

The Institute of Education Sciences (IES) publishes practice guides in education to bring the best available evidence and expertise to bear on the types of systemic challenges that cannot currently be addressed by single interventions or programs. Authors of practice guides seldom conduct the types of systematic literature searches that are the backbone of a meta-analysis, although they take advantage of such work when it is already published. Instead, authors use their expertise to identify the most important research with respect to their recommendations, augmented by a search of recent publications to ensure that research citations are up-to-date.

Unique to IES-sponsored practice guides is that they are subjected to rigorous external peer review through the same office that is responsible for independent review of other IES publications. A critical task for peer reviewers of a practice guide is to determine whether the evidence cited in support of particular recommendations is up-to-date and whether studies of similar or better quality that point in a different direction have not been ignored. Because practice guides depend on the expertise of their authors and their group decision-making, the content of a practice guide is not and should not be viewed as a set of recommendations that in every case depends on and flows inevitably from scientific research.

The goal of this practice guide is to formulate specific and coherent evidence-based recommendations for use by educators addressing a multifaceted challenge that lacks developed or evaluated, packaged approaches. The challenge is turning around low-performing schools. The guide provides practical, clear information on critical topics related to school turnarounds and is based on the best available evidence as judged by the review team. Recommendations presented in this guide should not be construed to imply that further research is not warranted to judge the effectiveness of particular strategies for turning around failing schools.

Turning Around Chronically Low-Performing Schools

May 2008

Panel

Rebecca Herman (Chair)
American Institutes for Research

Priscilla Dawson
Trenton Public Schools

Thomas Dee Swarthmore College

Jay Greene
University of Arkansas

Rebecca Maynard
University of Pennsylvania

Sam Redding
National Center on Innovation and Improvement

StaffMarlene Darwin American Institutes for Research



This report was prepared for the National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences under Contract ED-02-CO-0022.

Disclaimer

The opinions and positions expressed in this practice guide are the authors' and do not necessarily represent the opinions and positions of the Institute of Education Sciences or the U.S. Department of Education. This practice guide should be reviewed and applied according to the specific needs of the educators and education agency using it, and with full realization that it represents the judgments of the review panel regarding what constitutes sensible practice, based on the research that was available at the time of publication. This practice guide should be used as a tool to assist in decision-making rather than as a "cookbook." Any references within the document to specific education products are illustrative and do not imply endorsement of these products to the exclusion of other products that are not referenced.

U.S. Department of Education

Margaret Spellings Secretary

Institute of Education Sciences

Grover J. Whitehurst *Director*

National Center for Education Evaluation and Regional Assistance

Phoebe Cottingham Commissioner

May 2008

This report is in the public domain. While permission to reprint this publication is not necessary, the citation should be:

Herman, R., Dawson, P., Dee, T., Greene, J., Maynard, R., Redding, S., and Darwin, M. (2008). *Turning Around Chronically Low-Performing Schools: A practice guide* (NCEE #2008-4020). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications/practiceguides.

This report is available on the IES web site at http://ies.ed.gov/ncee/wwc/publications/practiceguides.

Alternative Formats

On request, this publication can be made available in alternative formats, such as Braille, large print, audiotape, or computer diskette. For more information, call the Alternative Format Center at (202) 205-8113.

Turning Around Chronically Low-Performing Schools

Contents

ntroduction	1
The What Works Clearinghouse standards and their relevance to this guide	5
Turning Around Chronically Low-Performing Schools	4
Overview Summary of level of evidence to support recommendations	4 6
Checklist for carrying out the recommendations	9
Recommendation 1. Signal the need for dramatic change with strong leadership	10
Recommendation 2. Maintain a consistent focus on improving instruction	14
Recommendation 3. Provide visible improvements early in the turnaround process (quick wins)	22
Recommendation 4. Build a committed staff	27
Appendix A. Postscript from the Institute of Education Sciences	30
Appendix B. About the authors	33
Appendix C. Disclosure of potential conflicts of interest	35
Appendix D. Technical information on the studies	36
References	42

List of tables

- Table 1. Institute of Education Sciences levels of evidence for practice guides 2
- Table 2. Recommendations and corresponding levels of evidence to support each 8

Introduction

The goal of this practice guide is to formulate specific and coherent evidence-based recommendations for use by educators aiming to quickly and dramatically improve student achievement in low-performing schools. Although schoolwide reform models exist, most assume a slow and steady approach to school reform. They do not seek to achieve the kind of quick school turnaround we examine in this practice guide. That is not to say that schools using a packaged schoolwide reform model could not experience dramatic and quick results. Often the differentiating factors are the intensity of the turnaround practices and the speed of putting them in place.

Our expectation is that a superintendent, a principal, or a site-based decision-making council can use this practice guide to help plan and execute school turnaround strategies. The target audience includes school administrators and district-level administrators, key because they can help break down policy and administrative barriers and ease the implementation of intensive school turnaround practices. This guide can help them develop practice and policy alternatives for immediate implementation in schools.

The guide includes specific recommendations and indicates the quality of the evidence that supports the recommendations. It also describes how each recommendation can be carried out. The examples are from case studies but should not be construed as the best or most effective ways to carry out each recommendation. Instead, the examples illustrate practices noted by schools as having had a positive impact on the school turnaround. Note

that the specific ways the practices were implemented varied widely, depending on each school's context.

We, the authors, are a small group with expertise in various dimensions of this topic. Several of us are also experts in research methodology. The evidence we considered in developing this document ranges from expert analyses of turnaround practices to case studies of seemingly effective schools and to correlational studies and longitudinal studies of patterns of school improvement. In all cases, we paid particular attention to patterns of findings replicated across studies. But all recommendations had to rely on low levels of evidence, as defined by the Institute of Education Sciences (IES) Practice Guide standards. We could not find any studies that fit the high-quality experimental and quasi-experimental study standards of the What Works Clearinghouse (http://ies.ed.gov/ncee/wwc) and that would provide the strongest evidence of causal validity.

We have taken findings from research and described how a practice or recommendation might unfold in school settings. Our aim is to provide sufficient detail so that educators have a clear sense of the steps needed to follow the recommendation.

A unique feature of practice guides is the explicit and clear delineation of the quality and quantity of evidence that supports each claim. To do this, we used a semistructured hierarchy suggested by IES. This classification system uses both the quality and the quantity of available evidence to help determine the strength of the evidence base grounding each recommended practice (table 1).

Table 1. Institute of Education Sciences levels of evidence for practice guides

Strong	In general, characterization of the evidence for a recommendation as strong requires both studies with high internal validity (i.e., studies whose designs can support causal conclusions) and studies with high external validity (i.e., studies that in total include enough of the range of participants and settings on which the recommendation is focused to support the conclusion that the results can be generalized to those participants and settings). Strong evidence for this practice guide is operationalized as: • A systematic review of research that generally meets the standards of the What Works Clearinghouse (WWC) (see http://ies.ed.gov/ncee/wwc/) and supports the effectiveness of a program, practice, or approach with no contradictory evidence of similar quality; OR • Several well-designed, randomized controlled trials or well-designed quasi-experiments that generally meet the standards of WWC and support the effectiveness of a program, practice, or approach, with no contradictory evidence of similar quality; OR • One large, well-designed, randomized controlled, multisite trial that meets the WWC standards and supports the effectiveness of a program, practice, or approach, with no contradictory evidence of similar quality; OR • For assessments, evidence of reliability and validity that meets the Standards for Educational and Psychological Testing. ^a
Moderate	In general, characterization of the evidence for a recommendation as moderate requires studies with high internal validity but moderate external validity, or studies with high external validity but moderate internal validity. In other words, moderate evidence is derived from studies that support strong causal conclusions but where generalization is uncertain, or studies that support the generality of a relationship but where the causality is uncertain. Moderate evidence for this practice guide is operationalized as: • Experiments or quasi-experiments generally meeting the WWC standards and supporting the effectiveness of a program, practice, or approach with small sample sizes and/or other conditions of implementation or analysis that limit generalizability and no contrary evidence; OR • Comparison group studies that do not demonstrate equivalence of groups at pretest and therefore do not meet the WWC standards but that (a) consistently show enhanced outcomes for participants experiencing a particular program, practice, or approach and (b) have no major flaws related to internal validity other than lack of demonstrated equivalence at pretest (e.g., only one teacher or one class per condition, unequal amounts of instructional time, highly biased outcome measures); OR • Correlational research with strong statistical controls for selection bias and for discerning influence of endogenous factors and no contrary evidence; OR • For assessments, evidence of reliability that meets the Standards for Educational and Psychological Testing ^b but with evidence of validity from samples not adequately representative of the population on which the recommendation is focused.
Low	In general, characterization of the evidence for a recommendation as low means that the recommendation is based on expert opinion derived from strong findings or theories in related areas and/or expert opinion buttressed by direct evidence that does not rise to the moderate or strong level. Low evidence is operationalized as evidence not meeting the standards for the moderate or high level.

- a. American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (1999).
- b. Ibid.

Strong refers to consistent and generalizeable evidence that a practice causes better outcomes for students in turnaround schools or that certain leadership practices are effective for school turnaround.¹

Moderate refers either to evidence from studies that allow strong causal conclusions but cannot be generalized with assurance to the population on which a recommendation is focused (perhaps because the findings have not been widely replicated) or to evidence from studies that are generalizeable but have more causal ambiguity than offered by experimental designs (statistical models of correlational data or group comparison designs for which equivalence of the groups at pretest is uncertain).

Low refers to expert opinion based on reasonable extrapolations from research and theory on other topics and evidence from studies that do not meet the standards for moderate or strong evidence.

The What Works Clearinghouse standards and their relevance to this guide

For the levels of evidence in table 1, we rely on WWC evidence standards to assess the quality of evidence supporting educational programs and practices. The WWC addresses evidence for the causal validity of instructional programs and practices according to WWC standards.

Information about these standards is available at http://ies.ed.gov/ncee/wwc. The technical quality of each study is rated and placed into one of three categories:

- Meets Evidence Standards for randomized controlled trials and regression discontinuity studies that provide the strongest evidence of causal validity.
- Meets Evidence Standards with Reservations for all quasi-experimental studies with no design flaws and randomized controlled trials that have problems with randomization, attrition, or disruption.
- Does Not Meet Evidence Screens for studies that do not provide strong evidence of causal validity.

We include an appendix with more technical information about the studies and our decisions regarding the level of evidence for each recommendation. To illustrate the types of studies reviewed, we describe one study for each recommendation. Our goal is to provide interested readers with more detail about the research designs, the intervention components, and the way impact was measured.

We thank Brian Hassel and Dana Brinson for their helpful feedback and reviews of earlier versions of this practice guide. We also express our appreciation to Dr. Marlene Darwin, an AIR staff member involved in every phase of this project, from research analysis to draft text. Her role has been critical for the timely and successful production of this guide.

Dr. Rebecca Herman Dr. Priscilla Dawson Dr. Thomas Dee Dr. Jay Greene Dr. Rebecca Maynard Dr. Sam Redding

^{1.} Following What Works Clearinghouse guidelines, we consider a positive, statistically significant effect or large effect size (greater than 0.25) as an indicator of positive effects.

Turning Around Chronically Low-Performing Schools

Overview

In 1994 the Improving America's Schools Act introduced the concept of holding schools accountable for student performance on state assessments. Although the act encouraged states to assess whether schools were making progress and imposing sanctions on those that did not, it lacked much force. The No Child Left Behind (NCLB) Act of 2001 changed that by requiring a regimen of annual testing in grades 3 through 8 and by imposing sanctions on schools that fail to make adequate yearly progress.²

In school year 2006-07, 70 percent of 98,905 schools nationwide (64,546) made adequate yearly progress: 10,676 schools were designated as schools in need of improvement, and 2,302 schools were designated as schools in need of improvement restructuring.3 All failing schools, especially those that persistently fail, need guidance on what will work quickly to improve student outcomes. These schools generally have explored a variety of strategies to improve student achievement, but without rapid, clear success. They now need to look beyond slow, incremental change and examine practices that will raise and sustain student achievement within one to three years.4 The need to

2. Adequate yearly progress (AYP) is an individual state's measure of progress toward the goal of 100 percent of students achieving to state academic standards in at least reading/language arts and math. It sets the minimum level of proficiency that the state, its school districts, and schools must achieve each year on annual tests and related academic indicators. (http://www.ed.gov)

- 3. Mapping America's Educational Progress (2008)
- 4. Hassel, Hassel, and Rhim (2007).

quickly improve student achievement is most pressing for low-performing schools that serve disadvantaged students.⁵

How can we provide practical guidance to these schools to turn around their performance in a short time? To answer, we must first turn to research. Unfortunately, the research base on effective strategies for quickly turning around low-performing schools is sparse. The panel did not find any empirical studies that reached the rigor necessary to determine that specific turnaround practices produce significantly better academic outcomes. So, we tapped into less rigorous case study research and theory to provide practical recommendations about school turnaround practices. This research suggests practices likely to improve student learning. But it does not offer proof that these practices will always succeed.

