Turning around high schools via "Scaffolded Craftsmanship"

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ABSTRACT

The following study provides a unique internal perspective on changes made in schools that "turned around" versus schools that are in the process of "turning around" versus schools that are "stuck." After comparing and contrasting these three groupings of schools who received similar state-level support, we learned that the turnaround process began in virtually every case with the appointment of a new principal who replaced a substantial number of teachers and sparked a series of interlocking changes focused on key areas of school operation, including (1) the strength of linkages between the school and both the district central office and the community served by the school; (2) the commitment, climate, and culture affecting student learning; (3) the knowledge and skills that school leaders, teachers, and other staff bring to their jobs; and (4) the structures and processes that support instruction within the school. We coined the term *scaffolded craftsmanship* to characterize this process of transformation.

Key Terms: Turnaround Schools, School Turnaround Reform, Scaffolded Craftsmanship

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INTRODUCTION

The Washington Post headline read, "Most states lacked expertise to improve worst schools" (Layton, 2015), referring to the Institute of Education Sciences' (IES, 2008) research brief documenting states' capacity to support the turnaround of low-performing schools (via billions of dollars from the US Department of Education's School Improvement Grants and/or Race to the Top programs). At the same time, Tanenbaum, Boyle, Graczewski, James-Burdumy, Dragoset, and Hallgren (2015) claimed that "there is limited existing research on the extent to which states have the capacity to support school turnaround and are pursuing strategies to enhance the capacity" (p. 1); their key findings include:

- (1) More than 80 percent of states made turning around low-performing schools a high priority, but at least 50 percent of all states found turnaround very difficult.
- (2) Thirty-eight states (76 percent) reported significant gaps in expertise for supporting school turnaround in 2012, and that number increased to 40 states (80 percent) in 2013. (p. 1)

Tanenbaum et al. (2015) further assert that "Unfortunately, there are few examples to date of such low-performing schools producing substantial and sustained achievement gains...It is thus of interest to examine what, if any, strategies these particular states are adopting to enhance their capacity to support turnaround" (p. 3). Our research does just that. We examine North Carolina's efforts and provide a unique, internal, comparative perspective on the mixed results from schools that "turned around" versus schools that are in the process of "turning around" versus schools that are "stuck." While a small but growing body of research has reviewed the processes involved in school turnaround, most studies (a) describe failing schools and the need for intervention, (b) provide case studies of a handful of schools that are/have improved, (c) describe reported approaches and key lessons to turnaround, and/or (d) highlight the differences between schools that have made significant progress versus those that have not (many from across different states, districts, and grant/funding samples) (American Institutes for Research [AIR], 2014a, 2014b; Council of the Great City Schools, 2015; Fryer, 2014; MDRC, 2013). Few studies, if any, have looked at the concerted, coherent efforts of one state and then compared and contrasted mixed results within three groupings of schools (turned around, turning around, and stuck) to learn the nuanced actions taken in each to scaffold improvement or not.

From 2010 through 2014, a portion of North Carolina's \$400 million Race to the Top grant enabled the North Carolina Department of Public Instruction (NCDPI) to intervene in an effort to improve performance in the lowest-achieving five percent of North Carolina's schools—118 elementary, middle, and high schools. With modifications to accommodate federal guidelines, the interventions supported by Race to the Top funds built upon experience gained from the NCDPI Turnaround Schools program's work in similar schools between 2006 and 2010.

Between 2006 and 2010, NCDPI and its partner organizations (e.g., New Schools Project) worked with 66 low achieving high schools, 37 middle schools, and 25 elementary schools. These schools were targeted for intervention primarily because their Performance Composites fell below 60% for two or more years. To assess the impact and isolate the effects of the Turnaround Schools program, an analysis of student achievement data and graduation rates was conducted using value-added models that controlled for differences in student characteristics such as prior achievement, family economic background, and ethnicity as well as characteristics of the schools themselves, including average daily membership (Author, 2011). While we acknowledge the narrowness of judging turnaround efforts based solely on reported improvements in test scores and graduation rates

(as opposed to efforts focused more broadly that create enriching school cultures and enhance the social, emotional and behavioral development of all students), our study was designed around the state's definition and form of classification.

To learn how change took place in the schools that did improve and what frustrated change in those that were slower to improve and/or continued to perform poorly, we selected 12 high schools, 9 middle schools, and 9 elementary schools to study via onsite interviews and examination of plans, reports, and other documents generated during the turnaround process. At each level of schooling, we chose one third whose Performance Composites had improved sharply (by 30 percentage points or more), one third that had improved moderately (about 15 to 20 points), and one third that had made little or no progress (less than 10 points). By contrasting the developments in the most improved, moderately improved, and "stuck" schools, we were able to reveal both the dynamics of improvement and the main obstacles to change. Since the state of North Carolina introduced and then consistently sustained their intervention efforts at the high school level (versus policy shifts, support inequities, and resource/funding limitations and interruptions at the middle and elementary levels), in this article we focus on data from a sample (n=12) of the 66 high schools in turnaround only (Author, 2011).

LITERATURE REVIEW

Billions of taxpayer dollars as well as multiple federal, state, and school district reform efforts have been allocated toward increasing student achievement in turnaround schools, but the results have been mixed. Some schools have managed to significantly increase student achievement, while others have been unable to emerge from the depths of chronic low performance. Several researchers have conducted studies on this phenomena based on reviews of school turnaround literature and the collection of data (quantitative and qualitative) at district and school sites (AIR, 2013; Almanzan, 2015; Author, 2011; Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Calkins, Guenther, Belfiore, & Lash, 2007; Duke, Tucker, Belcher, Crews, Harrison-Coleman, & Higgins, 2005; Duke, Tucker, Salmonowicz, & Levy 2007, 2008; Education First, 2011; Griffin & Pughsley, 2010; Herman, Dawson, Dee, Greene, Maynard, & Redding, 2008; Murphy & Meyers, 2008; Public Impact, 2007; Ravitch, 2015; Smith, 2015). These and similar studies often identify challenges at various turnaround schools and explore strategies focused on altering the structure of the school and/or the behaviors of administrators, teachers, and others to improve student achievement outcomes, as measured by End-of-Year or End-of-Grade tests (Fix & Passell, 2003, IES, 2008; Papa & English, 2011). For example, Calkins, Guenther, Belfiore, and Lash (2007) conducted an analysis of broader school turnaround issues and noted that transforming the culture and climate of turnaround schools in a way that ensured the consistency of high expectations for all students was essential. Similarly, in a study of chronically low performing schools in Chicago, Bryk, Sebring, Allensworth, Luppescu, and Easton (2010) found that schools which remained focused on the core business of instruction by using student achievement data to drive instruction saw increased student achievement results.

Based on a review of this literature it is evident that there is some confusion regarding terminology, some consensus regarding challenges, and some commonalities in leading and enacting positive change in turnaround schools. Likewise, many of these studies do not compare and contrast schools that have made significant progress against those that have made moderate progress against those who have not.

TURNAROUND REFORM, TURNAROUND SCHOOLS, AND SCHOOL TURNAROUND

The term "turnaround" in K-12 public education can be ambiguous; it can refer to a specific educational reform model, a particular type of low performing school, or the work undertaken in a low performing school. The "turnaround reform" model is an extension of the No Child Left Behind Act, which calls for a series of intervention procedures, including school closure, based on the history of low performance and growth in student achievement measures at a particular low performing school. "Turnaround schools," on the other hand, are low performing schools that have been identified by either the state or federal government to receive additional resources, including funding, to increase student achievement through swift positive change. "Turnaround schools" are mandated to increase student achievement in a relatively short time frame (within two to three years) or face certain high-stakes accountability measures for school leaders and teachers, including replacement. The work conducted in low performing schools aimed at breaking the cycle of low performance and lifting student achievement is defined as "school turnaround." In The Turnaround Challenge, Calkins et al. (2007) defined school turnaround as "requiring dramatic changes that produce significant achievement gains in a short period, followed by a longer period of sustained improvement" (p. 4). While the specific language can be confusing, the intended result is almost always increased student achievement as measured by traditional End-of-Grade (EOG) or End-of-Course (EOC) state mandated exams.

