state school performance evaluation approach, the federal criteria for SIG funding also changed during the years of our analysis. We therefore determined that SIG eligibility criteria would not be a reliable approach to identifying the lowest-performing schools in need of turnaround.

Percentile Rank of Statewide Assessment Performance

After considering the challenges presented by earlier approaches, we decided to use state percentile rankings to identify the lowest-performing decile schools in the state (the bottom 10 percent in math or reading/English

Table 3. Definitions of Success in Previous Studies

Criteria	Description
California Comprehensive Center at WestEd (Huberman et al., 2011)	
Growth	Schools had to have minimum growth, defined as at least 0.2 standard deviations, during the turnaround period, AND schools had to end up in at least the middle third of school performance statewide.
Subgroup Growth	All student subgroups also had to demonstrate minimum growth, defined as no drop in performance for students eligible for free or reduced-price lunch, African American students, Hispanic students, students with disabilities, and/or English learners during the turnaround period.
Stable Demographics	Schools cannot show a decrease in the percentage of students eligible for free or reduced-price lunch, African American students, Hispanic students, and/or English learners greater than 15 percentage points between Year 1 and Year 7. In addition, schools with a decrease in enrollment greater than 20 percent during the same period were filtered out.
Additional Criteria	Selected schools are included only if their scores did not decline more than 0.1 standard deviations between Years 6 and 7. Also, their student subgroup performance could not decline more than 0.2 standard deviations during this same period.
Massachusetts Evaluation Report (Lane, Unger, & Souvanna, 2014)	
Status	Schools moved out of Tier 4 status.
Chicago Report (De la Torre et al., 2013)	
Achievement Gap Closure	Schools closed the gap between school and district proficiency by half.

language arts) and to measure performance gains on state assessments over time. Schools ranking in the bottom decile in proficiency on statewide math or reading assessments were included in the sample cohort. While percentile rank is a relative measure and does not account for the overall achievement level, it has several benefits that make it a useful entry point for measuring academic gains.

First, the bottom decile approach is applicable across all states. All states can rank their

schools in order of proficiency on statewide assessments and then identify the bottom 10 percent. Additionally, the bottom decile approach captures all of the state’s lowest-performing schools, not just those identified for SIG funding or for state intervention. This wide net allows for the inclusion of schools that may have made dramatic gains in school performance through local efforts, private grants, and other strategies that might have otherwise gone unnoticed.

Definitions of Success

To begin to frame our definition of success, we reviewed approaches used in other studies. We then examined results of schools in our sample state data sets to inform the metrics and targets for the academic achievement portion of the turnaround success definition. The studies we reviewed included research on turnaround case studies from the California Comprehensive Center at WestEd, a Massachusetts evaluation conducted by the Institute for Strategic Leadership and Learning, and the University of Chicago Consortium on Chicago School Research (see Table 3). The following key takeaways from these studies informed our metrics and targets:

- ◆ Schools must demonstrate significant growth in math and English language arts.
- ◆ The proficiency gaps between students in low-performing schools and average- to high-performing schools must be significantly narrowed. As proficiency gaps close, performance of high-priority subgroups (low-income students, English learners, students with disabilities, students of color) should be closely monitored and keep pace with other student groups.
- ◆ The demographic breakdown and enrollment numbers of schools must remain stable.

The measures and metrics that we used to identify dramatic gains in academic achievement are detailed earlier in this paper and will be discussed again in the findings.

Applying Measures of School Achievement Gains

The resulting sample of low-performing schools (ranked in the bottom decile of all schools state-wide for proficiency in math or reading/ELA in 2009–2010) in our analyses included schools from three states—Tennessee, Colorado, and Illinois. We then used the measures and metrics to determine which schools reached the three targets related to turnaround success in the four years following the baseline year. To further validate our findings, we more closely examined schools that met the minimum and ambitious

targets but had large changes in demographics that might contribute to the achievement gains. We shared our findings with state leaders and confirmed (1) the schools that were identified as successful through the criteria were regarded as successful by state leaders; and (2) no other schools that the state had identified as making significant achievement gains were missing through our criteria. We also shared our findings with national leaders and solicited their input on the approach's strengths and challenges.

Findings

This project's findings are categorized into two sets: findings from data analyses and findings from state and national leaders' feedback.

Data Analyses

While the results of the analyses varied somewhat by state, our research indicated a few key findings with implications for the proposed measures of turnaround success.

Ambitious target is a meaningful marker of success. Across the three states, 1.8 percent and 6.2 percent of schools met ambitious goals in reading and math proficiency, respectively (meeting or exceeding the median state proficiency), indicating that the target is a rigorous yet achievable goal and a meaningful marker of turnaround success.

Minimum target indicates schools are on track for success. Across the three states, 7.7 percent and 18.1 percent of schools met minimum goals in reading and math proficiency, respectively (meeting or exceeding the proficiency of 25 percent or more of schools in the state), indicating that the minimum targets are useful benchmarks to monitor school progress and provide evidence that a school is making substantial gains and is on track for turnaround success.