This guide identifies practices that can quickly improve the performance of chronically low-performing schools—a process commonly referred to as creating "turnaround schools." For this guide, we define turnaround schools as those meeting two criteria.

- First, they began as chronically poor performers—with a high proportion of their students (generally 20 percent or more) failing to meet state standards of proficiency in mathematics or reading as defined under No Child Left Behind over two or more consecutive years.
- Second, they showed substantial gains in student achievement in a short time (no more than three years). Examples of substantial gains in achievement are reducing by at least 10 percentage points the proportion of students failing to meet state standards for proficiency in mathematics or reading, showing

^{5.} Ibid.

similarly large improvements in other measures of academic performance (such as lowering the dropout rate by 10 percentage points or more), or improving overall performance on standardized mathematics or reading tests by an average of 10 percentage points (or about 0.25 standard deviations). The schools discussed in this practice guide met these criteria, according to the data reported in the studies.⁶

School improvement and school turnaround both aim to improve student outcomes by changing how schools and classrooms operate. They differ in that school turnaround involves quick, dramatic improvement within three years, while school improvement is often marked by steady, incremental improvements over a longer time. Because of their similar goals, the two may have common approaches, but they differ in implementation. In school improvement, sharing leadership and training existing staff to share responsibility may develop gradually. In school turnaround, a leader may have to quickly identify and train one or two key staff members who are already qualified and prepared to initiate shared leadership. In addition, a turnaround school is more likely to consider replacing staff unable to easily make the transition with those already qualified to do so.

School turnaround literature builds on effective school improvement practices but focuses on how to speed up and increase the impact of these practices. According to one researcher, effective school turnaround strategies remove factors that inhibit school improvement and that do not support effective teaching and learning.⁷ This guide recommends four practices unique to turnaround schools. It does not explore the school improvement literature, which is well documented elsewhere.⁸ The four recommendations work together to help failing schools make adequate yearly progress and turn themselves around (see table 2).

This guide does not address comprehensive school reform (CSR) models, a specific approach to school improvement. Schools that adopt those models seek to implement all model components with supports and services provided by the model developer, such as professional development. Research on CSR models examine the models' effects on school improvement rather than the practices that comprise the model implemented by the school. And CSR models are typically designed to make incremental improvements over three to five years.9 The panel thus determined that CSR evaluations were outside the scope of this practice guide.10

We have included only research on "beating the odds" schools (schools that performed better than would be expected from their demographics) if those schools were also turnaround schools. The key distinction is that beating-the-odds schools may have always been high achieving. They have

7. Duke (n.d.)

9. Desimone (2002).

10. For overviews of the research on Comprehensive School Reform, see Borman, Hewes, Overman, and Brown (2003); Desimone (2002); Herman et al. (1999); Comprehensive School Reform Quality Center (2006a,b,c).

^{6.} The panel was unable to determine whether the schools in one study (Lachat and Smith 2005) showed dramatic improvement in three years because the study noted that data were collected over four years. But the panel chose to include this study in the evidence base because it provides research on practices that five low-performing high schools implemented to raise student achievement.

^{8.} For some pivotal research on school improvement, please see Berman and McLaughlin (1978), McLaughlin (1990), Newmann and Wehlage (1995), Purkey and Smith (1983), and Rivlin and Timpane (1975).

not necessarily made a transition from low to high achievement, a transition that poses some unique challenges (overcoming staff disillusionment and inertia) and requires unique solutions. Because this guide focuses on low-performing schools transitioning to high performance, the case studies are only of schools that were initially low performing. If the studies did not indicate the level of a school's performance, the panel did not include them in its examination of evidence.

Summary of level of evidence to support recommendations

As suggested in the overview, the research base on school turnaround practices is limited. Turnaround schools are, by definition, schools that have demonstrated that they have dramatically improved student outcomes in a short time. Studies of turnaround schools tend to be case studies that look back at factors that may have contributed to the school's success. This research design is particularly weak in determining causal validity for several reasons, including the fact that there is no way to be confident that the features common to successful turnaround schools are not also common to schools that fail.

The recommendations in this guide are based on a collection of case studies of low-performing schools that improved student achievement in one to three years. The panel feels compelled to emphasize that the level of evidence is *low* because none of the studies examined for this practice guide is based on a research methodology that yields valid causal inference. The recommendations are based on 10 case studies that examined turnaround practices across 35 schools: 21 elementary schools, 8 middle schools, and 6 high schools.¹¹

11. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and

Two of the documents in this review are secondary analyses of primary studies. In each case, the primary document profiles several schools, but the secondary document identifies the strategies common across successful turnaround schools. The panel's recommendations are drawn from the secondary analyses and cited accordingly.

The panel also drew from *Turnarounds with new leaders and staff.*¹² This report draws from research on turnaround schools and on organizational improvement in the business sector, providing substantial background on, and basic principles of, significant school improvement.

The panel also incorporated evidence from a related field, business turnaround. 13 Like school turnaround, business turnaround occurs when a failing business makes dramatic changes to become more successful. Often, turnaround businesses face bankruptcy or dissolution and restructure to become solvent. Schools and businesses share some organizational features, and some business turnaround practices also appear in turnaround schools. This guide draws on evidence from business turnaround to support recommendations for practices in both fields. For example, both schools and businesses that improve outcomes tend to use strong leadership to signal change early in the turnaround process.14

The evidence from business turnaround research lends support to the recommendations that schools should signal change in the turnaround process. But because businesses and schools can be very different organizations, we caution against rely-

Ouimette (2007); Whiteside (2006); Zargarpour (2005).

- 12. Kowal and Hassel (2005).
- 13. Kowal and Hassel (2005); Walberg (2007).
- 14. Ibid.

ing exclusively on the business turnaround research.¹⁵ For example, businesses often cut costs to promote turnaround, a strategy not relevant to schools. Further, businesses operate under the immediate threat of bankruptcy and termination; schools typically do not. So, this guide does not highlight practices that emerged in the business turnaround research unless they also emerged in the school turnaround research.

Readers should note that the case research on school turnarounds and the business research clearly indicates that there is no specific set of actions that applies equally well to every turnaround situation. Every school described in the case studies examined for this guide applied actions and

15. Ibid.

practices tailored to the school and local community.

Using their knowledge of school change, panel members emphasize that school turnaround encompasses a set of actions and practices. A school cannot select only one recommendation from this practice guide and reasonably expect quick results. For example, signaling change with strong leadership but not following through with visible improvement early in the school turnaround process (quick wins) could make school staff skeptical. So, readers should view these recommendations as a viable set of practices that have each demonstrated, at least in case studies, that they may work well together in turning around low-performing schools. Appendix 4 presents more information on the research evidence from the case studies to support each recommendation.

Table 2. Recommendations and corresponding levels of evidence to support each

Recommendation		Level of evidence
1.	Signal the need for dramatic change with strong leadership. Schools should make a clear commitment to dramatic changes from the status quo, and the leader should signal the magnitude and urgency of that change. A low-performing school that fails to make adequate yearly progress must improve student achievement within a short timeframe—it does not have the luxury of years to implement incremental reforms.	Low
2.	Maintain a consistent focus on improving instruction. Chronically low-performing schools need to maintain a sharp focus on improving instruction at every step of the reform process. To improve instruction, schools should use data to set goals for instructional improvement, make changes to immediately and directly affect instruction, and continually reassess student learning and instructional practices to refocus the goals.	Low
3.	Make visible improvements early in the school turnaround process (quick wins). These can rally staff around the effort and overcome resistance and inertia.	Low
4.	Build a committed staff. The school leader must build a staff that is committed to the school's improvement goals and qualified to carry out school improvement. This goal may require changes in staff, such as releasing, replacing, or redeploying staff who are not fully committed to turning around student performance and bringing in new staff who are committed.	Low

Source: Authors' compilation based on analysis described in text.

Checklist for carrying out the recommendations

Note: These recommendations are explored in greater detail in the practice guide.

Recommendation 1. Signal the need for dramatic change with strong leadership	structional staff monit and systematically m	
A change in leadership practices in the school is essential. Because the current school leader may be enmeshed in past strategies, a new leader can immediately signal change.	Recommendation 3. improvements early turnaround process	
If there is no change in leadership, the existing leader can signal change by radically altering leadership practices.	Start with a goal to be achieved quickly, a improvement.	
☐ Make the school leader the instructional leader who is highly visible in classrooms. ☐ Publicly announce changes and anticipated actions.	Develop a strated the goal that can be in for example, the schauthority and resource strategy.	
Recommendation 2. Maintain a consistent focus on improving instruction	Consider some co wins, such as changir time, improving access physical facilities, and	
Examine school-level data on student achievement to identify specific gaps in student learning.	Recommendation 4. Build a committed s	
Have teachers use formative data about individual students to analyze their instruction in light of student progress toward standards.	Assess the streng of the staff. Identify s committed to the school who do not have the other out.	
Establish priority areas for instructional focus and make necessary changes in those areas to strengthen teaching and improve student learning.	Redeploy staff me able skills but are not rent role.	
Arrange for targeted professional development based on analyses of achievement and instruction, differentiated according to teacher needs and the subject areas targeted for instructional improvement. Have staff collaboratively conduct a	Replace staff mem sist the school's turnal Recruit new staff specialized skills and sitions in the school—ists, reading specialis	
comprehensive curriculum review to ensure	instructional coaches.	

that the curriculum aligns with state and local standards and meets the needs of all students in the school. Be sure to involve teachers in the review.
Ensure that all school leaders and instructional staff monitor progress regularly, and systematically make adjustments to strengthen teaching and student learning.
Recommendation 3. Make visible improvements early in the school turnaround process (quick wins)
Start with a goal that is important, can be achieved quickly, and will provide visible improvement.
Develop a strategy for accomplishing the goal that can be implemented quickly—for example, the school already has the authority and resources to implement the strategy.
Consider some common goals for quick wins, such as changing the school's use of time, improving access to resources and the physical facilities, and improving discipline.
Recommendation 4. Build a committed staff
Assess the strengths and weaknesses of the staff. Identify staff who are not fully committed to the school turnaround goals or who do not have the qualifications to carry them out.
Redeploy staff members who have valuable skills but are not effective in their current role.
Replace staff members who actively resist the school's turnaround efforts.
Recruit new staff who have the needed specialized skills and competencies for positions in the school—such as interventionists, reading specialists, and mentors and

Recommendation 1. Signal the need for dramatic change with strong leadership

A failing school does not have the luxury of years to implement incremental reforms. Instead, leaders at the school should make a clear commitment to dramatic changes from the status quo and signal the magnitude and urgency of those changes. Leadership is key, but it alone is not adequate. The leader also needs to show that dramatic changes will be necessary to turn the school around.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low,* based on 10 case studies that describe school turnaround practices in 35 schools. ¹⁶ Of the 10 studies, 2 describe in detail the ways that schools implemented dramatic changes with strong leadership. ¹⁷ One study looked at 7 middle schools ¹⁸ and the other at 15 elementary schools ¹⁹ that participated in school turnarounds. The remaining case studies provide additional support.

Brief summary of evidence to support this recommendation

The authors of the two studies²⁰ that described dramatic changes with strong

16. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

- 17. Picucci et al. (2002a); Duke (n.d.).
- 18. Picucci et al. (2002a).
- 19. Duke (n.d.).
- 20. Picucci et al. (2002a); Duke (n.d.).

leadership identified patterns across 22 schools. The majority of the schools started the turnaround with new leaders; all underwent major changes in leadership practices.