In their research on the turnaround process in North Carolina Bowles, Churchhill, Effrat, and McDermott (2002) found the following to be potential indictors of successful turnaround initiatives:

- (a) Improvement on student test scores, meeting improvement goals set by the state;
- (b) School capacity, building on the strengths of school leaders, faculty and staff;
- (c) Continuous improvement plan showing an ability to improve and sustain improvement; and.
- (d) Data-driven decision making occurring at all levels of the school (p. 11).

COMMON CHARACTERISTICS AND CHALLENGES OF TURNAROUND SCHOOLS

Nearly all turnaround school leaders face a unique set of external and internal challenges depending on the school setting; however, there are also a number of common challenges that leaders often need to address. For example, according to a report published by Barbour et al. (2010), principals in turnaround schools face challenges associated with students performing below grade level, weak partnerships with families, parents and the community, low faculty morale, and poor instructional focus. In a similar study of turnaround schools in Virginia, Duke et al. (2007) identified the common challenges of low reading achievement, personnel problems, ineffective instruction, data deprivation, discipline issues, and lack of focus. Furthermore, turnaround schools often serve a large proportion of high poverty students (Bryk et al., 2010; Calkins et al., 2007; Fix & Passel, 2003; Murphy & Meyers, 2008). This is not to suggest that high poverty schools are not successful; in fact, Calkins et al. (2007), Bryk et al. (2010), and others highlight a number of strategies implemented at high-poverty, high-performing schools. There appears, however, to be significant correlation between schools serving high poverty student populations and the turnaround school categorization.

The education of students from low socioeconomic backgrounds presents various challenges particularly because many of the students begin school academically disadvantaged compared to their higher income peers. Hart and Risley (2003) found that "by age 3, children born in poverty have acquired, on average, only half the vocabulary of their higher-income counterparts" (p. 12).

Furthermore, Lee and Burkman (2002) discovered that "being poor far outweighs race/ethnicity, family structure, and other factors as causes of cognitive disadvantage" (p. 87). Thus, it is important that leaders of turnaround schools employ strategies that address the additional individual needs of these students in their quest to improve student achievement.

EFFECTIVE LEADERSHIP STRATEGIES FOR SUCCESSFUL SCHOOL TURNAROUND

In addition to common challenges, there is evidence of a number of common strategies employed by school leaders to enact positive change in turnaround school settings. For example, Public Impact (2007) emphasized the importance of early wins for a turnaround school leader to build confidence and trust with external stakeholders to help quell negative perspectives on the possibility of achieving success in a chronically low performing environment. Picucci, Brownson, Kahlert, and Sobel (2002) cited the importance of additional planning time during the academic day to allow teachers the opportunity to identify and discuss student assessment data to guide their instructional practices. Bryk et al. (2010), Herman et al. (2008), and Calkins et al. (2007) noted that transforming the culture and climate of turnaround schools in a way that ensures the consistency of high expectations for all students is essential to successful school turnaround. Other researchers cited the need to break away from previous norms and alter instructional practices to effectively enact differentiated instructional practices to address the needs of specific students and student groupings (Bryk et al., 2010; Calkins et al., 2007; Duke et al., 2005, 2008; Fullan, 2005; Herman et al. 2008; Murphy & Meyers, 2008; Picucci et al., 2002). Each of the strategies mentioned above has been successfully implemented in turnaround schools that have made significant improvement in student achievement indicators. However, as Papa and English (2011) point out, it is the people within the school that lead the change, not the mere presence of reforms or strategic ideas.

In Papa and English's (2011) review of the data collected for the What Works Clearinghouse *Turning Around Chronically Low-performing Schools Practice Guide* (Institute of Education Sciences, 2008), they identified specific leadership behaviors that appear to make significant positive impact on increased student achievement in turnaround school settings. Successful leaders refuse to accept the status quo, lead through inclusive styles, do not accept low performing labels as permanent, respect the cultural backgrounds of students and their families, and know how to build professional learning communities (among other actions taken to turn around chronically low performing schools). While these behaviors appear to remain consistent across various turnaround school settings, it remains important for school leaders to effectively address the specific challenges presented in their school setting.

CONTEXT: NORTH CAROLINA HIGH SCHOOLS

In 2010 more than 5,000 schools, representing the lowest five percent of student achievement for nearly 2.5 million students, were labeled "turnaround" (Wallace Foundation, 2010). According to the US Department of Education (2012), the expected trend is for the number of turnaround schools to continue to increase and reach more than 12,000 by the end of 2015. The upsurge nationally is somewhat offset by a few states that have decreased the number of turnaround schools at the middle and high school level during the same time period. North Carolina falls into this category. In the 2006-2007 school year, North Carolina began its school turnaround initiative with a restructuring of the state's consistently low-performing high schools. At that time, 66 high schools were labeled as turnaround schools based on two consecutive years of performance composite scores on End-of-

Course tests below 60 percent and/or four-year graduation rates below 60 percent. Four years after the inception of the statewide turnaround initiative, 14 schools improved to a composite between 60-69 percent, 24 schools improved to a composite between 70-79 percent, and 12 schools improved to a composite between 80-89 percent (North Carolina State Board of Education, September, 2011). In other words, by 2010, 50 of the 66 high schools (76%) reached composite scores higher than 60% versus only two of the 66 high schools (3%) in 2006. Graduation rates improved as well. By 2010, 38 of the 66 high schools (58%) graduated more than 70% of their students versus 25 of the 66 (38%) in 2006 (see Tables 1 and 2).

Table 1
Longitudinal Performance Composite Data for the 66 High Schools in NC Turnaround

Percent Proficient	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90+
2006-07	1	9	35	19	2	0	0	0
2007-08	0	9	16	26	13	1	1	0
2008-09	2	5	10	19	21	9	0	0
2009-10	0	1	3	12	14	24	12	0
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Table 2
Longitudinal Graduation Rate Data for the 66 High Schools in NC Turnaround

Graduation Percent	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90+
2006-07	0	0	1	5	35	16	8	1
2007-08	0	0	4	8	26	27	1	0
2008-09	0	0	1	8	28	22	5	2
2009-10	0	0	0	5	23	22	12	4

However, as noted in Table 3, not all of the schools improved at similar rates and/or to similar extents. Given the range of performance composite scores pre-intervention in 2006-07 (20.9% to 63.4%) and then again post-intervention 2009-10 (37.3% to 88.8%), one might expect the range of percent point change to be somewhere between 16.4% and 25.4%. In actuality, some of the high schools improved their composite scores drastically by more than 40% while others changed minimally and/or regressed. Of the 66 high schools targeted for turnaround in NC between 2006–07 and 2009–10, several schools improved sharply (by 30 percentage points or more), several improved moderately (about 15 to 20 points), and some made little or no progress (remained "stuck"). Table 3

Average Composite Scores and % Point Change Data for the 66 High Schools in NC Turnaround from 2006-07 to 2009-10ⁱⁱ

	2006-07 Performance Composite Score	2009-10 Performance Composite Score	% Point Change from 2006-07 to 2009-10
Range	20.9% to 63.4%	37.3% to 88.8%	-2.8% to 49.7%
Median	46.0%	71.2%	22.9%
Mean	46.5%	69.8%	23.3%

NORTH CAROLINA'S DISTRICT AND SCHOOL TRANSFORMATION INTERVENTION PLAN

North Carolina's turnaround process included three major components designed to work together to bring about major improvements in student achievement: (a) development of a plan consistent with NCDPI's Framework for Action for High Schools [Framework for Action] (n.d.)—intended to provide an overall shape and structure for the improvement process, (b) a centralized program of professional development for a leadership team from each school—intended to help the schools' leadership teams understand the Framework for Action and begin to acquire the knowledge and skills necessary to implement it, and (c) onsite coaching and school specific professional development designed to support implementation of the plan as well as other needed changes in the school—intended to help schools develop the practical know how to carry out their plans and to make adjustments along the way. The Framework for Action enumerated the following components that each school entering the process was required to address through a formal plan for improvement:

