Consortium for Educational Research and Evaluation–North Carolina

Turning Around North Carolina's Lowest Achieving Schools (2006-2010)

Charles L. Thompson
Kathleen M. Brown
Latricia W. Townsend
Gary T. Henry
C. Kevin Fortner
September, 2011

Consortium for Educational Research and Evaluation–North Carolina

SERVECenter
THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
People · Possibilities · Promise

Carolina Institute for Public Policy
THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

THE WILLIAM & IDA FRIDAY INSTITUTE FOR EDUCATIONAL INNOVATION
NC STATE UNIVERSITY COLLEGE of EDUCATION

Acknowledgements

We wish to acknowledge our field research colleagues Rodolfo Argueta, Nina Arshavsky, Kevin Bastian, Bernice Campbell, Shanyce Campbell, Julie Edmunds, Adam Hall, Julie Keane, Adrienne Smith, Matt Proto, Megan Thompson, Brad Walston, and Rebecca Zulli. Their skillful interviewing, observation, and document collection at the schools sampled in this study provided the basis for this report. We also wish to thank the principals, assistant principals, teachers, and staff of the 30 schools we visited as well as the leadership facilitators, instructional facilitators, and portfolio managers involved in the turnaround efforts in these schools. Pat Ashley, Director of the District and School Transformation (DST) division at the North Carolina Department of Public Instruction (NCDPI) and Ann Osburn, Assistant Director of NCDPI DST, gave generously of their time and knowledge about the challenges and process of putting low-achieving schools on the path to improvement. In addition, we owe a considerable debt of gratitude to Gus Martin of the Leadership Group for the Carolinas; Mike Williams, Executive Director of the Center for School Leadership Development; Bianca Montrosse, formerly of SERVE and now at Western Carolina University, who provided essential background information on the Turnaround Schools program; and Glenn Kleimann, Executive Director of North Carolina State University's Friday Institute for Educational Innovation for valuable feedback on drafts of this report.

Table of Contents

Executive Summary..... *i*

Impact of the Turnaround Schools Program.....*ii*

How Turnaround Worked: Scaffolded Craftsmanship…..……..…… *vi*

Commitment, Climate, and Culture..……..……... *vii*

Improved Knowledge and Skills …...…….……..*viii*

Structures and Support for Instruction..…..……..……... *x*

External Support……...*xi*

Conclusion ..... *xi*

Introduction 1

Background on the Turnaround Schools Program (2006–2010) 2

Framework for Action Plans 4

Professional Development 5

Coaching and School-Specific Professional Development 9

Methods 13

Impact Assessment 13

- Research Design 13
- Data and Sample 13
- Analysis 14

Qualitative Study of Turnaround Dynamics 14

Impact of the Turnaround Schools Program 16

Causes of Low Performance 19

The Process of Improvement: High School Level 23

Commitment, Climate, and Culture 27

- Safe, Orderly, and Caring Environment 28
- Stronger Pressure and Rising Expectations for Student Learning 30

Improved Knowledge and Skills 36

- Personnel Replacement 36
- Professional Development 38
- Coaching and School-Specific Professional Development 40

Structures and Support for Instruction 43

- Coordinating Curriculum and Assigning Students and Teachers Strategically 43
- Supervising Instruction, Building Professional Community, and Using Assessment 46
- Organizing Assistance for Struggling Students 51

External Support 52

The Process of Improvement: Middle School Level 56
Commitment, Climate, and Culture 56
Safe, Orderly, and Caring Environment 56
Stronger Pressure and Rising Expectations for Student Learning 58
Improved Knowledge and Skills 60
Personnel Replacement 60
Professional Development 61
Coaching and School-Specific Professional Development 62
Structures and Support for Instruction 64
Supervising Instruction, Building Professional Community, and Using Assessment 64
Organizing Assistance for Struggling Students 66
External Support 67
The Process of Improvement: Elementary School Level 68
Commitment, Climate, and Culture 69
More Orderly and Caring Environment 69
Stronger Pressure and Rising Expectations for Student Learning 69
Improved Knowledge and Skills 70
Personnel Replacement 70
Professional Development and Coaching 71
Structures and Support for Instruction 72
Coordinating Curriculum and Assigning Teachers and Students Strategically 72
Supervising Instruction, Building Professional Community, and Using Assessment 72
External Support 74
District Support 74
Community Support 74
Capacity for Continued Improvement 75
Conclusion 78
References 82

Figures and Tables:

Percentage Point Change in Turnaround Schools' Cohort 1 ..... *vi*
Percentage Point Change in Turnaround Schools' Cohort 2 ..... *v*
Summary of Contrasts between High-Progress and Low-Progress or "Stuck" School ..... *xiii*
The School Turnaround Process 27