The research points out that school leadership is a key part of school change and turnaround.21 Turnaround leadership should be anchored in school improvement practices and in strategies to make rapid and substantial changes. Although the research did not list a specific set of leadership skills and actions shared by all principals in turnaround schools, some commonalities were identified by the panel. In general, turnaround leaders demonstrated a commitment to developing a learning community for students and staff, with the primary focus of the school on learning and with staff and students working together toward that goal. Specific leadership actions were framed in a child-centered lens and the belief that staff should have the skills and knowledge to provide strong instruction.²²

School leaders also signaled change by:

- Communicating a clear purpose to school staff.
- Creating high expectations and values.
- Sharing leadership and authority.
- Demonstrating a willingness to make the same types of changes asked of their staff.
- Identifying advocates within the staff.
- Building a consensus that permeated the entire staff.

^{21.} Whiteside (2006); Picucci et al. (2002a); Rhim, Kowal, Hassel, and Hassel (2007); Duke (n.d.); Johnson and Asera (1999).

^{22.} Johnson and Asera (1999).

- Eliminating any distractions to ensure that the maximum amount of classroom time was focused on instruction.
- Establishing a cohesive culture.²³

School leaders committed to the turnaround effort worked toward integrating these principles into their daily practices.

The business research on leadership indicates a broad set of leadership actions in business turnaround.²⁴ Turnaround leaders figured out what actions would get rapid results and demonstrate an upward trend quickly. They implemented practices that deviated from the prevailing norms. They analyzed performance data. And they relentlessly focused on results.²⁵ These actions were a catalyst for change to build future successes.

Strong turnaround leadership sometimes met resistance. ²⁶ In several instances, school leaders who took dramatic steps to turn a school around faced calls from parents to resign or be removed. In the face of this resistance, leaders had to remain focused on the goal of raising student achievement. Gradually, teachers saw positive changes and became less resistant. Turnaround leaders learned to strike the right balance between demanding change and developing a collaborative culture within the school and among staff members.

How to carry out the recommendation

1. A change in leadership practices in the school is essential. Because the current school leader may be enmeshed in past

- 23. Picucci et al. (2002a).
- 24. Kowal and Hassel (2005).
- 25. Rhim et al. (2007).
- 26. Picucci et al. (2002a); Duke et al. (2005).

strategies, installing a new principal can signal change.²⁷ The case studies on school turnarounds have numerous instances of new principals being catalysts for change.²⁸ Teachers often cited the new principal as the motivating force.²⁹ Case study research on school turnarounds indicates that strong leadership is a critical element of the turnaround process.³⁰

In successful turnaround schools, new principals came into the schools with a clear purpose, ready to share responsibility for turning around the school. They immediately began to set clear expectations for students and faculty. They initiated a culture of change from the first day, letting teachers and students know that a defeatist or business-as-usual attitude would not be accepted. They sent the message that everyone—including administrators—needed to change the daily school operations and the way instruction was delivered.

Although new principals entered their school with a determination to raise student achievement, they did not act rashly. Instead, they spent long hours studying the school and its needs. But they still took steps to move the school forward with some immediate changes.

2. If a change in leadership does not take place, the existing principal may signal change by substantially reforming leadership practices.³¹ Although this can be quite challenging for a principal in a low-performing school, it is possible to radically alter leadership practices and develop a new culture that

- 27. Murphy and Meyers (in press).
- 28. Duke et al. (2005); Johnson and Asera (1999); Duke (n.d.).
- 29. Picucci et al. (2002b).
- 30. Whiteside (2006); Picucci et al. (2002b); Duke (n.d.).
- 31. Duke et al. (2005); Duke (n.d.).

will signal change to the staff.³² Key ingredients are recognizing the need to change and possessing a willingness to try new things to raise student performance. This willingness can come from a study of school improvement theory, research, and practice.³³

The established principal should examine and then eliminate the factors that impede change, by becoming an instructional leader and observing and monitoring classroom instruction.³⁴ The principal could also begin creating conditions that support teaching and learning in the school. In 5 of 15 schools in a case study report, the school leader did not change; instead, the leadership actions changed.³⁵

Typical leadership actions that signaled change in the turnaround school studies were establishing a stronger direction for the school, such as spending more time in classrooms and throughout the school; monitoring teacher and student performance; becoming more accessible to staff and students; and dealing directly with discipline issues.³⁶

One principal attended a specialized turnaround leadership program and initiated the turnaround process after one year as principal. Knowing that the school was low performing, she sensed that the staff were eager for change and wanted to see the school raise its student achievement. To signal change and begin to develop targeted goals for the school, she began by analyzing different types of data, such as student achievement, discipline, class size, staffing, and use of instructional time. She brought the staff into the process to identify what was or was not working, and

after these initial steps, began to eliminate practices that were not working.³⁷

Principals can signal change by modifying their personal style of leadership in the school. For example, they can change their style by sharing responsibility for learning more openly among all staff, stakeholders, and the administration, by placing an increased value on mutual support, and by ensuring the well-being and safety of students and staff.³⁸

Principals can also develop shared leadership by appointing a leadership team or lead teachers.³⁹ By establishing shared leadership structures and nurturing lead teachers, principals can strengthen the voice of teachers in school decisions and in assuming responsibility for results.

3. Through partnerships, schools can publicly announce changes and planned actions.⁴⁰ As in the business world, they may want to embark on a marketing campaign, which can take many forms.

One case study of an urban middle school describes an aggressive community campaign to "sell the school to local residents." The principal led the effort to change the perception of the school. He held coffees with parents and community members and met with parents of prospective students, among other activities, to educate the community. He also reached out to the larger urban community, including institutions of higher education, to solicit partnerships for additional resources. Outreach should not only "sell the school" but also "sell the fact that change must and has come to the school."

^{32.} Kowal and Hassel (2005).

^{33.} Whiteside (2006).

^{34.} Duke (n.d.).

^{35.} Duke (n.d.); Picucci et al. (2002a).

^{36.} Duke (n.d.).

^{37.} Duke et al. (2005).

^{38.} Duke (n.d.).

^{39.} Ibid.

^{40.} Kowal and Hassel (2005).

^{41.} Picucci et al. (2002b), p. 33.

In a turnaround middle school, the principal wanted to "reawaken the hallowed history" of the school.⁴² The school's sense of community was reignited through a large 75th anniversary gala for the local community.

In another example of a public campaign, the principal of a large urban high school began the turnaround process, but after a year in which initial progress had been made, the district decided to close the school. The principal, determined to see the school improve, embarked on a public campaign. With support from faculty, students, and parents, the community mobilized a campaign and persuaded the district to keep the school open and to support the principal's proposed direction for the school's vision and efforts toward reform.⁴³

Potential roadblocks and solutions

- 1. Staff may be convinced that the school does not have the potential to change or will never change. Some staff believe that reforms "come and go," so they can patiently wait out this set of reforms. When leaders in the school can couple signaling change with quick wins (see Recommendation 3), they may be able to dispel the entrenched mind-set that the school will never change.⁴⁴
- 2. If leadership does not change, the leaders may find it much harder to signal change immediately. They may not be able to separate themselves from the policies and practices that prevented changes in the past.⁴⁵ In such situations, the district may want to consider providing specialized training for its principals through established programs that focus on intensive training in turnaround

leadership skills, develop a school turnaround plan with a district team, and collaborate with a school support team on such content areas as data analysis, target setting, and action plans.⁴⁶

Principals can do other things to build stronger leadership for the turnaround:

- Visiting and learning from other schools that face similar challenges.
- Immersing themselves in student benchmark and achievement data and such nonachievement data as disciplinary referrals, class size, and use of instructional time to make informed decisions for the school.
- Engaging in additional instructional support activities.
- Drawing on district resources for help in responding to problems constructively.
- Seeking professional development focused on leadership.⁴⁷
- 3. Signaling change may be difficult when the prevailing community perception of the school is negative. 48 School leaders may need to initiate a public campaign in the community to develop immediate support. In one case study, parents had little confidence in the school, feeling that many students did not receive a quality education. To bolster the community's trust, the principal initiated early morning meetings with parents when they dropped off their children at school, videotaped classroom and special activities for parents, and invited parents to observe classes. 49

^{42.} Whiteside (2006).

^{43.} Tung and Ouimette (2007).

^{44.} Duke (n.d.); Johnson and Asera (1999); Kowal and Hassel (2005).

^{45.} Duke (n.d.).

^{46.} Kowal and Hassel (2005); Duke et al. (2005).

^{47.} Johnson and Asera (1999).

^{48.} Picucci et al. (2002a).

^{49.} Johnson and Asera (1999).

Recommendation 2. Maintain a consistent focus on improving instruction

Turnaround schools focus on improving instruction at every step of the reform process. Turnaround schools use data to set goals for instructional improvement, make changes to affect instruction immediately and directly, and continually reassess student learning and instructional practices to refocus the goals.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low,* based on 10 case studies that describe turnaround practices in 35 schools.⁵⁰ All 10 studies describe in detail the ways that turnaround schools maintained a consistent focus on instruction.

All schools in the case studies focused on improving teaching and student learning by analyzing student assessment and classroom data; and regularly monitoring progress and adjusting strategies.

Brief summary of evidence to support this recommendation

Low performance on standards-based assessments is common for schools in need of turnaround. All schools in the case studies focused on improving teaching and student learning by analyzing student assessment and classroom data, establishing goals for instructional improvement in targeted subject areas, using the goals and

50. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

data to make changes designed to directly affect instruction, and monitoring progress regularly and adjusting strategies.⁵¹

In a case study of seven schools, "the study schools used common elements that led to change, including building a shared purpose; reflecting on the existing setting before implementing change; planning and implementing improvement strategies; and re-evaluating their efforts." The study explicitly listed the elements that emerged from all of the studies: set common goals, look at data to plan, and monitor progress.

Using data to set goals. All the schools in the case studies used data to set instructional goals.⁵³ Data included school average student test scores, but went beyond that. In 3 of the 10 case studies, researchers note that the schools collected and analyzed a range of data in addition to achievement test results. ⁵⁴ In 1 study of an elementary school, the principal and teachers collected and analyzed data on the school's climate, its sense of community, and its curriculum and instruction.⁵⁵

In addition to looking at diverse types of data, turnaround schools considered data at three levels: at the school level to focus on areas that needed schoolwide improvement to meet adequate yearly progress, at

- 51. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).
- 52. Picucci et al. (2002a), p. ix.
- 53. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).
- 54. Conzemius (2000); Lachat and Smith (2005); Zargarpour (2005).
- 55. Conzemius (2000).

the classroom level to focus on teachers' instructional strengths and weaknesses, and at the student level to focus on instructional needs of individual students.

At the school level, data were used to identify instructional areas that needed schoolwide improvement. The turnaround schools consistently used data on student achievement to identify gaps in student learning.56 In one study of 7 middle schools, every one of the schools used school performance data to determine areas of teaching and learning that needed improvement.⁵⁷ The schools developed systems to help teachers understand and use the data to guide their teaching, disaggregating data to indicate specific areas of weakness in instruction. In addition, the schools developed processes for defining target areas for schoolwide change. In one case study of 10 schools, 8 realized that they did not have access to sufficient data on student achievement to guide their decision-making and so worked to obtain the necessary data.58

At the classroom and program levels, data were used to determine areas of weakness for targeting improvement efforts. One study of turnaround efforts showed that five urban high schools collected a wide variety of data regularly over four years, disaggregating the data by student demographics and participation in school programs, such as special education and remediation classes.⁵⁹ They used this information to focus their improvement efforts on specific programs and classes. In addition to disaggregated test data, the schools used principal and peer observations to better understand what was happening in the classrooms and to identify instructional needs.

56. Ibid.

57. Picucci et al. (2002a).

58. Duke et al. (2005).

59. Lachat and Smith (2005).

At the student level, data were used to plan instruction to meet individual needs. For example, most of the seven turnaround schools in one study disaggregated performance data by grade level, learning objectives, responses to individual items, and other factors. They then used the disaggregated data to identify individual students who needed help on specific skills.60 One principal described the process: "First, look at the data for trends to see what we're doing as teachers. And then you look at individual kids and where they fit in... And they can refer to that [data] and see where kids have strengths and weaknesses in their classrooms."61 In another study, three elementary schools established Data Action Teams that gathered information from teachers on student performance and analyzed student work samples. They applied a set of standard templates and protocols specific to the different data sets to help teachers use the data to guide policies and practice.62

Changing instruction to meet goals. All schools in the case studies made changes to directly improve instruction.⁶³ Some common approaches were teacher collaboration for instruction and instructional planning, targeted professional development in specific areas, and careful reviews of curricula to ensure that the curricula focused on essential content and addressed state standards.