- Plan for ninth grade transition
- Plan for formative assessment
- Plan for students who are struggling academically
- Plan for addressing literacy issues and needs
- Plan for professional development based on student achievement data
- Plan for reviewing all school processes and procedures to ensure that they are structured to help all students achieve proficiency
- Process for involving the school community in addressing the needs of the school
- Process for establishing a professional learning community
- Process for determining whether the school will design or reform

(http://www.ncpublicschools.org/schooltransformation/turnaround/archives/framework/)

All turnaround schools served by NCDPI using a transformation modelⁱⁱⁱ received at least two types of additional support that began during the professional development sessions and continued as long as their Performance Composites remained under 60%: weekly school-level coaching from leadership facilitators and monthly classroom-level coaching from instructional facilitators. Leadership facilitators (i.e., a cadre of experienced school coaches, all of whom had been principals) provided coaching, including assistance in developing a Framework for Action plan, helping the principal and other leaders build a professional learning community, and helping the school choose and implement a school reform model approved by the NCDPI.

Instructional facilitators, employed directly by the NCDPI, specialized by subject area. Because of resource constraints, they visited the schools less frequently than did the leadership facilitators, once or twice a month rather than weekly. In addition to these coaching visits,

instructional facilitators were available on request to provide tailored professional development to support implementation of components of the Framework for Action with which a school was struggling. See http://www.ncpublicschools.org/schooltransformation/ for a fuller description of the states' intervention plan.

METHODS

Methods employed in this study of NCDPI's Turnaround Schools program build on the quantitative assessment of the program's impact on the schools in which the District and School Transformation unit intervened. Using qualitative methods we sought to learn what facilitated improvement in some schools and frustrated improvement in others. We began by ranking all 66 high schools by their 2009–10 performance composite and then selected a total of 12 schools with contrasting levels of progress. More specifically, we selected schools that had made consistent progress from 2006–07 to 2009–10 and identified those with the highest levels of total improvement during this time period (some 30 points or more and "exited" turnaround status). Then we selected a set that had made significant but more moderate levels of progress, averaging about 15 to 20 points; and a set that had either slid back or had improved by fewer than 10 points. To complete sample selection, we chose schools so that the total set reflected variation in community context (urban vs. rural), school districts and regions of the state, school size, ethnic composition, and poverty (free and reduced-price lunch percentages) (see Table 4).

To learn about the schools' dynamics, we decided that at each school, we would interview the principal, assistant principal, five to seven teachers, and any other school personnel the principals identified as especially knowledgeable about the school's experience during the turnaround process. In addition, we interviewed the one or two people from the central office

Table 4

School Demographics of Sample Schools

School Improvement	2006-2007 Composite Score	2009-2010 Composite Score	% point change from 0607 to 0910	% change from 0607 to 0910	Improved each year from 0607 to 0910	Size	URM	Free Or Red Lunch
Stuck A	40.0%	37.2%	-2.8%	-7.0%	No	541	99%	81%
Stuck B	52.7%	53.3%	0.6%	1.1%	No	631	51%	62%
Stuck C	42.6%	52.9%	10.3%	24.2%	No	1493	96%	69%
Moderate A	52.1%	67.4%	15.3%	29.4%	Yes	758	43%	56%
Moderate B	42.3%	68.5%	26.2%	61.9%	Yes	1295	76%	62%
Moderate C	45.1%	68.5%	23.4%	51.9%	No	890	89%	65%
Most A	35.0%	80.8%	45.8%	130.9%	Yes	800	87%	57%
Most B	51.7%	83.2%	31.5%	60.9%	No	1056	89%	64%

Most C	60.7%	90.5%	29.8%	49.1%	Yes	365	65%	61%
Most D	48.6%	87.9%	39.3%	80.9%	Yes	832	45%	56%
Most E	56.3%	88.7%	32.4%	57.5%	Yes	1134	85%	61%
Most F	50.5%	95.0%	44.5%	88.1%	Yes	400	89%	62%
Closed/								
Reopened								

URM = Underrepresented Minorities

who had worked most closely with the school during turnaround, as well as the leadership facilitator; and, when possible, one or more of the instructional facilitators (total n = 159). We supplemented our knowledge of their work by reviewing a sample of the reports they filed with NCDPI.

We developed separate but parallel interview protocols for each of these categories of interviewees. The protocols asked about the reasons for the school's initial low performance; the steps the school had taken to improve and which of these were particularly effective or ineffective; what assistance they had received along the way and the degree to which the assistance was genuinely helpful; what obstacles to improvement they had encountered and how they had surmounted the obstacles, if indeed they had done so; and whether the school now had the capacity to continue to improve and perform at higher levels. Two-person teams visited the schools for one or two days to conduct the interviews; in some cases, second visits or follow-up telephone interviews were conducted. Most interviews were recorded and transcribed. In some schools, interviewees declined to be recorded, and in these cases, we relied on notes taken during the interviews.

Using the transcribed and written notes, we composed field notes on each school in a common format. Field notes captured the main themes across the answers to each of our questions, included quotations that expressed the themes in striking or economical ways, and anecdotes that would help us illustrate them more clearly. We then synthesized the field notes on each school in a one- to two-page summary table, organized into sections corresponding to the major questions in the interview protocol. We coined the term *scaffolded craftsmanship* to characterize the process of school transformation.

FINDINGS

Causes of Low Performance

We began our interviews in the selected schools with questions designed to help us understand why these schools had been performing so poorly before NCDPI intervened. The story of one high school, as recounted by its principal and teachers, illustrates many of the dynamics of low performance. The school had been a reasonably strong performer in the 1980s, but in the early 1990s, the small manufacturing plants that formed the economic backbone of the area closed or moved. Middle and upper income families left in droves, pursuing jobs elsewhere. Enrollment in the school dropped from nearly 1,100 to about 600, and most of the remaining students were from low income families. Performance at the school followed the same downward trend.

But the drop in performance was not seen as an inevitable consequence of economic and demographic trends. As a teacher noted, "The other [problem] is that we lost administrators with good management abilities. The ship basically was either micromanaged or just left adrift." One teacher, a more recent hire, said that by the time she arrived, there was "... just this sort of mentality of, 'Well, this is the way it's been so this is the way it's going to be." District officials confirmed the perception, "Expectations were very low. Staff expectations were low. Administrative

expectations were low. So kids met those expectations where they were. Children were not challenged."

A teacher and an administrator recalled that there was no consistency in efforts to respond to the challenging new demographics:

There were a lot of programs that were started and never finished. It was sort of, 'This is a new band wagon and we'll all jump on it.' We stayed on it for a couple of months and then something else came along. 'Oh, we'll jump off of this one and jump on this one.' There was nothing finished that was started. (Teacher)

You'd have a program and typically, the program required a certain level of funding, but that wouldn't be there. So you partially funded the program, and you partially implemented it. Then, when it didn't work, 'Why didn't you implement this properly?' Then, when that failed, we would bring in something else. We endured a lot of this, and eventually, what happens is you get your teachers into self-survival mode, where everybody retires to their own classroom because that is the best they can do under the circumstances ... This, of course, leads to very bad performance because everybody is sort of doing their own thing. There's no [common] vision ... without a vision, people die. That's essentially what was happening. (Administrator)

With the exception of a handful of unique circumstances, the causes of low performance identified by the principals and teachers we interviewed were similar across the twelve schools. There was little difference noted in their accounts:

- Challenging economic and demographic conditions, whether newly developed or chronic
- Serious and widespread discipline problems
- Low academic demands and expectations among teachers and low aspirations among students
- High principal and teacher turnover
- A negative school identity in the minds of teachers, students, and the surrounding community
- Ineffective leadership, ranging from authoritarian, top-down leaders to leaders that were too eager to please, and leaders who failed to enforce discipline or follow through on decisions
- Alienated teachers marking time in survival mode, isolated within their own classrooms.