TURNING AROUND NORTH CAROLINA'S LOWEST ACHIEVING SCHOOLS

Executive Summary

From 2010 through 2014, a portion of North Carolina's $400 million Race to the Top grant will enable the NC Department of Public Instruction to intervene in an effort to improve performance in the lowest-achieving five percent of North Carolina's schools – some 118 elementary, middle, and high schools. With modifications to accommodate federal guidelines, the interventions supported by Race to the Top funds will build upon experience gained from the NCDPI Turnaround Schools program's work in similar schools between 2006 and 2010. The study reported here was designed to help distill that experience into knowledge which the District and School Transformation Division can use to strengthen its work during the Race to the Top era.

During the 2006-2010 period, the NCDPI and its partner organizations 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. A school's performance composite is a percentage reflecting the number of End-of-Grade or End-of-Course examinations its students passed, out of the total number of examinations taken. Across the elementary, middle, and high school levels, local educators pointed to similar factors contributing to low performance:

- 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 school leadership, ranging from harsh top-down leadership to leaders that are too eager to please and fail to enforce discipline or follow through on decisions
- Alienated teachers marking time in survival mode, isolated within their own classrooms

When intervention by NCDPI, the New Schools Project, and other partners 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. The Turnaround Schools program of intervention included (1) a requirement that the schools submit plans consistent with a Framework for Action designed to focus the schools on changing practices thought to affect student achievement, (2) a series of professional development sessions designed to build the schools' capacity to carry out the plans, and (3) follow-up coaching and school-specific professional development, which continued for as long as the school's performance composite remained below 60%. A subset of 13 high schools were also divided into separate, smaller academies in order to strengthen teacher-student relationships and facilitate other reforms.

In the "stuck schools" we studied—those that had made little or no progress despite strong pressure from Judge Manning and assistance from the NCDPI, the New Schools Project, and other organizations enlisted by the NCDPI and local districts—attempts at reform were undermined by stop-and-start reform initiatives with no sustained follow-through, continued principal and teacher turnover, principals who were unable to mobilize teachers behind efforts to enforce discipline and step up demands for academic achievement, and breakdowns in basic policies and procedures at both the district and school levels. Without sustained, competent, and authoritative leadership at both the district and school levels, these schools were simply unable to break out of the doldrums of despair.

This report is the first in a series related to the evaluation of North Carolina's Race to the Top initiative. As indicated earlier, the interventions to be implemented as a major component of the Race to the Top initiative will build upon experience gained by the Turnaround Schools program between 2006 and 2010. The study reported here was designed to draw lessons from that experience in order to inform the NCDPI's Race to the Top-funded work. In this executive summary, we outline the key findings from the study.

Impact of the Turnaround Schools Program

To assess the impact of the Turnaround Schools program at the high school level, we conducted an analysis of student achievement data and graduation rates comparing change in the turnaround high schools with change in a set of high schools that performed only slightly better in the years before the Turnaround Schools intervention began. The student test score analysis used 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. This enabled us to isolate the effects of the Turnaround Schools program from many other variables that affect student test scores. The results revealed that the Turnaround Schools intervention made a significant contribution to improved student test scores in the high schools it served. The contribution was modest but grew progressively larger over the period of treatment. We also compared high school graduation rates in Turnaround schools and similar schools from 2006-07 through 2009-10. Graduation rates in the Turnaround high schools appeared to increase by two percentage points. but the difference between the Turnaround high schools and comparison schools was not statistically significant. At the middle school level, where intervention began a year after intervention began in the first set of 35 high schools, the impact on test scores was not large enough to be statistically significant. Because of an interruption in the flow of resources to support intervention in the elementary schools, the program at that level was not sustained enough in a single set of schools to warrant impact assessment. An important implication of our

Impact

The Turnaround Schools intervention made a significant contribution to improved performance in the high schools it served. The contribution was modest – about ¾ point on average on End-of-Course tests – but grew progressively larger over the period of treatment…. An important implication of our findings at the high school and middle school levels is that improvement in the state's lowest-achieving schools is seldom immediate, but requires sustained support over three or more years.

findings at the high school and middle school levels is that improvement in test scores in the state's lowest-achieving schools did not occur immediately, but in the high schools required three to four years before significant improvement registered.