All nine schools in one case study took steps to involve teachers more directly in targeting specific areas for improvement in teaching across the school.⁶⁴ The

^{60.} Picucci et al. (2002a).

^{61.} Picucci et al. (2002a) p. 43.

^{62.} Zargarpour (2005).

^{63.} Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

^{64.} Johnson and Asera (1999).

principals guided the planning processes and kept teachers focused on improving instruction. Teachers met in teams, reviewed student work against standards, and used this information to target specific areas for instructional improvement. In one school, teacher teams used disaggregated standardized test scores to identify students who were not reading at grade level for additional academic support, such as one-on-one tutoring.65 In another, the teams developed a tool to monitor student growth in mathematics, used those data to focus instruction on specific mathematics objectives that students had failed, rechecked student performance on the objectives, and further focused the instruction.66

Professional development focused on instructional goals. Once teachers identified specific subject areas to focus on, the principal identified and commissioned intensive professional development to improve teaching in those areas. The schools described in the case studies relentlessly focused on improving teachers' skills and shoring up gaps in their content knowledge and instructional skills.⁶⁷

The approaches to professional development varied, but all involved collaboration and a focus on instructional goals. Seven middle schools in one study engaged teachers in an array of professional development opportunities targeted at improving teaching in critical subject areas. Eachers shared common planning time, participated in workshops on using data to guide instructional decisionmaking, and

received regular support from a designated staff member, such as a lead teacher, instructional facilitator, or reading or mathematics coach. In another study, teachers were organized into vertical teams across grade levels with the goal of creating professional learning communities that offered their own professional development.⁶⁹ The teacher teams planned lessons to ensure alignment across grade levels. They also attended summer workshops and used friendly observers in classrooms to give individual teachers direct feedback on their teaching. One elementary school developed weekly faculty workshops focused on skills that contribute to a good learning environment, such as time management and classroom management.⁷⁰

School personnel also examined the curriculum. In one case study of nine elementary schools, all reviewed their curricula and aligned them with the applicable standards and assessments.⁷¹ A careful curriculum review helped ensure that teachers were teaching the skills and knowledge that students needed to succeed on assessments.

Two case studies described schools that decided to overhaul their curriculum.⁷² One middle school became a discovery academy consisting of four separate houses, each focusing on a related cluster of academic subjects, such as mathematics, science, and technology.⁷³ A high school that originally focused on vocational training refocused its curriculum on academics and preparation for postsecondary education.⁷⁴

^{65.} Ibid.

^{66.} Ibid.

^{67.} Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005)

^{68.} Picucci et al. (2002a).

^{69.} Conzemius (2000).

^{70.} Duke et al. (2005).

^{71.} Johnson and Asera (1999).

^{72.} Duke et al. (2005); Tung and Ouimette (2007).

^{73.} Duke et al. (2005).

^{74.} Tung and Ouimette (2007).

Monitoring progress and making ad**justments.** Once schools identified specific instructional areas in need of improvement and established a plan to improve teaching in these areas, they continually monitored instructional practices and student achievement against goals.⁷⁵ All schools in the case studies used benchmark assessments or systematically monitored progress.⁷⁶ The principal of one elementary school established a school database tracking system to store information on student progress on benchmark assessments for easy access by all teachers.⁷⁷ The principal also showed teachers how to disaggregate the data, create spreadsheets, and conduct item analysis to help monitor student growth on the benchmark assessments. With this information, staff members could refine the school improvement plan and regularly adjust instruction.

A case study of nine urban elementary schools found that the principals, sometimes with the school planning teams, monitored progress by continually analyzing student data, conducting classroom observations, and analyzing student work to determine the adjustments needed in instruction. Principals spent a large part of their time in the classrooms—as much as 40 percent in one school—to observe teaching and improve instruction. Common adjustments in strategies entailed adding professional development in teaching-specific skills and resources, such as supplemental curricula.

- 76. Ibid.
- 77. Duke et al. (2005).
- 78. Johnson and Asera (1999).
- 79. Ibid.

How to carry out the recommendation

1. Turnaround schools need to examine student achievement data to identify gaps and weaknesses in student learning. Principals can establish a data leader or data teams to organize and lead the effort. They can examine student learning through standards-based assessments and classroom assessments. Using the state assessments or other measures aligned with the state standards helps ensure that the progress in learning will result in higher achievement on high-stakes tests. School personnel can also look at data on factors that contribute to or impede student learning, such as attendance, discipline, and fiscal expenditures. In secondary schools, principals and other staff can examine data on course selection, course enrollment patterns, and course failure rates to identify other problem areas.80

For example, one middle school⁸¹ studied student discipline referral data to understand when and why disciplinary problems occurred. These data indicated that a change in lunchroom procedures could reduce disciplinary problems that seemed to occur most often during lunch. The school also examined why students were assigned to in-school suspension and discovered that the majority of students were there for minor problems. To solve the discipline issue and keep students from missing instruction, the school staff developed new guidelines for in-school suspension.

2. Teachers can use data to analyze their instruction in light of student progress toward standards.

One case study school demonstrated the importance of using data to guide instruction. The data standards team analyzed student assessments and identified the

^{75.} Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

^{80.} Lachat and Smith (2005).

^{81.} Picucci et al. (2002b).

need for more emphasis on vocabulary and reading comprehension. In response, the teachers used visual and nonlinguistic representations as graphic organizers to enhance their instructional practice.⁸²

Another example of the use of data included work in an elementary school where the principal⁸³ met weekly with teachers by grade level to look at data to guide instruction. Each week, teachers generated a test for each of the core subject areas and data sheets showing the results of the previous week's tests. The previous week's data guided team planning. Teachers and the principal discussed individual student progress and identified areas where students needed additional instruction. In this way, teachers began to differentiate instruction. Staff used weekly test data to regroup students across the grade level and to plan targeted instruction to address the students' particular learning needs.

3. Drawing on the results from the analysis of student achievement data and the curriculum review, principals and staff need to determine specific areas of weakness in instruction, establish priority areas for instructional focus, and make changes in those areas to strengthen teaching and improve student learning. Once schools have identified subject areas or instructional practices that need to be strengthened, staff members need to develop a plan with specific steps for improving instruction.

For example, the principal and teachers in one school determined that reading achievement was low, particularly in the comprehension of expository text. They also found in their curriculum review that teachers did not have enough lessons and strategies to use when teaching this literacy skill. The staff developed a plan that included having teachers work together to

4. The school leader should become the instructional leader and be highly visible in classrooms. Strong instructional leadership shows the importance of strengthening instruction that is aligned to standards, curricula, and assessments and guided by ongoing data analysis of both achievement and non-achievement outcomes.⁸⁵ The principal needs to set an example, lead the effort, and maintain vigilance toward the targeted, measurable goals.⁸⁶

In one case study, the principal and the assistant principal made short, regular classroom observations. These observations gave school leaders informal and impromptu opportunities to see what instruction was like in classrooms throughout the school. The leaders prepared a one-page summary of the observation within 24 hours to share and discuss with the teacher. Rather than become part of the teacher's formal professional record, the summary was used to hone instructional practices.⁸⁷

In another study, principals in turnaround schools indicated that they spent a lot of time in classrooms, monitored teachers closely, modeled good teaching practices, and were highly visible throughout the

develop additional lessons for this skill. They used professional development for teachers to learn how to teach comprehension more effectively, targeted interventions for students who demonstrated the lowest achievement on the skill, and purchased supplemental materials for comprehension instruction. Teachers also recommended providing additional time for reading by lengthening the reading instructional block by 30 minutes a day.⁸⁴

^{82.} Zargarpour (2005).

^{83.} Duke et al. (2005).

^{84.} Johnson and Asera (1999).

^{85.} Murphy (2007).

^{86.} Picucci et al. (2002a).

^{87.} Whiteside (2006).

school. They were also involved in every phase of instructional planning.⁸⁸

5. Professional development should be based on analyses of achievement and instruction and differentiated for teacher needs and the subject areas targeted for instructional improvement. Teachers need content knowledge and pedagogic knowledge (such as how students learn to read and what the key parts of reading instruction are). They also need instructional strategies for teaching the knowledge and skills to students (such as explicitly showing students the thinking skills needed to comprehend expository text).

Professional development can be delivered in many ways. Schools may choose to combine one or more strategies for providing intensive professional development. For example, several teachers at one urban elementary school89 participated in weekly mathematics and science classes at a nearby technology institute. The school provided substitute teachers to cover their classrooms. Following the classes, experts from the institute visited the teachers and observed their instruction, providing coaching and support as needed. This intensive and targeted professional development helped teachers directly apply new skills and content knowledge to their teaching. Additional resources for professional development include:

- Staff members dedicated to providing job-embedded professional development, such as a full-time reading or mathematics coach.
- Teachers identified as skillful in a particular instructional topic and who model lessons for colleagues, observe them teaching, and provide structured feedback.

- External technical assistance providers who visit the school regularly to work directly with teachers.
- Specialized learning academies that provide content knowledge.

Schools can also provide pedagogic and structural supports to deepen the learning experience and foster greater collaboration among teachers. For example, schools may arrange teachers into grade-level, vertical, or subject-area teams that meet regularly to plan lessons and share teaching strategies.

As a school implements its professional development plan, it should provide the necessary supports, such as instructional coaches, so that teachers can translate their learning into their daily teaching. The school's capacity to give teachers ongoing support is thus important when selecting the strategy for professional development.

6. Conducting a comprehensive curriculum review can ensure that the curriculum aligns with state and local standards and meets the needs of all students. Teachers need to be involved in the review. But it may also be desirable to seek outside assistance from a curriculum specialist or another person with expertise in aligning a curriculum with standards. Teachers should understand the standards, the specific curriculum units or lessons that address them, and the methods effective for teaching those lessons.

In this review, teachers can pose such questions as the following:

- Does the curriculum include instruction in all the standards for the subject area?
- Is there a need to provide supplemental materials or curriculum to address gaps in key skills or topics?

^{88.} Duke (n.d.).

^{89.} Ibid.

- Is the curriculum compatible with research-based practices?
- Are the instructional units and lessons in the curriculum designed for teachers to provide explicit, systematic instruction?

A careful and thorough examination of curricula can be accomplished in a number of ways. One turnaround school leader provided stipends for teachers to meet in early mornings for 16 weeks to align the curriculum with standards and to prepare lessons aligned to the standards.⁹⁰

In one school, the principal led the curriculum review and worked with teachers on specific curriculum alignment projects for science and mathematics.⁹¹ Another school formed a committee of science teacher representatives from each grade level.92 The committee reviewed the curriculum and realized that although some objectives were taught at every grade level, others were not clearly addressed. Their review raised concerns about the way the curriculum was addressed at different grade levels and the school began to create an aligned curriculum. Because this process helped the science teachers, the mathematics teachers launched a similar effort looking specifically for gaps in the mathematics curriculum.

Teachers in another elementary school held weekly grade-level meetings to develop daily instruction plans aligned with both the state standards and the performance expectations at the school. Teachers periodically met with other grade levels to ensure that lessons were clear and well articulated throughout the school.⁹³

90. Picucci et al. (2002b).

91. Ibid.

92. Ibid.

93. Almanzán (2005).

Another school organized its staff into teams spanning two grades as a way to improve alignment. District personnel provided computer programming and technical assistance to help the teams develop curricula and assessments aligned to standards.⁹⁴

7. School leaders and teachers need to continually monitor data, looking for ways to improve instruction. They should monitor progress regularly and make adjustments as needed to strengthen teaching and student learning.

Principals can take the lead in monitoring progress by making daily or frequent classroom walkthroughs, reviewing lesson plans, and critiquing lessons. Teachers can work in teams and with the administration to monitor student progress and identify students who need additional support. All staff in turnaround schools need to make decisions guided by data and provide sharply focused support for teachers to improve their instruction so that students improve their learning.