However, the common causes of poor performance (i.e., challenging demographics and difficult circumstances) did not necessarily hinder all schools from actually changing and getting positive results and desired outcomes. When intervention by NCDPI and other partner organizations (e.g., New Schools Project) was matched by energetic school leadership and district support, teachers took responsibility for student learning, overcame the challenges, and raised student performance, sometimes to striking degrees (even improving their proficiency rates by more than 40 percentage points over a four-year period). With these supports, school leaders and staff gradually learned how to improve performance by crafting change in several key areas.

Turnaround Worked: Sustainable Change via Scaffolded Craftsmanship

We found that in the improved schools (most and moderate), the turnaround process began in virtually every case (8 out of 9) with the appointment of a new principal who in turn replaced a

substantial number of teachers and sparked a series of changes focused on four key areas of school operations: (a) strength of linkages with the school, the district central office, and the community served by the school; (b) commitment, climate, and culture affecting student learning; (c) knowledge and skills that school leaders, teachers, and other staff bring to their jobs; (d) structures and processes that support instruction within the school. We also found that improvement came through a process of painstaking, piece-by-piece craftsmanship, guided or "scaffolded" by the NCDPI facilitators coupled with the energy and inventiveness of local educators. As our participants described the process, reconstruction did not go forward through a pre-specified, linear series of steps. Instead, external facilitators, school leaders, and teachers worked on one part, shifted their attention to another, recognized that there was a piece missing between the two and worked on that, circled back to rework the first piece so that it dovetailed better with the middle one, and so on until the pieces began to take shape and work together in a functioning whole.

External support

The most improved schools featured stronger links with district central office administrators served by the schools than the moderately improved and stuck schools (see Table 5). For example, five of the six districts with the most improved schools took the initiative to replace poor-performing teachers and helped principals and teachers create more effective formative assessment programs and interpret data from a variety of sources. In all six districts, targeted instructional and support services, funded by internal, state, and federal resources coupled with specific district initiatives, helped in improving classroom instruction and teacher retention and provided extra assistance for students who had been falling behind. In fact, with support from central office, School F (see Table 4) was actually closed and then reopened as five smaller academies, each organized around a distinctive theme, each going on to achieve remarkable results.

Table 5
Scaffolding Support 1: External Support (District and Community)

School Attribute	Most	Moderately	"Stuck"
	Improved Schools	Improved Schools	Schools
	>30%	15 to 20%	<10%
Principal replacement and district support	District installation of new instructionally oriented principal committed to reform, with continued district support for assertive accountability (especially for hiring and instructional matters)	District support in the beginning for new instructionally oriented principal committed to reform, with sporadic district follow-through thereafter	Without strong district support for principal and assertive accountability, continued principal turnover
Community relationships, involvement and support	Strategic and sustained community outreach efforts	Strategic and sustained community outreach efforts	Start-and-stop community outreach efforts

Another strikingly innovative decision was the apartment complex for teachers that one rural district built in partnership with the State Employees Credit Union to help combat new teacher recruiting difficulties and limited housing obstacles. In the same district, the high school's leadership facilitator slowly became a trusted advisor to the superintendent, helping to address problems extending across the full range of schools, including the middle school that fed into the high school. A final example that one of the districts instituted was a no teacher transfer policy. Teachers were unable to apply for transfer within the district and had to commit to teaching at a particular school, slowing the revolving door in and out of their high need schools.

However, from what we heard, the single most important thing that districts did to scaffold support for the six high schools that made significant progress was to select and install a new principal. Superintendents and others involved in these hiring decisions emphasized knowledge of curriculum and instruction as the key qualification. The new principals' mandate was to raise test scores, and to do so quickly, even if it involved major personnel replacement. As a result, central office support was critical, especially during times of leadership transition. But, it is also clear that personnel replacement is not by itself *the* key to turning around a low performing school. After all, most of these schools had been plagued for years by rapid turnover of principals as well as teachers, and the resulting instability had undermined repeated attempts to build a faculty unified behind strong discipline policies and higher academic standards. We determined that without stable, competent, open leadership from the principal, without careful selection of the new teachers, and without strategic management of core instructional processes, personnel replacement is just turnover.

Unfortunately, district level engagement and assistance was sporadic in the moderately improved schools and not present in the stuck schools. Instead, finger-pointing and blame games were more the norm. Two of the moderately improved schools expressed frustration over calls and emails to their district office not being returned and policies not being updated (e. g., 10-day out-of-school mandatory suspension policy for certain offenses no longer fit one school's newly adopted block-schedule). Another one of the moderately improved schools was able to analyze their student achievement data using the SAS Education Value-Added Assessment System (EVAAS) and discovered that only 17% of the students entering the ninth grade could read at grade level. However, after three years of consistent effort, they were unable to get district agreement and approval on a common K-8 reading program, with follow-through into high school.

Sporadic district assistance was evident in all three of the stuck schools as well but with even less support. According to one leadership facilitator, district officials were "almost bi-polar," meaning that they would go for long periods without giving out any information or instructions, and then suddenly insist that action be taken immediately without proper preparation. This led to resentful compliance rather than purposeful, adaptive action. At the same time, the facilitator noted ruefully that he was attempting to train the principals and teachers in collaborative leadership. During the three years the facilitator was there, he revealed that "no principal ever had a formal evaluation and the superintendent visited the schools only when some special occasion called for it, not to help them identify and address fundamental problems." Instead, a negative view of the stuck schools prevailed even among district administrators, who repeatedly alluded to behavioral issues at the school sites.

One leadership facilitator in a stuck school reported spending a great deal of time working with teachers on what he characterized as "Harry Wong training"—training in how to establish basic routines and an orderly environment in their classes. They would say to him, however, "We don't stand a chance unless we can get the other teachers to support us—unless we all follow these rules

and enforce them together." And they doubted that they could get their fellow teachers to join a concerted effort to establish an environment conducive to learning because they could not count on their principals to back them up by insisting on uniform enforcement. In turn, the principals did not enforce the rules because they did not believe they could get the top leadership and School Board to back them up—there were always teachers who had relatives or friends on the Board or in the central office who would protect them.

All twelve of the high schools were engaged in outreach efforts aimed at strengthening relationships within their surrounding communities. Due to leadership capacity and stability, the most and moderately improved schools were able to strategically target certain partners and use a variety of other devices to improve relationships. Until the school began to turn around, its image as a place where students were out of control and learned little weighed on teachers and leaders psychologically. A step in reversing the negative image at one of the most improved schools was the principal's invitation for the school board to tour the school one afternoon and hold their regular meeting there that evening. This intervention was so successful that the principal followed it up with a similar invitation to the county commissioners. Another example involves one principal who developed a close relationship with the former, well-known and respected Title 1 Director, leading to the creation of a successful mentorship program at the school. The principal noted, "She beats the bushes along with her church to try and get minority role models into this building."

Other examples of outreach in the most and moderately improved schools included an automated phone system to deliver updates and messages to parents, frequent newsletters, visits to local community centers to encourage reluctant parents, grants from area foundations, involvement of parents in major school clean-up efforts (e.g., "We got 400 parents and students to work with us one Saturday"), afterschool tutors, partnerships with local businesses, and the creation of coordinated volunteer programs with dedicated staff members managing the program. In one small rural high school, the new principal lined up a series of appearances at churches throughout the largely African-American community. At each, he was accorded time to explain what he and his colleagues were undertaking and how they were going about it. This extensive round of appearances paid off later when he instituted new policies requiring a higher GPA to participate in sports, thus threatening the participation of some talented football players. Some grumbling arose among parents and athletic boosters. "But some important people in the community told them that I knew what I was doing, so they should leave me alone," he recalled. Despite any opposition aroused by the new GPA requirement, the County Commissioners were persuaded to raise the teacher supplement in this low-wealth community by \$1,000.