More schools met targets in math than reading. Analyses of school data from Tennessee, Colorado, and Illinois show that more schools met the targets for proficiency and growth in math than in reading/ELA.

Table 4. Meeting Targets*

	Threshold	Minimum	Ambitious
Proficiency: 3 States			
Reading 867 schools	25% (213 schools)	8% (67 schools)	2% (16 schools)
Math 867 schools	38% (333 schools)	18% (157 schools)	6% (54 schools)
Growth: 2 States*			
Reading 444 schools	25% (113 schools)	8% (35 schools)	3% (14 schools)
Math 442 schools	33% (147 schools)	13% (56 schools)	5% (24 schools)
Graduation Rate: 3 States			
Four-Year Cohort Rate 155 schools	71% (110 schools)	37% (57 schools)	2% (5 schools)

* School-level growth data are available for two of three states.

Note: The number of schools that met the threshold target included those schools that met minimum and ambitious targets as well, so the percentages do not add up. The number of schools that met the minimum target included those schools that also met the ambitious target.

More elementary schools met targets than middle and high schools. In general, more elementary schools across all three states met the minimum and ambitious targets, followed by middle schools, then high schools.

A majority of schools did not even meet the threshold target in reading. Only 25 percent of schools moved out of the bottom 10 percent of schools for reading proficiency. Schools did slightly better in math, with 38 percent of schools moving out of the bottom 10 percent of schools.

State and National Leader Feedback

We solicited feedback from state and national leaders throughout the development of the

proposed measures of turnaround success and found the following trends in their input.

Benefits of multiple measures. Measuring turnaround success is multifaceted and requires using multiple measures of outcomes, leading indicators, and practices to evaluate school performance.

Benefits of percentile rank. Percentile rank is a useful cross-state measure of achievement gains in school turnarounds and is especially helpful in states where assessments are changing from year to year.

Limitations of percentile rank. Percentile rank is comparative by nature and therefore does not ensure that absolute achievement gains are

being made. States analyzing only schools within their state could use overall proficiency scores on state assessments in addition to percentile rank changes to increase rigor.

Limitations of high school metrics. Additional indicators beyond graduation rates (e.g., ACT/SAT performance, measures of postsecondary success) are needed to provide a more complete picture of achievement gains in high schools (see the following section below).

Creating Rigorous Metrics/Targets for High School Turnaround

Throughout our research and analysis, we received consistent concern and feedback about creating rigorous metrics and targets for monitoring and identifying successful turnaround high schools. Graduation rate is important, because it is an important ending milestone of kindergarten-through-grade-12 (K-12) education, but we also know that the graduation rate is not a rigorous metric and does not provide a complete picture of a school's ability to prepare students for college and career. The following are concerns, feedback, and suggestions we received to strengthen the turnaround definition for low-performing high schools.

Graduation rate is not a rigorous measure and does not reflect college and career readiness. Graduation rate measures the percentage of students who complete the state-determined course of study to complete high school. Graduation rate does not require reporting on how well students performed academically and, therefore, does not set a high bar for student academic performance.

Graduation rate is a lagging measure. Graduation rate is measured at the end of a student's K-12 academic career, so it does not monitor during the earlier grades a student's potential to graduate. To account for this, it may be useful to pair graduation rate with a "ninth-grade on-track" measure, which would look at the credits a student needs to complete to qualify for graduation and a student's progress toward those benchmarks.

Graduation rate is reported for four-year cohorts. The current standard calculation of graduation rate examines only the number of students who graduate within four years of starting high school. Some state experts suggested that the definition should include five- and six-year graduation rates to show school improvement by capturing students who graduate soon after the four-year rate calculation. Additional metrics are needed to capture success at "recovering" dropouts and helping them obtain high school equivalent credentials, perhaps years after their four-year cohort graduated.

States, districts, and schools can "game" the graduation rate system. Some respondents distrust the accuracy of graduation rates and the apparent ease with which graduation rates can be "gamed." In particular:

- ◆ Social promotion moves students through the system and can lead to students graduating without meeting the academic requirements to do so.
- ◆ "Innovative" programs and alternative schools take on a majority of the low-performing students and students at risk of dropping out in a district and post low graduation rates, so that other district high schools can show high rates.
- ◆ States can lower graduation requirements to increase the number of students who qualify for diplomas.

Implications for Measuring Turnaround Success

Through this project, we have developed an approach for defining school turnaround success in a way that incorporates achievement measures, leading indicators, and school-based practices, and we have laid the foundation of measures, metrics, and targets for identifying schools that have made dramatic gains in student achievement on state assessments. The next steps in the measuring turnaround success project will be to

explore the practices and indicators of schools that met the minimum and ambitious targets on state assessments and develop a more robust definition that incorporates multiple measures.

Lessons Learned

Promise of the Approach—Measures of Achievement

The proposed measures of achievement present a number of opportunities for national, state, and local education leaders to monitor and identify turnaround success. These promising measures include the following characteristics:

Applicable across assessments. The proposed measures of achievement are based on statewide percentile rankings of school proficiency and growth. Because the percentile rank approach can be used regardless of the assessment administered, these measures may be used to monitor school turnaround progress at a time when many states are selecting and implementing new assessment systems.