Potential roadblocks and solutions

1. Careful data analysis of student achievement to improve instruction may be new and unfamiliar to teachers. Teachers may also fear reprisals or negative consequences if their classroom data are carefully scrutinized. The systematic use of data requires teachers to shift their attitudes toward solving problems rather than pointing fingers. The turnaround leader can facilitate and model this change in attitude and practice. The principal can also become immersed in the data to support and guide teachers. At times, an outside facilitator or specialized training may be necessary to help teachers fully understand the different types of data and the ways to use these data to further student learning.95

95. Lachat and Smith (2005).

^{94.} Conzemius (2000).

Researchers described three urban high schools that collaborated with the district's data-system personnel to create a Data Access Plan. The plan included such details as what type of data the schools needed, when the data were needed, and what questions the staff hoped the data would answer. The schools used quarterly data to determine student attendance and course failure rates and had timely access

96. Ibid.

to the data needed to continue to improve student achievement.

2. A faulty plan, a resistant staff or community, or a feeble or inept commitment to change can derail the turnaround. To change instructional practices and improve learning, the learning goals must be realistic, and the changed practices must be sufficient and appropriate to produce the desired results. So, the turnaround plan must be grounded in good data, understood by the school community, executed competently, and modified with experience.

Recommendation 3. Provide visible improvements early in the turnaround process (quick wins)

Quick wins (visible improvements early in the turnaround process) can rally staff around the effort and overcome resistance and inertia. ⁹⁷ Certain outcomes that matter to the school can result from changes made quickly at the administrative level without needing teacher buy-in or approval from the district. Although these initial changes may not improve student achievement immediately, they can set the tone for change. A short-term focus on quick wins can establish a climate for long-term change. ⁹⁸

Principals may at times feel that they face insurmountable chaos. But when they identify one or two clear goals that can be accomplished quickly, the positive results show that it is possible to reach a school's overarching goal—raising student achievement. So, it is important to identify issues that can be addressed quickly and with noticeable success.⁹⁹

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low,* based on 10 case studies that describe turnaround practices across 35 schools.¹⁰⁰

97. Kowal and Hassel (2005).

98. Picucci et al. (2002b).

99. Johnson and Asera (1999).

100. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

One study of nine elementary schools shows particularly clear examples of visible improvements early in the turnaround process.¹⁰¹

Brief summary of evidence to support this recommendation

In case studies of multiple schools, researchers identified quick wins as a common strategy for successful turnarounds. This strategy was also prevalent (although not always explicitly acknowledged by researchers) in the case studies of individual schools and in the business turnaround research. 103

In one case study of nine elementary schools that demonstrated significant academic gains, school leaders quickly identified and pursued one or two goals that could be met in a short time. ¹⁰⁴ In several schools, the principals faced such immediate problems as weak student discipline, parental dissatisfaction, and low teacher morale. In response, the principals chose one area to make progress quickly. The quick wins sent a clear message that the schools were changing.

The focus of the quick wins depended on the needs of the school. But some areas were particularly important and open to rapid change: the use of time, ¹⁰⁵ resources and the physical plan, ¹⁰⁶ and student discipline. ¹⁰⁷

101. Ibid.

102. Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b) Zargarpour (2005).

103. Conzemius (2000); Murphy and Myers (in press); Rhim et al. (2007); Tung and Ouimette (2007); Whiteside (2006).

104. Johnson and Asera (1999).

105. Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Picucci et al. (2002a,b).

106. Ibid.

107. Ibid.

Changing the use of time was a quick win for several turnaround schools: thoughtful changes improved student achievement. Some turnaround schools changed instructional schedules to maximize learning time, 108 others the way teachers could use time for planning. 109 Most often, the schools created common planning times for teachers through grade-level planning teams or content teams in secondary schools. 110

Changing instructional time also involved student teams in middle schools so that all students on the team shared a common group of core subject teachers. This arrangement allowed teachers to know their students better and to collaborate on meeting individual student needs.¹¹¹

Common planning time for teachers can improve instruction and student discipline—a vehicle for problem-solving and brainstorming while keeping the focus on raising student achievement.¹¹²

Although no clear evidence links student achievement to changes in the use of instructional time, teachers felt that their instruction improved.¹¹³

Improving the physical plant was also a quick win in multiple turnaround schools. One principal removed displays that had been posted on the walls for years and put up new displays of student work every two to four weeks. Both parents and teachers appreciated the clean, attractive, and stimulating environment. Staff at another school established a school beautification committee, resulting in a neat and clean building, a fresh coat of white paint,

colorful murals and maps, and new flower beds in front of the school.¹¹⁴

Attending to student discipline was another quick win in the case study research. A carefully designed student behavior plan facilitated learning by reducing disruptions and increasing the time and attention that teachers could devote to instruction. Such plans included having teachers and administrators be a visible presence throughout the school during class changes and before and after school. At times, additional strategies were put into place, such as locking all entrances other than the main entrance, reducing transitions between classes, eliminating bells and lockers, and minimizing interactions between younger and older students in the building. Throughout the case study research, reducing disruptive behavior and developing a safe and orderly learning environment could be put into place quickly to initiate the turnaround. 115

How to carry out the recommendation

1. Having set goals for the turnaround, school leaders should identify one or two that build on the school's needs and strengths, are important to staff, and can be achieved quickly. A narrow goal ("increasing the reading achievement of English language learners on a high-stakes test") can be achieved faster than a broad goal ("increasing the achievement of all students in all subjects").

2. School leaders should consider strategies that minimize dependence on others for decisions or financial support. A strategy that requires district review and approval or district funding is unlikely to be implemented quickly. Similarly, changing the way teachers approach their work might require a

^{108.} Picucci, et al., (2002a).

^{109.} Ibid.

^{110.} Ibid.

^{111.} Ibid.

^{112.} Ibid.

^{113.} Ibid.

^{114.} Ibid.

^{115.} Picucci et al. (2002a); Duke et al. (2005); Johnson and Asera (1999).

consensus among all teaching staff, which takes time. School leaders should think about strategies that they have the authority and funds to implement and that do not require wholesale involvement of all school staff.

For example, putting alarms on school exits may cut midday truancy faster than having teachers meet individually with parents of chronically truant students. Quick wins do not preclude long-term strategies. In the truancy example, the school might immediately reduce midday truancy with alarmed exits and then follow up with teacher-parent meetings once staff are committed to the changes.

3. One goal that a school may set for a quick win is to change the way it uses time—change that can be pursued quickly, with immediate effects on instruction.

School leaders can adjust schedules to improve the functioning of the school, to provide time for academic support, and to give teachers time to collaborate on analyzing data and planning aligned instruction.

If a low-performing school struggles with maintaining its focus on academics, an adjustment in the schedule to ensure uninterrupted blocks of instructional time could provide an immediate reorientation toward academics. Several secondary schools limited student access to electives until the students were performing at grade level. The time they would have spent on electives was spent strengthening their basic academic skills. Core academic classes could not be interrupted for assemblies, counselor visits, or other activities that would take away from instructional time. 116

Teachers in one school started a Discovery Room, open throughout the school day and staffed with an experienced teacher.

Students could go there for extra help, especially during electives or lunch.¹¹⁷

At another school the principal—after noting that the breakfast program had turned into an opportunity for parents to linger throughout the morning and distract their children from instruction—changed things. Parents were instructed to say goodbye at the door, and breakfast was served in the classroom. So, instruction began without distractions within 15 minutes of student arrival at the school. Parents were welcome, but the school did not become a gathering place for them to socialize and to come and go as they pleased. 118

4. Some schools changed the schedule to provide common planning time, an immediate benefit for teachers. 119 Teachers felt that the meetings were a critical element of their work, especially when a specific day, time, and agenda were set. The meetings also provided stability and continuity in the collaboration and planning process. 120 But some teachers did not know how to make the most of the planning opportunities. So, in several case studies, the schools hired an outside facilitator or went to the district for specialized technical assistance.121 School leadership can also support productive collaboration, aligning practices to goals and maintaining focus. 122

Although staff collaboration can take time to develop, some schools had a small group of staff members that were frustrated with the lack of improvement and ready to quickly initiate collaboration among colleagues.¹²³ Communicating their

^{117.} Ibid.

^{118.} Duke et al. (2005).

^{119.} Zargarpour (2005).

^{120.} Ibid.

^{121.} Picucci et al. (2002a).

^{122.} Zargarpour (2005).

^{123.} Picucci et al. (2002a).

commitment to working with other staff more hesitant to collaborate, they stimulated opportunities to talk with one another, share ideas and lesson plans, and plan instruction as teams rather than as individuals.

5. If a school decides to improve access to instructional materials, textbooks, and basic school supplies for a quick win, the principal can do several things to produce quick results. All textbooks and supporting materials should be ordered and immediately available to staff and students. If the district procurement system is complex, the principal can designate a staff member to learn how to navigate the system and follow up on orders. Teachers also need a workroom with a copy machine, phones, and computers, in addition to a place to relax, mingle with other teachers, and hold grade-level team meetings.

Teachers in some schools, thinking of their instructional materials as "their own," may not be inclined to share their successful approaches or materials with other teachers. A well organized resource room can overcome this tendency. Some turnaround schools created a Teacher Resource Room that combined many of these functions and instructional materials and professional resources. But a new mindset must accompany the physical changes. Principals can help teachers adopt this new mindset when materials are available when they need them.

Basic school supplies should be provided to all teachers. At times, teachers may have felt that basic supplies, like colored pencils and staplers, were in short supply, so they hoarded them for a rainy day. A careful analysis of spending patterns across departments may reveal some unevenness in supplies.

6. Immediate improvement of school facilities, such as painting, fixing broken fixtures, and cleaning school grounds, can signal

change and a quick win.¹²⁴ It is likely that the staff and the community will notice the improvements in the school's appearance. At times, simply replacing worn displays with new displays that change periodically is effective. Big improvements in a school's appearance can also be accomplished by working closely with the building engineer, who can do many little things to improve the learning environment in classrooms, such as maintaining stable room temperatures.

Painting the school is not always feasible. But maps, murals, and wall posters can make drab hallways bright and colorful. Students at the school or older students from a nearby secondary school can paint colorful murals and pictures in the hallways.¹²⁵

Other examples of quickly improving facilities are replacing broken chairs, painting lockers, displaying student work, and buffing floors. Before the school year began, one principal took immediate action to clean up a dirty, cluttered school. The administrator met with the custodial staff and district personnel to create and supervise a plan to clean up the school's environment before students arrived. 127

7. Establishing a safe and orderly school environment is another quick win.

One urban middle school set rules for behavior that were simple and strictly enforced. Gangs were prevalent, and school safety was a primary concern. The school administrators and safety officer maintained a vigilant presence at various entrances when students arrived in the morning and were dismissed in the afternoon. Boys and girls entered through different

124. Ibid.

125. Ibid.

126. Picucci et al. (2002b).

127. Duke et al. (2005).

entrances, and fighting and inappropriate language were prohibited.¹²⁸

Another middle school sought parent assistance in discipline. The dean of students called every parent of every child who had a disciplinary issue and asked the parent to come to the school that day to reinforce the urgency of correcting the behavior. Teachers also had more autonomy in addressing disciplinary problems. The administration made it known to parents that students who came to school late would stay late to compensate for the lost instructional time. Indiscriminate tardiness was not tolerated.¹²⁹

In one example of out-of-control student behavior, a low-performing middle school with 500 students logged 1,181 disciplinary referrals in one fall semester. The school made sweeping changes to the school schedule in the next fall semester, and disciplinary referrals dropped to 205. The district also created a special alternative program for referring over-age middle schoolers with discipline problems. The school's willingness to send students to this program sent a clear message that inappropriate behavior would not be tolerated.¹³⁰

Potential roadblocks and solutions

1. A failing school needs to change in many areas, and parents and school and district staff may push for addressing many goals simultaneously and immediately, making it difficult to focus on any one goal. The principal must be willing to keep the focus, even when pressured to broaden the goals pursued. Setting a goal that is clearly a priority for most stakeholders eases that pressure by ensuring an initial base of support. Setting a very short timeline for accomplishing that goal can also help. A quick win on one goal and turning right away to other important goals can help staff and parents feel that their concerns will eventually be addressed.¹³¹

2. A quick win that is not sustained becomes yet another example of the transience of school reform and fodder for those who resist change. Accomplishing a quick win can persuade school staff that the school can and will change. But it is equally important to follow up the quick win with strategies to sustain that success. Cleaning and fixing the school could be followed with regular inspections and maintenance. Establishing a resource room for teachers could be followed with funds set aside to continually update the room. Providing uninterrupted blocks of instructional time could be followed with a review of how that time was used and professional development for teachers to use large blocks of time.