The stuck schools tried very similar tactics but were not as successful due mainly to leadership turnover and lack of sustained effort. Relationship-building necessitates consistency but, according to teachers in two of the stuck schools, "personnel (... including principals and superintendents) change so frequently that it is hard to really get a good working connection going" and, "our efforts seem more like 'start and stop, start and stop' with little substantive follow-through?" Without some longevity and credibility, school leaders in the stuck schools were unable (even though they tried) to tap into community resources with great reward. In fact, some of the 'old guard' volunteers and employees actually perpetuated the negative school images and did more harm than good. For example, one instructional coach shared that "the folks in the front office are definitely part of the problem and not the solution. There are always people from the outside community in there but they just seem to visit and gossip more than help."

Commitment, climate, and culture

Successful turnaround leaders simultaneously asserted strong accountability pressures as they also cultivated relationships of trust and engaged the teaching staff more actively in planning, policymaking, and problem solving within the school (see Table 6). In the most improved schools, it appears to have been a paradoxical combination of strengthened accountability pressures and strengthened professional ties that mobilized teachers and other staff behind the leadership's new goals, standards, and policies. This new commitment led teachers to challenge students with more demanding lessons and student assignments. When, often to teachers' surprise, students responded with substantially better performance, teachers concluded, also with surprise, "We can do this!" And the initial successes led to still higher expectations for student learning. In the process, motivation, self-efficacy and collective effectiveness to raise the bar were built and the context began to change. Table 6

Scaffolding Support 2: Commitment, Climate and Culture

"Stuck"
Schools
<10%
Ineffective
leadership, ranging
from unilateral
demands for
improved
achievement without
relationship building,
to nurturing
relationships without accountability
Without an assertive
principal with strong
district support,
teachers lack
incentives and
confidence to enforce
discipline
•
Profusion of start-
and-stop initiatives
without continuity or
follow-through
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The parallel scaffolding of tough assertion and strengthened relationships between the leaders and staff on the one hand and students and parents on the other appears to have produced an environment that was substantially more orderly and conducive to learning within the successful turnaround schools (most and moderately improved). For example, the principal of a small rural high school whose performance composite had soared 28 points in only two years claimed it because "my

teachers love me." Our interviews with teachers bore him out. They spoke fondly of how hard he worked, how well he knew the students, how often he was in their classrooms, how well he listened and responded to their problems and needs, how he had handled a certain problem with a parent, and on and on. One teacher told us, "I'll go to him about a problem I'm having with a student in my class, and he'll know more about the student than I do." This same principal was also famous for the home visits he made in some of the area's toughest neighborhoods which he often followed up on by getting in touch with social services, a local clinic, or a minister to seek help not only for students, but also for their parents or other family members. According to interviews, he treated teachers with respect, cared about them as people, was motivated primarily by a concern for student learning rather than his own advancement, followed through in a competent way on the decisions and plans they made together, and evaluated teachers even-handedly rather than playing favorites. He was in their classrooms on a regular basis, observing and making useful suggestions for improvement.

On the board behind this same principal, we could see teachers' End-of-Course examination passing rates and average scores displayed, together with the goals for the number of students in each class who would pass the exam that year. He explained that early in a semester, he sat down with each teacher of an EOC course to review the students' prior scores and their EVAAS (Education Value-Added Assessment System) prediction, suggest instructional strategies, and help set goals for the number of students the teacher should be able to get over the bar. Periodically, they would meet to review benchmark and formative assessment results in order to adjust the program of extra support required to meet the goals. Because the goals are displayed on this public board, each teacher could compare student performance relative to the goals with those of other teachers in the same and other EOC courses. This spurred competition among teachers, and it prompted teachers to seek help from colleagues with better success rates. For example, as the DPI facilitator recalled,

... that first year (2006-07) we hired a lot of new teachers, fresh out of college or with only one semester of teaching under their belt. We worked really hard with those teachers. And then at the end of the year when those teachers did just as well as our veteran teachers did on the standardized testing But if I had been a [veteran] teacher with students scoring 70% and a first-year teacher came out at 75%, it would really make me look at, 'What do I need to do?'

Similarly, the principal at one of the moderately improved high schools began his tenure with a tight, top-down drive to gain control through intimidation but was quickly persuaded by the leadership facilitator and an assistant principal to share control of planning, policy making, and problem-solving with a School Planning and Management Team. In so doing, the teachers reported they "had input and felt pretty much empowered and invested" while the principal reflected he "was able to command loyalty and mobilize support via informal influence versus formal authority."

The clearest illustration of how a more orderly and caring environment was created comes from another small rural high school that was plagued for more than 20 years by conflict between students from two communities consolidated into this county-wide facility. Fights regularly broke out as students got off their school buses—not small scuffles but all-out brawls. On one occasion things got so bad that the principal stopped the buses from unloading, put all of the students back on their buses, sent them home, and cancelled school for three days. The effect of the cooling off period was brief, however, and disorder soon ruled the school again. In this environment, those teachers who attempted to establish order and challenge students academically were generally ignored at best and cursed at worst. The atmosphere of conflict and disorder permeated halls and classrooms and contributed to rapid turnover of principals as well as teachers. The problems in this school were quite similar to those in one of the stuck schools, but in this case, they were addressed successfully.

Leadership came from an unexpected quarter. A local police officer, believing that his military and police experience gave him a special perspective on the issue, presented his plan to the chairman of the school board who in turn hired him to implement it. The plan was two-pronged. First, he added two more security officers to the two already in place, deployed all four to walk the halls, and instituted a zero tolerance policy against fights. Offenders would not simply be disciplined by the school, but arrested, jailed, and prosecuted. At the same time, the security officers were instructed to chat with students, get to know them personally, eat lunch with them, attend student sports events, and ask the students to report developing conflicts or planned fights. Teachers were also asked to show a greater presence in the halls and to listen for signs of trouble in their classrooms. The combination of a get-tough policy with relationship building worked. After an arrest or two, students began to approach the staff to talk through the conflicts that would previously have sparked fights. In the process, referrals decreased and test scores increased.

Accountability pressures within the context of strong relationships and engagement of teachers in planning and problem solving generated commitment to new goals and higher standards for student behavior and learning. The combination made the motivational difference. Sociologists Lapinski and Rimal (2005) have long noted that such a complete web of relationships gives rise to new norms—unwritten rules—that shape behavior more powerfully than formal rules and policies. Accountability for carrying out formal policies helped cultivate the development of the web.

While the initial mobilization of commitment seems to have been crucial, it does not seem to have been sufficient to complete the culture-building process. By *culture*, we mean beliefs, expectations, and norms that have a force of their own in shaping teachers' and students' ongoing behavior. When teachers reflectively told themselves, "Wow, this is possible! So we can go higher!"—a development that was recognized and reported across the most and moderately improved schools—a new culture started to take shape. By then, teachers had newly recruited colleagues, learned new skills, and begun to take action in new ways. Administrative responsibilities were shared and a sustained focus on improving key functions persisted.

A major challenge in establishing higher expectations for academic performance was overcoming the ingrained belief that poor or mediocre performance was the best that could be expected of students. Principals' assertion of teachers' responsibility for improved student achievement seems to have been pivotal in breaking through this barrier. The account one teacher gave us was echoed in other improved schools: "From my first year to the second, [my attitude shifted] ... from why this isn't my fault that my students aren't doing well to 'I'm taking responsibility for my students' success and their failures."

In at least seven of the nine improved schools in our sample, participants often told a similar story: intensified demands on teachers led to more demands on students, which led to unanticipated levels of improvement in test score performance, leading in turn to an exhilarating sense that far more was possible than teachers, students, and others had imagined. In this sense, changes in teachers' and students' behavior brought about the elevation of expectations just as much as higher expectations brought about changes in behavior. In the formerly low achieving schools in our sample, change came in waves, with the initial assertion of accountability and mobilization of engagement leading to changes in teacher and student behavior, issuing in improved outcomes that inspired still higher prospects. One subtle difference between the most improved and the moderately improved schools was the clarity, concreteness, and consistency of these accountability expectations. For example, in two of the moderately improved schools, teachers shared that the tracking, frequency and "enforcement of the 'new rules' was a little spotty in the beginning ... it took a good

year or so before he [the new principal] was able to get the leadership team to be consistent and fair and then have others like us [the teachers] buy into his ideas, vision and plans for the future."