Applicable across states. The proposed approach to defining turnaround success can be applied in any state because it is a comparative analysis of school academic performance on the state's assessment. All states currently collect data on the proposed achievement metrics: proficiency, growth, and graduation rate.

Adaptable to state contexts. The proposed approach to defining turnaround success can be modified to examine turnaround success within a specific state. The definition can be adjusted to include any additional metrics on which the state collects data and that are considered important for measuring school turnaround.

Validated by states. State and district officials from Tennessee, Colorado, and Illinois examined the turnaround success analyses and largely confirmed the results, validating that the schools that met the criteria were those that the state would identify as making gains.

Trajectory for turnaround success. This approach to measuring school performance can be applied as a series of levels a single school passes through on its trajectory to turnaround

success. For example, a school may reach the threshold target in one year, the minimum target a year or two after that, and the ambitious target in four or five years. On the other hand, a school may reach minimum or ambitious targets in one or two years in one area and then leverage successful practices to make gains in other areas in the following years.

Accelerate turnaround success. The successful turnaround schools that surface through this approach present an opportunity to learn more about the practices that most impact turnaround success. Lessons from successful schools can be shared with others to accelerate turnaround success across the country.

Challenges of the Approach—Measures of Achievement

The proposed measures of success appear to be useful for monitoring and identifying turnaround success, but our research also revealed some challenges associated with applying the turnaround definition.

Percentile ranks are comparative. Percentile ranks are comparative measures that do not account for absolute performance of schools. For example, proficiency at the 50th percentile in one state could be significantly higher or lower than the 50th percentile in another state and, therefore, reaching the state median proficiency may not be adequate to ensure that students are achieving at high levels. In addition, a school may increase proficiency and decrease in ranking, if the other schools in the state increase in proficiency as well.

Gains are not consistent across subjects. The analysis revealed that some turnaround schools were able to dramatically improve student outcomes in one core subject (math or reading), but the other subject either showed a lack of improvement or decrease in performance. While dramatic improvement in one subject area may indicate that a school is on track to make dramatic improvement in other areas, ultimately, a school would need to achieve dramatic gains in all subject areas to be considered a turnaround success.

Graduation rate has limitations as a measure. Throughout our research, and in particular from

feedback from state and national turnaround experts, we discovered that graduation rate by itself is not a rigorous measure of school performance gains.

Recommended Next Steps

The next steps in developing the proposed approach to measuring school turnaround success are to use these findings as a foundation for identifying schools making dramatic gains in achievement on state assessments and for conducting a more thorough analysis of school-based practices and leading indicators to create a more robust and multifaceted definition of turnaround success.

Develop feasible methods of gathering data about leading indicators and practices. States and districts have made progress in developing systems to measure leading indicators, especially easily quantified indicators, such as student attendance and number of discipline incidents. However, qualitative school-based practices, such as engaging families or aligning resources, are more difficult to measure, especially in a state with many low-performing schools. Measuring school-based practices and leading indicators in a cost-effective way is challenging. Likely, states will need to focus on a limited set of practices and leading indicators—ideally, those most correlated with achievement outcomes.

Examine the role of leading indicators and school-based practices in turnaround success. By examining the role of school-based practices and leading indicators in the approach to measuring turnaround success, the definition of school turnaround success can be made more robust and three key questions can be answered:

- ◆ What are the school-based practices that must be in place to dramatically increase student achievement in a persistently low-performing school?
- ◆ Which leading indicators are correlated with turnaround success?
- ◆ How can school-based practices and leading indicators be accurately and appropriately measured and incorporated into the definition of turnaround success?

Our initial research has begun to provide answers to these questions. However, additional research on school-based practices and leading indicators will provide a more complete picture of school turnaround success.

Develop successful school turnaround case studies to describe how rapid, dramatic improvements look over time in different contexts. By examining school profiles and creating case examples of successful turnaround schools, the measures of turnaround success can be used to monitor and improve outcomes in other schools engaged in turnaround efforts.

Encourage states to apply the measures of turnaround success and examine ways to modify them to fit state contexts and needs. Throughout this report, we note the challenges associated with changing assessments and accountability systems in states across the nation. These varying systems present barriers to creating a common definition that can be applied across states, but they also present an opportunity for states to use a common definition as a foundation and to adapt the measures to fit with the state context. While the proposed definition shows promise, state application of these measures in monitoring and improving outcomes in turnaround schools is where the true value will be realized.

Help states and districts get smarter about what to do when schools are not achieving success or exhibiting practices and indicators that suggest future success. Most change efforts in education wait for five or more years of continued failure before trying a new turnaround strategy, but research indicates that attempting a new strategy earlier has major payoffs for the turnaround success rate (Hassel, 2009). However, starting another turnaround process soon after a previous one has begun presents significant challenges. It requires navigating complex district policies and processes, recruiting a new pool of teachers and school leaders, and reinvesting families and communities in a new (and yet another) change to their school environment. States and districts need not only better data to inform the turnaround process, but also better strategies to intervene and replace failing turnarounds.

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