131. Murphy (2007).

^{128.} Whiteside (2006).

^{129.} Duke et al. (2005).

^{130.} Ibid.

Recommendation 4. Build a committed staff

The school leader needs to build a staff that is committed to the school's improvement goals and qualified to meet them. Changes in staff may be required, such as releasing, replacing, or redeploying those who are not fully committed to turning around school performance or bringing in new staff to better meet the goals. Some teachers in a low-performing school may retreat to their classrooms to avoid the larger, perhaps negative, school climate. 132 Breaking this pattern may require changes in staff or in the ways that some staff are used. This recommendation focuses on having the right staff in the right places. Professional development to help staff reach the school's goals is an essential element of all school reform efforts and should be part of turnaround schools. That is not unique to turnaround schools, however, so it is not the focus of the discussion here.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low*, based on 10 case studies that describe turnaround practices across 35 schools. One study of 15 turnaround schools is especially relevant for this recommendation. The remaining 9 studies

132. Johnson and Asera (1999).

134. Duke (n.d.).

also showed turnaround schools building committed staff.¹³⁵

Brief summary of evidence to support this recommendation

A common thread from the case study research was the care that school leaders took to choose the right staff for the school and to deploy staff members carefully to meet the student needs. School leaders needed to make certain that the selected staff fit the vision of the school and its context. Not all teachers were trained and prepared to work with a challenging student body. School leaders highly valued teachers who accepted their students at their individual starting points, both academically and behaviorally, and who were committed to working with students to raise their level of achievement.

Case study research indicates that successful schools had a shared common purpose and a belief that all students can learn.¹³⁸ Thus, building a committed staff was essential, with everyone of the same mindset. A cohesive staff also set high expectations for instruction, with everyone's efforts focused on improving student performance. A committed staff displayed this mindset by caring about students, building pride in the school, the staff, and oneself, demonstrating a willingness to be diligent, and doing whatever

135. Conzemius (2000); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

136. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

137. Whiteside (2006).

138. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

^{133.} Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

it took to meet goals and raise student achievement. 139

A committed staff built strong professional relationships among colleagues, possibly improving instruction and teacher satisfaction. It was easier to build close relationships at a small school than at a large school, but large schools built structures to connect colleagues and create a small-school feel.¹⁴⁰

In one analysis of 15 turnaround schools, all the case study schools made some staffing changes. ¹⁴¹ Principals of 9 schools took action to remove staff who did not have the skills to raise student achievement or who were not committed to the effort. ¹⁴² In 11 schools, principals created one or more new positions, such as program coordinators or reading specialist. ¹⁴³ They also took such actions as developing differentiated staffing plans, creating specialized intervention teams, and modifying job descriptions. ¹⁴⁴

How to carry out the recommendation

1. The school leader should assess the strengths and weaknesses of the staff and identify staff members who are not fully committed to the turnaround efforts. 145 The school turnaround case studies and the business turnaround research do not support the wholesale replacement of staff. 146 The school leader needs to understand staff and the commitment of each staff member

to the turnaround process. 147 Consequently, the school leader should spend considerable time getting to know teachers and their individual skills, personality, knowledge, background, and goals. Getting to know teachers also involves spending time in their classrooms. The school leader can then use this information to place a teacher in a classroom that better "fits" both the teacher and the students. 148

2. The school leader should redeploy staff members who offer valuable skills but are not effective in their current role and bring in new staff with specialized skills and competencies for specific positions, such as intervention or reading specialists. ¹⁴⁹ In the schools in the case studies, new positions were most often designed to coordinate programs or to bring in teachers with specialized training, such as an instructional specialist, a reading specialist, a school-community liaison, or a computer specialist. ¹⁵⁰

By examining staff strengths and weaknesses, a school leader can determine a better fit for some personnel. This may include modifying job descriptions, differentiating staffing, or creating intervention teams, 151 tailoring the positions of staff members to individual strengths and school needs. Some differentiated staffing strategies have the lowest reading groups taught by the classroom teacher and a reading specialist—and special education teachers team with regular education teachers in the general classroom. For example, one school arranged to have a Title I-supported reading teacher trained to be a Reading Recovery teacher so that she could provide differentiated services. 152

^{139.} Picucci et al. (2002a).

^{140.} Ibid.

^{141.} Duke (n.d.).

^{142.} Ibid.

^{143.} Ibid.

^{144.} Ibid.

^{145.} Ibid.

^{146.} Kowal and Hassel (2005).

^{147.} Zargarpour (2005); Murphy (2007).

^{148.} Johnson and Asera (1999).

^{149.} Tung and Ouimette (2007).

^{150.} Duke (n.d.).

^{151.} Ibid.

^{152.} Conzemius (2000).

School leaders should also look at the roles of support personnel, such as the lunchroom supervisor or lunchtime aides. Their roles might be expanded to improve efficiency in the cafeteria or provide one-on-one tutoring when the lunch shift is over.¹⁵³

3. The school leader should replace staff members who resist the school turnaround efforts.¹⁵⁴

One school principal noted that it is important to "get the right people on the bus and [be] prepared to take some people off the bus [who] don't belong."155 However, the school leader could work to develop staff members who have potential. In one synthesis of case studies of successful school turnarounds,156 principals in 9 of the 15 schools took steps to remove staff who lacked the requisite skills or the desire and commitment to significantly raise student achievement. In several instances, staff members were transferred to other schools. For example, one teacher who wanted to continue to provide pullout remedial reading classes, even though this format did not fit the redesigned literacy orientation, was moved out of the school.157

Potential roadblocks and solutions

- 1. Collective bargaining agreements can often forestall immediate staff changes. Usually these agreements have stipulations for seniority: more-senior staff might have priority in transfers, be able to choose the grade level to teach, or be able to select certain subject and class assignments. Soliciting support from the union at the outset of the turnaround efforts can be a key task. When a union has an opportunity to participate as an active partner in the turnaround efforts, it may be easier to create workarounds or renegotiate certain stipulations in the contract.
- 2. In addition to the complications that may arise from collective bargaining agreements, teachers may be unwilling to leave a school. The principal can suggest early retirement if appropriate, reassign teachers to new areas within the school, or even take more decisive steps, such as not renewing a contract or counseling an ineffective teacher to leave the profession.
- 3. When a principal makes targeted staff replacements, replacements are not always readily available. For rural schools, replacing teachers can be an especially large challenge. Principals may need to "grow their own" by encouraging effective instructional assistants to seek certification and apply for an emergency credential. Principals can also consider providing incentives for new teachers.¹⁵⁸

^{153.} Johnson and Asera (1999).

^{154.} Duke (n.d.); Tung and Ouimette (2007); Zargarpour (2005).

^{155.} Zargarpour (2005), p. 177.

^{156.} Duke (n.d.).

^{157.} Johnson and Asera (1999).

^{158.} Mazzeo and Berman (2003).

Appendix A. Postscript from the Institute for Education Sciences

What is a practice guide?

The health care professions have embraced a mechanism for assembling and communicating evidence-based advice to practitioners about care for specific clinical conditions. Variously called practice guidelines, treatment protocols, critical pathways, best practice guides, or simply practice guides, these documents are systematically developed recommendations about the course of care for frequently encountered problems, ranging from physical conditions, such as foot ulcers, to psychosocial conditions, such as adolescent development.¹⁵⁹

Practice guides are similar to the products of typical expert consensus panels in reflecting the views of those serving on the panel and the social decisions that come into play as the positions of individual panel members are forged into statements that all panel members are willing to endorse. Practice guides, however, are generated under three constraints that do not typically apply to consensus panels. The first is that a practice guide consists of a list of discrete recommendations that are actionable. The second is that those recommendations taken together are intended to be a coherent approach to a multifaceted problem. The third, which is most important, is that each recommendation is explicitly connected to the level of evidence supporting it, with the level represented by a grade (high, moderate, low).

The levels of evidence, or grades, are usually constructed around the value of particular types of studies for drawing causal conclusions about what works. Thus, one typically finds that a high level

of evidence is drawn from a body of randomized controlled trials, the moderate level from well designed studies that do not involve randomization, and the low level from the opinions of respected authorities (see table 1). Levels of evidence also can be constructed around the value of particular types of studies for other goals, such as the reliability and validity of assessments.

Practice guides also can be distinguished from systematic reviews or meta-analyses, such as the What Works Clearinghouse (WWC) intervention reviews or statistical meta-analyses, which employ statistical methods to summarize the results of studies obtained from a rule-based search of the literature. Authors of practice guides seldom conduct the types of systematic literature searches that are the backbone of a meta-analysis, although they take advantage of such work when it is already published. Instead, authors use their expertise to identify the most important research with respect to their recommendations, augmented by a search of recent publications to ensure that the research citations are up-to-date. Furthermore, the characterization of the quality and direction of the evidence underlying a recommendation in a practice guide relies less on a tight set of rules and statistical algorithms and more on the judgment of the authors than would be the case in a highquality meta-analysis. Another distinction is that a practice guide, because it aims for a comprehensive and coherent approach, operates with more numerous and more contextualized statements of what works than does a typical meta-analysis.

Thus, practice guides sit somewhere between consensus reports and meta-analyses in the degree to which systematic processes are used for locating relevant research and characterizing its meaning. Practice guides are more like consensus panel reports than meta-analyses in the breadth and complexity of the topic that

is addressed. Practice guides are different from both consensus reports and metaanalyses in providing advice at the level of specific action steps along a pathway that represents a more-or-less coherent and comprehensive approach to a multifaceted problem.

Practice guides in education at the Institute of Education Sciences

The Institute of Education Science (IES) publishes practice guides in education to bring the best available evidence and expertise to bear on the types of systemic challenges that cannot currently be addressed by single interventions or programs. Although IES has taken advantage of the history of practice guides in health care to provide models of how to proceed in education, education is different from health care in ways that may require that practice guides in education have somewhat different designs. Even within health care, where practice guides now number in the thousands, there is no single template in use. Rather, one finds descriptions of general design features that permit substantial variation in the realization of practice guides across subspecialties and panels of experts.¹⁶⁰ Accordingly, the templates for IES practice guides may vary across practice guides and change over time and with experience.

The steps involved in producing an IES-sponsored practice guide are first to select a topic, which is informed by formal surveys of practitioners and requests. Next, a panel chair is recruited who has a national reputation and up-to-date expertise in the topic. Third, the chair, working in collaboration with IES, selects a small number of panelists to co-author the practice guide. These are people the chair believes can work well together and have the requisite expertise to be a convincing

source of recommendations. IES recommends that at least one of the panelists be a practitioner with experience relevant to the topic being addressed. The chair and the panelists are provided a general template for a practice guide along the lines of the information provided in this preamble. They are also provided with examples of practice guides. The practice guide panel works under a short deadline of 6-9 months to produce a draft document. The expert panel interacts with and receives feedback from staff at IES during the development of the practice guide, but they understand that they are the authors and, thus, responsible for the final product.

One unique feature of IES-sponsored practice guides is that they are subjected to rigorous external peer review through the same office that is responsible for independent review of other IES publications. A critical task of the peer reviewers of a practice guide is to determine whether the evidence cited in support of particular recommendations is up-to-date and whether studies of similar or better quality that point in a different direction have not been ignored. Peer reviewers also are asked to evaluate whether the evidence grade assigned to particular recommendations by the practice guide authors is appropriate. A practice guide is revised as necessary to meet the concerns of external peer reviews and gain the approval of the standards and review staff at IES. The process of external peer review is carried out independent of the office and staff within IES that instigated the practice guide.