All nine of the most and moderately improved schools used a variety of other devices to communicate new, higher expectations for their students. Principals met with students frequently to stress the importance of academic work, explain how grade point averages are calculated, why EOC tests are important to them and to the school, and how benchmark test results would be used. They instituted or strengthened the GPA requirement for playing sports. Several schools organized visits to universities, colleges, and community colleges to give students images of what they were working toward; the names, colors, mascots, and information about colleges were displayed in their hallways and classrooms. Incentives, rewards, and celebrations of various sorts also played a role. For example, when students school-wide behaved well principals relaxed the dress code on Friday; or, for good performance on benchmark or EOC exams, principals and teachers took students bowling or skating, threw pizza parties, and held assemblies to award certificates, trophies, or prizes for everything from perfect attendance to best attitude to most improvement in each subject area.

Unfortunately, in the "stuck schools," this type of culture-building and improved performance was not achieved. Instead, teachers often reported frustration with colleagues who let students get by with disrespectful behavior, cursing, tardiness or skipping classes, and the like. One NCDPI coach told us: "There's so much principal and teacher turnover in that school, they can't get follow through on the policies they do set. Teachers know the principal won't stay long, and the students know that a lot of teachers won't stay long, either." In another stuck school, a student told one teacher, "Why should I do what you say? You're not gonna be here next year anyway." As a Career and Technical Education teacher in a rural high school explained: "If they don't think you care about them, they're not gonna cooperate with you, no matter what you threaten them with...The same thing goes for principals and teachers. Teachers won't work hard for a principal who doesn't care about them."

Serious discipline and morale problems were sometimes exacerbated by principals trying to get control of the school and raise scores through stern unilateral action alone. Cultures do not change by mandate; they change over time by replacing old norms with new ones and modeling expectations. As seen in the improved schools we studied, assertive accountability, strengthened relationships, shared decision-making, and an infusion of new colleagues begot commitment to new goals and standards. Commitment begot a more orderly environment and initial steps toward improved teaching and learning. Together, these begot some improvement in student learning and performance, and improved performance inspired the "Wow!" that energized still higher expectations.

Improved knowledge and skills

School leaders' and teachers' knowledge and skills—the human capital available to the school—were improved through three main scaffolding approaches at all six of the most improved and one of the moderately improved schools by: (a) selectively replacing administrators and teachers, (b) focusing professional development on the school's most pressing problems, and (c) providing sustained follow-through with coaching at both the leadership and instructional levels (see Table 7). The installation of a new principal was generally followed by replacement of a substantial number of teachers—the entire teaching staff in one case, half of the teachers in another, and seldom less than a third in the other schools that turned around. A substantial infusion of energetic new teachers and administrators who owed their jobs to a reform-minded principal clearly made it much

easier for the principal to mobilize active support for improvement. In fact, one difference between the most improved and moderately improved high schools in our sample appeared to be some remaining pockets of alienated teachers in the latter, teachers who continued to complain about the students, their parents, and much else rather than taking responsibility for student achievement and getting behind the push for improved performance. Personnel replacement clearly played an important role in crafting the turnaround process.

Conventional wisdom says that it is very difficult to fire a tenured teacher; and in terms of formal procedure, it is. In two of the moderately improved schools, it was clear that principals took action on recalcitrant teachers only when NCDPI coaches pressed them to do so. An NCDPI Table 7

Scaffolding Support 3: Improved Knowledge and Skills

School Attribute	Most	Moderately	"Stuck"
	Improved Schools	Improved Schools	Schools
	>30%	15 to 20%	<10%
Teacher replacement	Replacement of	Replacement of most	Without improved
	ineffective teachers	low-skilled, alienated	discipline and
	with energetic new	teachers, with slower	accountability for
	teachers committed to	reform buy-in	student achievement,
	turnaround agenda,		continued
	with district support		uncontrolled teacher
			turnover
Professional	PD with sustained	Localized PD and	Continued turnover
development (PD)	coaching follow-up at	coaching, someone	undermines the
and coaching	school and classroom	other than the	effects of PD and
	levels strengthens	principal assuming	coaching, spottier
	principal and teacher	instructional	classroom level
	skills and knowledge	leadership role	coaching

coach told one principal, "You need to get rid of these teachers. They are killing your scores." The principal acknowledged the problem: "I knew she was right. I had known for some time that I should do it. I guess the pressure from her made me do what I knew all along I should do." He told the teachers "straight out" that "It's time for you to retire or move on," and they did so largely without protest. As his School Facilitator remarked, "Good teachers don't allow themselves to be in places where there is not stable leadership ... but if teachers see that a school is improving achievement, they want to be part of it."

Obviously, creating a vacancy was only step one in replacing a teacher. Perhaps the harder problem was recruiting and hiring a replacement with stronger skills and determination. Asked how he managed to do so, one principal of a most improved school said, "I can't compete on money, so I sell the mission and a chance to work in a school that is on the move." By "the mission," he meant the opportunity to give low-income, minority students a good education and a fighting chance in life. Other successful leaders concurred: "When I have the chance to replace staff, I do so using a specific set of criteria ... to determine how they will fit into our agenda;" and, "We've just made some strategic changes in how we do things in terms of how we hire folks and even where folks are actually placed in their teaching capacities within the building."

New teachers brought new energy and commitment as well as new talents, but in the short term, personnel replacement sometimes intensified mistrust between administrators and staff as well as among teachers themselves. As leaders in the most improved schools honed their individual theories of action, they devoted substantial time and care to mending frayed bonds. Teachers new to the school and new to teaching were provided professional development to strengthen their classroom management skills and knowledge of the Standard Course of Study (SCoS).

The common image of a turnaround principal is that of an energetic, expansive dynamo who shapes up a lagging school by force of personality. But in only one case did a principal conform closely to this image—the principal who swept into the school, tore up the existing Framework for Action, wrote his own, persuaded the School Improvement Team to endorse it, and set about getting it into practice. Principals of the other five most improved schools seemed quieter, distinguished more by the ability to develop rapport with teachers and students, their knowledge of instruction, and an unshowy determination to improve academic performance rather. This is not to say that they were people of low energy. On the contrary, they were reported to arrive early, work late, know every student's name and many details about them, work the halls talking with students and teachers, get into classrooms daily, hold teachers personally responsible for helping to meet school goals and standards, and make tough decisions about teachers who failed to respond to suggestions for improvement. The district administrators we interviewed emphasized knowledge of and experience in managing instruction as the primary reasons for choosing these principals. The day of picking principals mainly for the ability to manage operations and keep order were long gone. Interestingly, two of the principals in the stuck schools and even two in the moderately improved schools had big bravados (sometimes with little substance) while the principal in the third stuck school had a defeatist attitude.

In the sharply improved schools, coaching from leadership and instructional facilitators complemented personnel replacement as a scaffolding strategy for building human capital and learning in context. Leadership facilitators—successful former principals, many with experience in turning around schools themselves—visited the schools weekly. A typical visit involved a brief orienting conversation with the principal, several classroom observations, and participation in a School Improvement Team meeting or a meeting with a small group of teachers and an assistant principal working on some identified problem, such as difficulties in the in-school suspension program or how to improve tutoring arrangements for struggling students. At the end of a day in a school, leadership facilitators usually met again with principals to reflect, inquire, and discuss what they had learned during the day. Facilitators' written reports also show them providing tools such as classroom observation protocols and common lesson planning formats, modeling the use of the tools in joint instructional monitoring and feedback sessions, then following up by observing and coaching principals and teachers as they used the tools. As one NCDPI manager put it, "You need to see what is really going on and remind them of the plan. We agreed that we would do these three things, and you're getting away from the plan. You need to remind them on a regular basis...to keep people on track in really low-capacity schools."

Instructional facilitators provided assistance to individual teachers and groups of teachers in their assigned subject areas. Paralleling the experience-based qualifications of leadership facilitators, instructional facilitators were selected for recent experience as successful teachers. Because resource constraints limited the number of instructional facilitators on staff, instructional facilitators were unable to visit schools as frequently as leadership facilitators—once or twice a month at most, rather than weekly. Although reports filed by instructional facilitators reflected differences in the frequency of visits across facilitators, schools, and time, these variations did not necessarily correlate with the

levels of improvement in the stuck, moderate, or sharply improved schools. Instead, the difference maker was motivating others to unfreeze the status quo and begin building new norms.

Particularly when working with new teachers, instructional facilitators often focused on the SCoS, breaking it down goal by goal and objective by objective to clarify exactly what teachers should be focusing on. Instructional facilitators demonstrated lessons, observed teachers using the new techniques or materials, and provided a combination of encouragement and corrective feedback giving them credibility and leverage.

Most teachers' comments about instructional facilitators were positive, if general in nature. The majority of the negative feedback hinged on the frequency of the services provided and the lack of customization for each school. A few teachers in low-progress schools complained that the instructional facilitators knew too little about them and their schools to advise them appropriately; teachers across all three types of school felt that "they would better be served by coaches who knew the context of the school and its population intimately." One NCDPI manager conceded that resources were too limited to provide the depth and frequency of instructional facilitation that she thought necessary in the lowest capacity schools. Leaders in one moderately improved and two stuck schools further commented that state teams came out repeatedly to their schools but did not send them the targeted resources that were requested or needed. Several of the low-progress schools reported professional development at similar levels of intensity and frequency as the improved schools, but with fewer payoffs. We are not sure what explains the lower payoff in these schools, but one possibility is that professional development is efficacious only within the context of an environment of order and high academic expectations.

Structures and support for instruction. Increased commitment, order, and demands for performance and new knowledge and skills are important. So too are carefully crafted structures and support for instruction to make effective use of the new commitment and skills. Instruction had not been strategically organized or managed in turnaround schools. And, according to many participants, "Little to no real teaching was going on in many classrooms." The most improved schools in our sample used a variety of strategies to shepherd individual students through curricular paths matched to their emerging skills and to ensure that students encountered solid teaching and re-teaching along the path to proficiency. This process required the construction and scaffolding of many distinct components, each carefully crafted to perform its function in a coordinated whole. As noted in Table 8, improvements included more systematic attention to (a) coordinating curriculum and assigning students and teachers strategically, (b) supervising instruction, building professional community, and using multiple forms of assessment to guide revision of curriculum and teaching as well as to pinpoint the objectives that individual students are having trouble with, and (c) organizing extra assistance for struggling students.

One key to improvement was to break down the curriculum into course-sized chunks leading up to as well as through the objectives in the SCoS, then route individual students through the right courses in the right order. Above the main entrance to one most improved school's was the slogan, "Whatever It Takes." The principal was saying that one thing "it takes" is a branching set of pathways through the curriculum, all designed to enable students of Table 8

Scaffolding Support 4: Structures and Support for Instruction

School Attribute	Most	Moderately	"Stuck"
	Improved Schools	Improved Schools	Schools
	>30%	15 to 20%	<10%

Curriculum coordination and assignment	Strategic, individualized assignment of students to curriculum pathways matching their developing skills and of strongest teachers to End-of-Course curricula	Purposeful, more broadly constructed curriculum pathways, not completely individualized	Curricular pathways less carefully constructed, both student and teacher assignment less strategic
Instructional supervision	Frequent classroom observation and targeted feedback from school leaders	Regular classroom observations with more generalized feedback versus individualized comments	Less regular classroom observation, less feedback
Professional community	Time, training, and support for teacher-led collaboration on pacing guides, lesson plans, mutual observation, and use of formative assessment	Concentrated effort and support for PLCs with less specified directions and expectations	Less structure and support for a professional learning community (PLC), resulting in less robust implementation of PLCs
Assistance for struggling students	Well-developed tutoring focused with formative assessment results—during, before, and after school	Creative systems for helping failing students with need for earlier identification	Assistance less organized, not clearly focused with use of formative assessment

different abilities to make progress toward proficiency, albeit at different rates. In each of the substantially improved schools, principals told of long summer days working with counselors and assistant principals to choose an appropriate route for each individual student. They used each student's record, including but not limited to test data, as well as personal knowledge of teachers and students to make the best set of matches. Construction of the master schedule along with student assignment rosters was a complex task that required juggling a variety of considerations, thinking not just semester by semester but over full academic years, at the same time anticipating the courses that students would need in future years. The inevitable mistakes and unanticipated developments generally required what the principal of a sharply improved school called his "mid-season adjustment period" over the winter break. Principals and school facilitators consistently pointed to the master schedule as instrumental for improved academic performance.

The director of NCDPI's Turnaround Schools program emphasized that what was essential to improved performance was that the functions featured in the Framework for Action be implemented. What we learned from our school interviews bore out the wisdom of emphasizing essential functions rather than specific organizational forms. Two of the stuck schools lacked the ability to differentiate

these two aspects. Instead, leaders and teachers were flexible where they didn't need to be (e.g., course selection) and inflexible where they needed to be (e.g., strict tracking and course sequencing). In two of the moderately improved schools, creative course scheduling was in its infancy and the focus was more generally geared toward groups of students rather than individually based. In contrast, a leadership facilitator at one of the most improved schools described their two-tier system of support: "The acceleration program served as a safety net for non-proficient students and offered them additional time, in some cases with a different instructor. The enrichment component was designed to provide some additional work at a higher level for proficient students."

Importantly, administrators in the most improved schools did not leave teachers on their own to teach. They took a number of additional scaffolding steps to ensure that the SCoS for each course was actually taught, was taught well, and was taught again when necessary. With the support of facilitators, all six principals structured and supervised instruction closely, organized teachers into collaborative groups (professional learning communities), and promoted the use of coordinated benchmark and formative assessments—to check students' learning regularly, to guide assistance for struggling students, and to shore up weak spots in teaching.

A complement to administrative supervision came from collaborating groups of teachers. These groups took different forms in different schools but were referred to in all twelve sample schools as professional learning communities. In the improved schools (most and moderate), the teachers worked together to develop pacing guides and common lesson plans, observed and provided each other with feedback, created formative assessments, and used the results to improve their teaching as well as to pinpoint which of their students needed further instruction on which objectives. The format could be modified to fit the content and circumstances at a particular class, but the elements of explicit objectives, bell-to-bell teaching, a mixture of presentation with progressively more independent student work, four or five transitions from one activity to another, and a closing summary of what had been learned were viewed as essential in five of the six most improved and one of the moderately improved schools.

Staff meetings at these schools became more focused on data and instructional strategies—a definite improvement from prior meetings according to many. In fact, teachers at one of the schools reportedly developed a "coachable spirit" and became more open to suggestions and feedback. For example, one teacher recalled, it was "Literacy in math, literacy in science, literacy in history, literacy in shop, literacy in Phys Ed. We all got involved in teaching literacy." Capacity building, with a focus on results and reflective action, became the new norm. This was not the case in two of the moderately improved and all three of the stuck schools where the directions and expectations for professional learning communities were not clearly stated, where "data was hard to get," and where teachers still tended to work independently in silos.

In fact, through team teaching in one of the most improved schools a practice referred to as "rotations" was developed in which the teacher who was best at teaching a given set of objectives would teach it to all of the students enrolled in an EOC-tested subject rather than keeping students in fixed class groupings. This level of student exchange was uncommon, but teachers in all of the most improved schools often reported observing each other to pick up ideas and make suggestions.