Because practice guides depend on the expertise of their authors and their group decision-making, the content of a practice guide is not and should not be viewed as a set of recommendations that in every case depends on and flows inevitably from scientific research. It is not only possible but also likely that two teams of recognized experts, working independently to produce

^{160.} American Psychological Association (2002).

a practice guide on the same topic, would generate products that differ in important respects. Thus, consumers of practice guides need to understand that they are, in effect, getting the advice of consultants. These consultants should, on average, provide substantially better advice than an individual school district might obtain on its own because the authors are national authorities who have to reach agreement among themselves, justify their recommendations in terms of supporting evidence, and undergo rigorous independent peer review of their product.

Institute of Education Sciences

Appendix B. About the authors

Panel

Rebecca Herman, a managing research analyst at the American Institutes for Research, holds a Ph.D. in sociology from Johns Hopkins University. As the project director for the first phase of the What Works Clearinghouse, she was responsible for the U.S. Department of Education's flagship project to set standards for education research and use those standards to identify effective educational programs, practices, and approaches. She has provided congressional testimony and served on many expert panels on setting standards for outcomes research and on comprehensive school reform. She specializes in evaluating, designing, and conducting research on education improvement; setting standards for the quality of education research; and reviewing research based on those standards.

Priscilla Dawson, a school principal in urban settings for 18 years, earned her Ed.D. from the University of Pennsylvania. She has won multiple principal awards and was featured in the film documentary *Girls in the Middle*, which depicts her work in increasing mathematics and science achievement among middle school girls. Her leadership in schools "in need of progress" has increased poor, minority students' levels of achievement.

Thomas S. Dee is an associate professor in the Department of Economics at Swarthmore College and a faculty research fellow with the programs on education, children, and health at the National Bureau of Economic Research. He has recently held visiting appointments at Stanford University and Princeton University. His research focuses largely on policy-relevant issues in the economics of education. Recent examples are econometric evaluations of

the racial and gender interactions between students and teachers and an assessment of the effects of schooling on adult civic engagement.

Jay P. Greene is endowed chair and head of the Department of Education Reform at the University of Arkansas and a senior fellow at the Manhattan Institute, Greene earned his Ph.D. from the Government Department at Harvard University in 1995. His research was cited four times in the Supreme Court's opinions in the landmark Zelman v. Simmons-Harris case on school vouchers, and his articles have appeared in major policy and academic journals, as well as in major newspapers. Dr. Greene is the author of Education Myths. Dr. Greene conducts research and writes about education policy, including such topics as school choice, high school graduation rates, accountability, and special education.

Rebecca A. Maynard is University Trustee Chair Professor of Education and Social Policy at the University of Pennsylvania, senior program associate at the W. T. Grant Foundation, and affiliate scholar at Abt Associates. She teaches graduate courses in program evaluation and policy analysis, the economics of economics and education, and research synthesis methods. She also maintains an active research agenda focused on school improvement, youth risk reduction, and employment skills development. She has published widely on welfare policy, educational innovation, employment and training, teenage pregnancy and parenthood, and evaluation design. Her research has appeared in a wide range of journals and in publications of the Brookings Institution, the Urban Institute Press, the National Academy of Sciences, Russell Sage, University of Michigan Press, and University of Wisconsin Press. She has testified before Congress on welfare policy, teenage pregnancy prevention, and childcare policy, and she frequently advises U.S. and foreign government agencies on

various aspects of education and social welfare policy.

Sam Redding is the executive director of the Academic Development Institute and director of the National Center on Innovation & Improvement. He holds a doctorate in educational administration from Illinois State University and is a graduate of Harvard's Institute for Educational Management. Dr. Redding was a senior research associate of the Laboratory for Student Success at Temple University from 1995 to 2006. He is the executive editor of the School Community Journal. He has written a book on continual school improvement, edited books on restructuring state systems and on home-school relations, and published numerous articles and book chapters on education topics. In 1994. Illinois State University awarded him the Ben Hubbard Leadership Award for his service to public education. The Illinois State Board of Education similarly honored him in 1990. Dr. Redding has served on the boards of nine nonprofit

and civic organizations and is a member of three leadership teams for the state of Illinois.

Staff

Marlene Darwin, a senior research analyst at the American Institute for Research, received her Ph.D. in education from George Mason University. She helped develop the 2009 Framework for the National Assessment of Educational Progress Test for Reading, wrote an adolescent literacy toolkit for the Neglected and Delinquent Technical Assistance Center, developed the reading taxonomy to be used for technical assistance for states in the development of adult education literacy program standards, and led the production of the Comprehensive School Reform Quality Center's five consumer-oriented reports on comprehensive school reform and education service provider models. With 15 years of classroom experience, she specializes in research-to-practice in literacy, school reform, and high schools.

Appendix C. Disclosure of potential conflicts of interest

Practice guide panels are composed of individuals who are nationally recognized experts on the topics about which they are rendering recommendations. The Institute of Education Sciences (IES) expects that such experts will be involved professionally in a variety of matters that relate to their work as a panel. Panel members are asked to disclose their professional involvements and to institute deliberative processes that encourage critical examination of the views of panel members as they relate to the content of the practice guide. The potential influence of panel members' professional engagements is

further muted by the requirement that they ground their recommendations in evidence that is documented in the practice guide. In addition, the practice guide undergoes independent external peer review prior to publication, with particular focus on whether the evidence related to the recommendations in the practice guide has been appropriately presented.

The professional engagements reported by each panel member that appear most closely associated with the panel recommendations are noted below.

No professional engagements or commitments were reported by the panel members that were identified as a potential conflict of interest.

Appendix D. Technical information on the studies

Recommendation 1. Signal the need for dramatic change with strong leadership

Schools should make a clear commitment to dramatic changes from the status quo, and the leader should signal the magnitude and urgency of that change. A low-performing school that fails to make adequate yearly progress must improve student achievement within a short timeframe. It does not have the luxury of years to implement incremental reforms.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be low, based on 10 case studies that describe turnaround practices in 35 schools: 21 elementary, 8 middle, and 6 high schools. 161 Of the 10 studies, 2 describe in detail the ways that schools implemented dramatic changes with strong leadership. 162 One 163 looked at 7 middle schools, and the other 164 at 15 elementary schools that participated in school turnarounds. The remaining case studies provided additional support. 165

161. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

162. Picucci et al. (2002a); Duke (n.d.).

163. Picucci et al. (2002a).

164. Duke (n.d.).

165. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung

Across the case studies, either the turnaround schools initiated the change process with a new leader, or the existing leader implemented new practices. Typically, leaders engaged in such practices as setting a stronger direction for the school, strengthening partnerships across the school community, regularly visiting classrooms and monitoring instruction, being visible throughout the school, and directly addressing discipline issues.

Example of one case study in which the school leaders signaled change

The case study analyzed 15 elementary schools that engaged in turnaround initiatives and sustained improvements for at least two years. Turnaround efforts at these schools focused on reversing a pattern of low performance in literacy and mathematics. The schools were examined to identify changes that took place as a result of the turnaround process.

In the study, all schools signaled change by changing leadership practices. Ten of the 15 schools initiated the turnaround process and signaled change by replacing the principal. In the other 5 schools, the existing school leaders exercised leadership differently to signal change. They changed the school's mission and focus, leadership style, school culture, and leadership structures.

Principals in the turnaround schools identified a lack of direction for the school and signaled change by developing a highly focused mission that targeted specific areas for change. Most often, these changes focused on instruction in literacy. After principals signaled change with one or more targets, they used the targets to plan for such activities as staff development and resource allocation.

and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

The leadership style of new and existing leaders in the turnaround schools also changed. Although specific aspects of leadership styles were not identified in the study, some common aspects of leadership appeared across the schools. Principals spent a great deal of time in classrooms, closely monitored teachers' instructional practices, and in some modeled instruction and coached teachers. They also became visible throughout the school and were accessible to staff and the school community. And they dealt directly with student discipline.

Principals also signaled change by taking steps to alter the culture of the schools. In 12 of the 15 schools, they changed at least one aspect of school culture. They commonly refocused the culture on the basis of such core beliefs as the ability of all children to learn, the value of teamwork and collaboration, and the shared responsibility for student achievement. The beliefs were put into practice through changes in organizational processes and planning and interventions to help struggling students.

Additional changes were made to distribute leadership, such as using team leaders or lead teachers. In all schools, teachers were instrumental in making important school-level decisions for change.

The attention to detail and the willingness to signal change from the outset contributed much to turnaround efforts. Both new and existing school leaders signaled change through a variety of practices that improved student performance.

Recommendation 2. Maintain a consistent focus on improving instruction

Chronically low-performing schools need to maintain a keen focus on improving instruction at every step of the reform process. To improve instruction, schools should use data to set goals for instructional improvement, make changes designed to affect instruction immediately and directly, and continually reassess student learning and instructional practices to refocus the goals.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low,* based on 10 case studies that describe turnaround practices in 35 schools: 21 elementary, 8 middle, and 6 high schools. All 10 studies describe in detail how turnaround schools maintained a consistent focus on instruction.¹⁶⁶

All schools in the case studies used data analysis to identify and set priorities for instructional needs at the school, class, and student levels; targeted professional development to addressing those needs; reviewed the curriculum for alignment with objectives; and regularly monitored progress and adjusted strategies.

Example of one case study in which the schools maintained a consistent focus on improving instruction

The case study looked at using data to turn around five low-performing urban high schools.¹⁶⁷ Specifically, researchers examined the schools' use of disaggregated data to measure progress and guide the turnaround process, factors that promoted or acted as barriers to data use, and future policy and practice implications of data use to guide reform efforts.

The populations of the five schools ranged from 1,400 to 1,800 students. In four of

166. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

167. Lachat and Smith (2005).

the schools, Hispanic students represented slightly more than 50 percent of the students. Three high schools were in the same district and operated under a district-mandated reform effort. The fourth was in a district with a district reform plan in place, but with schools implementing site-based decision making. The fifth school was the only public high school in its district.

The five high schools were considered large comprehensive high schools in high-poverty urban districts with diverse student populations. Many students did not perform at grade level on state assessments. Although not representative of high schools across the country, the schools were considered by researchers to be typical of many low-performing, medium-to-large urban high schools. Each school exhibited issues similar to those facing many schools.

As an integral piece of its turnaround efforts, each high school formed a data team, responsible for data analysis and dissemination. Four factors influenced the use of data at each school: the quality of and access to the data, the school's and district's capacity to disaggregate data, the collaborative use of data by staff, and the leadership structures that supported data use. The focus on data was intended to enable a school to set goals on the basis of school and student needs and to measure progress toward those goals.

For example, the study schools had small learning communities but needed increased access to the timely release of data to assign students to the communities. To establish equity across communities, each school worked with the district to ensure more timely access to a broader range of data. The three high schools in the same district, in conjunction with district personnel, developed a Data Access Plan for releasing quarterly attendance and course grade data much faster.

Each school also created a team to collaborate on data analysis, focusing on clearly defined questions. That helped staff look more deeply at the data to direct the school's improvement efforts. School teams looked specifically at how school policies, teacher beliefs, teaching and learning conditions, and teaching practices could affect student achievement. That made it easier for staff to base their decisions on objective data, rather than prevailing beliefs or norms, and to maintain their focus on improving student achievement.

Schools used defined leadership structures to advance the use of data to guide the turnaround process. In two high schools, school leadership led the use of data. In all five schools, using data to guide turnaround efforts was strongly influenced by the shared leadership roles among other administrators and teacher leaders. The schools also used facilitators to support them in learning how to use data to guide improvements. School data teams increased communication within the school community around trends and issues revealed by the data.

Recommendation 3. Provide visible improvements early in the turnaround process (quick wins)

Quick wins (visible improvement early in the turnaround process) can rally staff around the effort and overcome resistance and inertia. Certain outcomes that matter to the school can result from changes made quickly at the administrative level without needing approval from the district or teacher buy-in. Although these initial changes do not necessarily improve student achievement immediately, they have the potential to have an impact on some important aspects of the school and set the tone for change. In the short term, focusing on

quick wins can establish a climate for longterm change.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low,* based on 10 case studies that describe turnaround practices in 35 schools: 21 elementary, 8 middle, and 6 high schools. 168 One study of 9 elementary schools shows particularly clear examples of visible improvements early in the turnaround process. 169

The case studies indicate that school leaders were instrumental in achieving quick wins—by identifying the neediest areas in the school, determining the actions needed to address those areas, and taking action quickly to address those needy areas. The leaders were willing to take actions that deviated from the prevailing norms and that would be catalysts for ongoing changes.

Example of one case study in which the school leaders provided quick wins

The study is a compilation of individual cases that tell the turnaround story in nine urban elementary schools.¹⁷⁰ The nine shared the following characteristics: the majority of students met the low-income criteria, the schools were in urban areas across the country and did not have selective admissions policies, student achievement in mathematics and reading was higher than the state average after three years of assessment data, evidence did not suggest that the schools exempted large numbers of students from assessments because of limited

English proficiency or disabilities, and they agreed to participate in the study.

Many of the nine school schools used similar practices, although they differed in size, grade configurations, student demographics, and curricula. To collect data on specific practices at each school, qualitative researchers visited each school for two days. At the schools, they interviewed principals, at least one teacher from each grade level, other school administrators, and parents. Parents and teachers also took part in focus groups so that researchers could gain multiple perspectives. District personnel were also interviewed. Researchers observed a range of settings within the schools, such as classrooms, hallways, and playgrounds. They also observed staff meetings and professional development activities and reviewed documentation. They sought to discover what had changed and how those changes were made.

In several schools, principals came on board in an atmosphere of overwhelming problems of student discipline, teacher morale, parent and community dissatisfaction, and academic apathy. School leaders initially identified and pursued important but attainable first goals to demonstrate quick wins. They wanted to communicate an unambiguous message to all stakeholders that the schools were changing. Following initial success, they used the accomplishments to move toward more ambitious goals.

For example, at two schools, the quick wins addressed student discipline and immediate steps to create a safe and orderly environment. At another school, initial efforts were directed at reducing disruptions to instructional time and increasing the focus on strong academic instruction. The principal at a fourth school unified a parent-teacher association from two ethnically separate parent organizations. At several schools, principals directed their initial efforts toward the facility to create

^{168.} Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

^{169.} Johnson and Asera (1999).

^{170.} Johnson and Asera (1999).

a more attractive environment conducive to learning.

Within the first few weeks and months of the turnaround efforts, these changes sent the message—to students, parents, the community, and the staff—that the schools were improving. The successes also helped forestall any excuses and prepared the school communities for more challenging long-term changes. Thus, the first successes "became the cornerstone for future successes." 171

Recommendation 4. Build a committed staff

The school leader must build a staff committed to the school's improvement goals and qualified to carry out school improvement. This goal may require releasing, replacing, or redeploying staff who are not fully committed to turning around student performance and bringing in new staff who are committed.

Level of evidence: Low

The panel judges the level of evidence supporting this recommendation to be *low*, based on 10 case studies that describe turnaround practices in 35 schools: 21 elementary schools, 8 middle schools, and 6 high schools. To lone study of 15 turnaround schools is especially relevant for this recommendation. The remaining 9 studies also showed turnaround schools building committed staff.

171. Ibid., p. 11.

172. Conzemius (2000); Duke (n.d.); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005); Picucci et al. (2002a, 2002b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

173. Duke (n.d.).

174. Conzemius (2000); Duke et al. (2005); Johnson and Asera (1999); Lachat and Smith (2005);

Across the 10 case studies, school leaders took steps to build a strong, committed staff dedicated to the turnaround. In each school, staff changes occurred, but no school changed its entire staff. School leaders focused on developing a staff dedicated to improving instruction, assessment, and classroom management skills and to sustaining the turnaround beyond one or two years.

Example of one case study in which school leaders built a committed staff

The example comprises two related studies: volume I is an analysis of themes that emerged from a study of seven high-poverty middle schools demonstrating strong academic improvement; volume II is a compilation of in-depth case studies of each school.¹⁷⁵ Together, the studies sought to uncover the practices, policies, and belief systems that contributed to better academic performance. The seven schools had different configurations encompassing grade ranges from 4 to 9 grade. At least 50 percent of the student population participated in the free or reduced-price lunch program. Only schools with open enrollment that showed a strong growth rate over three years were included. In general, the schools exhibited characteristics typical of high-poverty schools and communities but varied in school size, community type, geographic locales, and student populations.

Researchers collected data through fourday site visits, conducting interviews and focus group discussions with different members of the school community. They also reviewed documentation and observed classes, transition times, and staff meetings.

Picucci et al. (2002a,b); Tung and Ouimette (2007); Whiteside (2006); Zargarpour (2005).

175. Picucci et al. (2002a,b).

In each school, the leader made it clear from the outset that defeatist attitudes would not be tolerated. All teachers needed to be committed to improving student performance. In some cases, teachers were ready for that commitment. Others needed support to make the needed changes, and still others could not make the commitment and had to be reassigned or released.

One principal told staff members that if they wanted to stay at the school, their commitment to change was necessary. Some teachers were not able to accept the school's goals and either left voluntarily or were asked to leave. Of 125 teachers, 25 left the school during the years of the turnaround efforts. Similar staffing changes were noted in the other schools. To build a committed staff, principals looked for individuals whose beliefs and values aligned to those of the school. In this way, principals did not need to focus their energies on persuading people to accept the change. All staff could become advocates for change.

In another middle school, the principal recognized that some teachers were not willing to make the needed changes but decided to give everyone two years to adjust. After the second year, it was evident that the school was not the right setting for some teachers. Some left voluntarily, others were asked to leave, and others stayed but did not fully support the changes they were asked to make in the turnaround process. So, the principal placed them in positions where they would have minimal impact on student learning. As new positions in the school opened, the principal looked for teachers willing to support the school's mission for change.

In the seven middle schools, a committed staff was essential to implementing the dramatic change necessary to turnaround a low-performing school. The staff at these schools helped build on the quick wins initiated by the principal and developed capacity for sustained improvement.

References

- Almanzán, H.M. (2005, summer). Schools moving up. *Educational Leadership, 62*. Retrieved September 2007, from http://www.ascd.org/portal/site/ascd/menuitem.459dee008f99653fb85516f7 62108a0c
- American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. (1999). Standards for educational and psychological testing. Washington, DC: American Educational Research Association.
- American Psychological Association. (2002). Criteria for practice guideline development and evaluation. *American Psychologist*, *57*: 1048–1051.
- Berman, P., and McLaughlin, M.W. (1978). Federal programs supporting educational change: Vol. 8. Implementing and sustaining innovations. Santa Monica, CA: RAND.
- Borman, G.D., Hewes, G.M., Overman, L.T., and Brown, S. (2003). Comprehensive school reform and achievement: a meta-analysis. *Review of Educational Research*, 73(2): 125–230.
- Comprehensive School Reform Quality Center. (2006a, April). *CSRQ Center report on education service providers*. Washington, DC: American Institutes for Research, Comprehensive School Reform Quality Center.
- Comprehensive School Reform Quality Center. (2006b, November). *CSRQ Center report on elementary school comprehensive school reform models.* Washington, DC: American Institutes for Research, Comprehensive School Reform Quality Center.
- Comprehensive School Reform Quality Center. (2006c, November). *CSRQ Center report on middle and high school comprehensive school reform models.* Washington, DC: American Institutes for Research, Comprehensive School Reform Quality Center.

- Conzemius, A. (2000). Framework. *Journal of Staff Development*, 21(1): 38–41.
- Desimone, L. (2002). How can comprehensive school reform models be successfully implemented? *Review of Educational Research*, *73*(3): 433–479.
- Duke, D. (n.d.). *Keys to sustaining successful school turnaround*. Unpublished manuscript. Charlottesville, VA: Darden/Curry Partnership for Leaders in Education. Retrieved August 2007, from http://www.darden.edu/html/standard.aspx?menu_id=39&styleid=3&id=3215
- Duke, D.L., Tucker, P.D., Belcher, M., Crews, D., Harrison-Coleman, J., Higgins, J., et al. (2005). *Lift-off: launching the school turnaround process in 10 Virginia schools*. Unpublished manuscript. Charlottesville, VA: Darden/Curry Partnership for Leaders in Education. Retrieved August 2007, from http://www.darden.edu/html/standard.aspx?menu_id=39&styleid=3&id=3215
- Field, M.J., and Lohr, K.N. (Eds.). (1990). *Clinical practice guidelines: directions for a new program.* Washington, DC: National Academy Press.
- Hassel, B., Hassel, E., and Rhim, L.M. (2007). Overview of restructuring. In H. Walberg (Ed.), *Handbook on restructuring and substantial school improvement* (pp. 9–22). Lincoln, IL: Center on Innovation and Improvement.
- Herman, R., Aladjem, D., McMahon, P., Masem, E., Mulligan, I., O'Malley, A.S., et al. (1999). *An educator's guide to schoolwide reform.* Arlington, VA: Educational Research Service.
- Johnson, J.F., and Asera, R. (Eds.). (1999). Hope for urban education: a study of nine high-performing, high-poverty, urban elementary schools. Washington, DC: Policy Studies Associates and The University of Texas at Austin, The Charles A. Dana Center.
- Kowal, J.M., and Hassel, E.A. (2005). Turnarounds with new leaders and staff. Washington, DC: The Center for Comprehensive School Reform and Improvement.

- Lachat, M.A., and Smith, S. (2005). Practices that support data use in urban high schools. *Journal of Education for Students Placed at Risk*, *10*(3): 333–339.
- Mapping America's Educational Progress. (2008). Retrieved February 29, 2008, from http://www.ed.gov/nclb/accountability/results/progress/nation.html
- Mazzeo, C., and Berman, I. (2003). *Reaching new heights: turning around low-performing schools*. Washington, DC: National Governors Association, Center for Best Practices.
- McLaughlin, M.W. (1990). The RAND change agent study revisited: macro perspectives and micro realities. *Educational Researcher*, 19(9): 11–16.
- Murphy, J. (2007). Restructuring through learning-focused leadership. In H. Walberg (Ed.), *Handbook on restructuring and substantial school improvement* (pp. 71–84). Lincoln, IL: Center on Innovation and Improvement.
- Murphy, J., and Meyers, C. (2007). *Turning around failing schools: lessons from the organizational sciences*. Thousand Oaks, CA: Corwin Press.
- Newmann, F., and Wehlage, G. (1995). Successful school restructuring: a report to the public and educators by the Center on Organization and Restructuring of Schools. Madison, WI: Center on Organization and Restructuring of Schools.
- Picucci, A.C., Brownson, A., Kahlert, R., and Sobel, A. (2002a). *Driven to succeed: high-performing, high-poverty, turn-around middle schools. Volume I: cross-case analysis of high-performing, high-poverty, turnaround middle schools.* Austin, TX: The University of Texas at Austin, The Charles A. Dana Center.
- Picucci, A.C., Brownson, A., Kahlert, R., and Sobel, A. (2002b). *Driven to succeed:*

- high-performing, high-poverty, turnaround middle schools. Volume II: case studies of high-performing, high-poverty, turnaround middle schools. Austin, TX: The University of Texas at Austin, The Charles A. Dana Center.
- Purkey, S.C., and Smith, M.S. (1983). Effective schools: A review. *The Elementary School Journal*, *83*(4): 426–452.
- Rhim, L.M., Kowal, J.M., Hassel, B.C., and Hassel, E.A. (2007). *School turnarounds:* a review of the cross-sector evidence on dramatic organizational improvement. Chapel Hill, NC: Public Impact, and Lincoln, IL: Academic Development Institute.
- Rivlin, A.M., and Timpane, P.M. (Eds.). (1975). *Planned variation in education: should we give up or try harder?* Washington, DC: The Brookings Institution.
- Tung, M., and Ouimette, R. (2007, April). Promising results and lessons from the first Boston District School converting to pilot status. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL. Retrieved December 2007, from http://www.ccebos.org/BCLA_conversion_study.pdf
- Walberg, H.J. (Ed.). (2007). *Handbook on restructuring and substantial school improvement*. Lincoln, IL: Center on Innovation and Improvement.
- Whiteside, V.B. (2006). *Meeting the challenge of No Child Left Behind: how an inner-city middle school succeeded.* Unpublished doctoral dissertation. Fordham University, New York City.
- Zargarpour, N. (2005). A collective inquiry response to high-stakes accountability. Unpublished doctoral dissertation. Claremont Graduate University, Claremont.