With surprising regularity, teachers in four of the most improved schools reported using 20-question assessments on a weekly basis, with 5 of the 20 questions focusing on material taught in previous weeks. They stressed that the weekly assessments not only served the obvious functions of generating information to guide improvement of teaching as well as tutoring for students who missed certain items, but also prompted students to review the week's lessons and to refresh their memory of material learned earlier in the semester. In fact, as a science department chair put it, "For the

slower students, repetition is really the key. You just cannot expect them to learn something at the beginning of the semester and remember it when EOC time comes at the end of the semester." For advanced students as well as struggling ones, this pattern of rolling review through the semester appears to have been important.

Looking across all nine of the improved schools in our sample, we saw a variety of approaches to supervising instruction, building professional community, assessing student progress, and using the results both to re-shape instruction and to pinpoint the difficulties that students were having in working toward proficiency. But all of the improved schools used some version of these techniques to ensure that the SCoS was taught in a purposeful way, that student learning was checked regularly, and that the checks led to ongoing improvements in teaching as well as interventions with struggling students. A principal in one of the high progress schools concluded that their lack of progress in the past hinged on the fact that the staff was not addressing the needs of individual students.

The Framework for Action called on all designated turnaround schools to submit plans for assistance to struggling students. In improved schools (most and moderate), administrators and teachers; provided extra help to struggling students before, during, and after school, focusing the help with information from the benchmark or formative assessments. In the highest performing high school in our sample, teachers seemed to go to extraordinary lengths to work with students who needed help. One math teacher told us that he arrives at school early, stays late, and sometimes meets students after church on Sundays. These weekend hours may have been unusual, but before and after school tutoring by teachers and some principals was common in the improved schools. Another most improved school featured a mentoring program. Teacher volunteers were assigned students to take a particular interest in each participating student's academic and social well-being. Teachers monitored grades, encouraged good behavior, visited students at home, ate lunch with students, and supported students in extra-curricular activities.

Yet because transportation was limited in rural areas, and because some students either worked or had responsibility for younger siblings, many students apparently found it difficult to get to school early or stay late for extra help. So, three of the most improved high schools scheduled periods during the regular school day for this purpose. One school called these periods "Great Expectations." To make time in the day for these sessions, the school eliminated a ten-minute break from the schedule and shaved five minutes off of each class period. All three of the stuck schools tried to implement some form of support for students who were struggling but their efforts paled in comparison. Once again, the instability of personnel (administrators and teachers) in these schools hindered consistency and longevity of programs. Instead, start-and-stop was the norm while cynicism was the common attitude.

CONCLUDING DISCUSSION

Partly because our study was retrospective and partly because NCDPI's leadership and instructional facilitators approached their work in a facilitative rather than a directive manner, we found it impossible to determine just how much to credit the facilitators for the progress in improved schools and how much to credit the administrators and staff themselves. In their accounts of the transformation process, school people naturally featured the actions they themselves had taken—appropriately so, in the sense that it was their actions that directly affected student learning and test performance.

While each of the practices we report upon corresponds individually, and in some instances collectively, with the current, more cursory overview literature (nothing independently 'new' per se), our findings indicate that it is actually the interplay and scaffolding of them that makes the greatest difference. When external assistance was matched by energetic and sustained local leadership and both were focused on rebuilding many essential, context-specific systems, schools succeeded in breaking patterns of low performance and made significant, measurable progress over a four-year period. And, by examining the nuanced differences between schools that turned around versus those in the process of turning around versus schools that were stuck, we were able to dissect and tease out some of the details of how and why.

Turning around low-performing schools is a complex process that necessitates concerted resources, strategies, and efforts. We already know that tinkering around the edges, implementing stand-alone programs and/or adopting intermediary interventions wholesale is not sufficient for transformation. Instead, local capacity needs to be built (e.g., via sustained, elbow-to-elbow coaching and professional development), the right questions need to be asked (e.g., how/are we learning focused), and resources need to be committed (e.g., time, effort and support). Similar to scaffolding, the strategies used need to be strategically interconnected and provide support for student learning. And, an instructionally oriented principal, committed to reform who has district and community backing for assertive accountability, needs to be the base.

Looking forward, gauging the capacity of turnaround schools to continue performing at high levels or to make further improvement is a question. Among the most worrisome bases for concern is the possibility—indeed, the certainty—that some principals, assistant principals, and key teacher leaders will be lost to retirement or more attractive positions. Principals who develop reputations for leading successful turnaround efforts appear to become very marketable, within and across districts. As one set of schools raises its performance composites enough to escape the low-achieving label and attendant pressures, attention shifts to a new set of schools, and the search for principals to lead their turnaround efforts intensifies. In addition, districts seem to promote successful turnaround principals to leadership positions in the central office. And NCDPI has now hired some of them to serve as school leadership facilitators or district transformation coaches. Assistant principals, instructional coordinators, and teacher leaders credited with important contributions to successful turnaround efforts may also move to more responsible positions in other schools. Some successful principals are canny enough to train the next generation of leadership for their schools, but succession planning may seem an unaffordable luxury to many who are struggling.

An accountability system built around test results appeared to be a catalyst for the turnaround schools in this study to focus on academics. Test-based accountability was not sufficient in itself to spur improved performance, but teachers and principals in many schools viewed it as essential to further progress. As a result, we wonder how changes in the state's standards and assessments will affect morale in these schools as teachers who have worked hard to improve performance against one set of standards will now be faced with new ones (i.e., "moving goalposts"). We also wonder about the loss of support from leadership and instructional facilitators for those schools that raised performance sufficiently to warrant the change. When is the timing of support withdrawal appropriate versus premature? Do you dismantle the scaffold? Will the presence of newly employed, district level instructional coaches be enough to support the current improvement efforts and hold off relapses? Are the foundations that have been laid strong enough for continued progress? School leadership agreed that these reforms needed to be sustained and that the most important component to any future success is consistency. Likewise, most teachers in improved schools came across as confident, committed to their schools and optimistic that student success can and will be sustained.

Despite the new capacities embodied in the culture, teaching skills, efficacy, and collaborative, data-based routines of improved schools, we have the strong sense that the keys to continued good performance and further improvement lie at the district and community levels as much as they do within the schools. Just as central office administrators and districts played an essential role by appointing new principals to spark the turnaround process, they will also make or break continued progress as they choose new leaders after the inevitable losses of principals from these schools. If a new principal grasps the importance of building upon existing and emerging capacities in the staff and develops the strong bonds required to make accountability pressures work constructively, progress seems likely to continue. But a principal who neglects to appreciate the improvements already made and charges off in new directions, jumping from one reform to the next (e.g., multiple reforms versus depth of a few key ones) could undermine capacity in even the strongest of the turnaround schools. Turning around struggling high schools is complicated and it takes time for things to stick—and the larger the system, the more complicated is the implementation.

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AUTHOR CONTRIBUTIONS

All four authors contributed equally to this paper (e.g., research design, data collection, analysis, and write-up).

CONFLICTS OF INTEREST

There are no conflicts of interest regarding this research paper.

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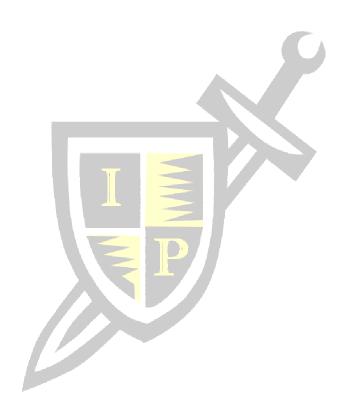
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iii One of the four intervention models required by USDOE for turnaround. See http://www.ed.gov/blog/2010/03/whats-possible-turning-around-americas-lowest-achieving-schools/ for a summary



ⁱ A school's performance composite is a percentage reflecting the number of End-of-Grade or End-of-Course examinations its students passed compared to the total number of examinations taken.

ⁱⁱ Through the first four years of implementation, the average performance of turnaround high schools continued to rise. An important implication of these findings is that improvement in test scores in the state's lowest achieving schools is seldom immediate but requires focused and sustained support over three or more years to register.