In addition to the analyses comparing the improvement in student learning in Turnaround high schools with improvement in student learning in the comparison schools, we also compared improvement in the performance composites of the two sets of schools. Performance composites represent the percentage of students in a school who have achieved proficiency in tested subjects. The graphs on the next pages show that improvement in performance composites varied widely across the high schools served by the Turnaround Schools program, but on average, the Turnaround schools' performance composites improved more than those of the comparison schools. In the first cohort of high schools, where intervention began in 2006-07, by the end of 2009-10 performance composites in the Turnaround Schools had improved by an average of about 12 percentage points, compared with an improvement of about three percentage points in the comparison schools. In the second cohort of high schools, where intervention began in 2007-08, by 2009-10 average performance composites had improved by about 10 points, compared with the 3-point improvement in comparison schools. Note also that the degree of improvement varied widely across Turnaround schools in both cohorts. It was to understand this variation in improvement that we undertook the closer study of selected schools summarized in the next section.

Figure 1: Percentage Point Change in Turnaround Schools' Performance Composites Compared with Change in Comparison Schools' Performance Composites, 2005-06 through 2009-2010

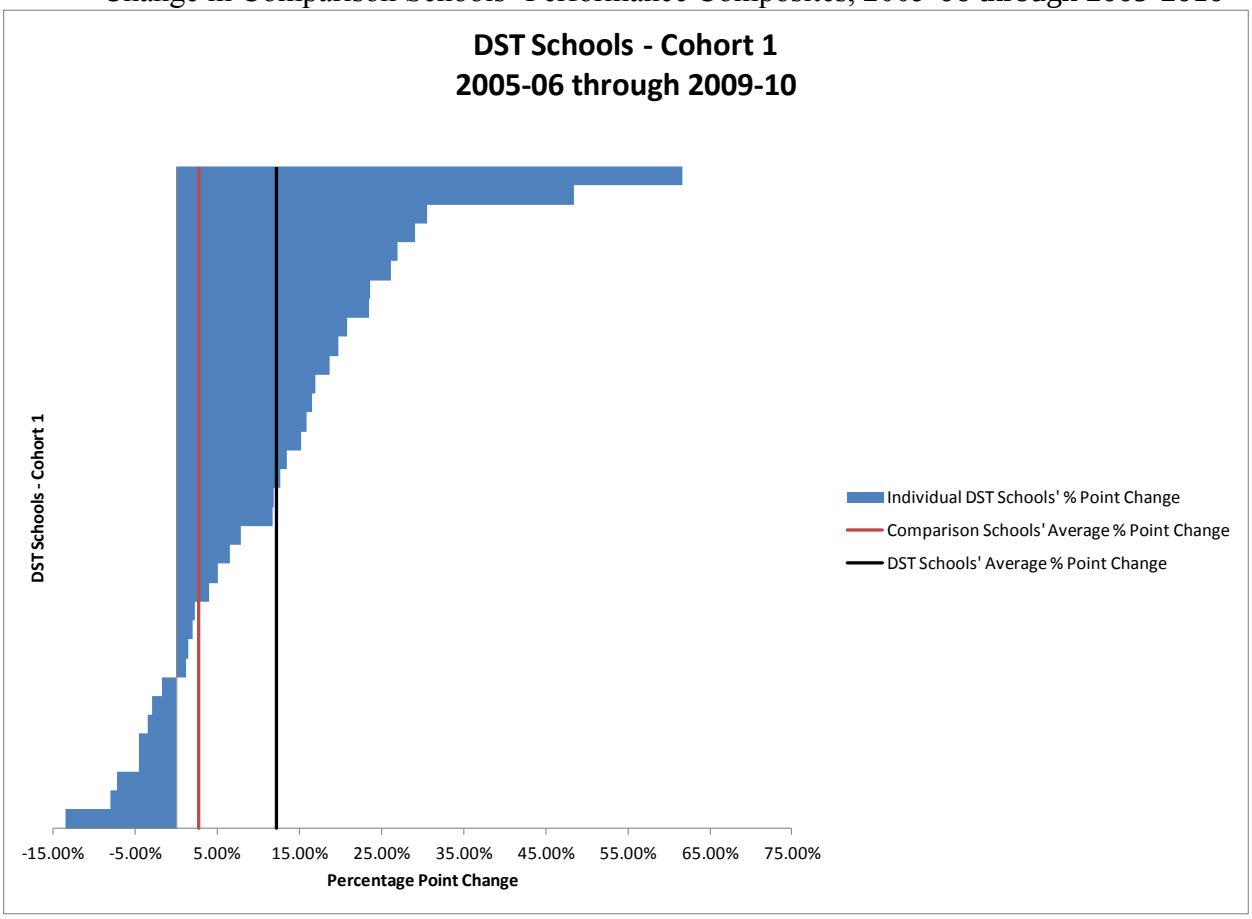
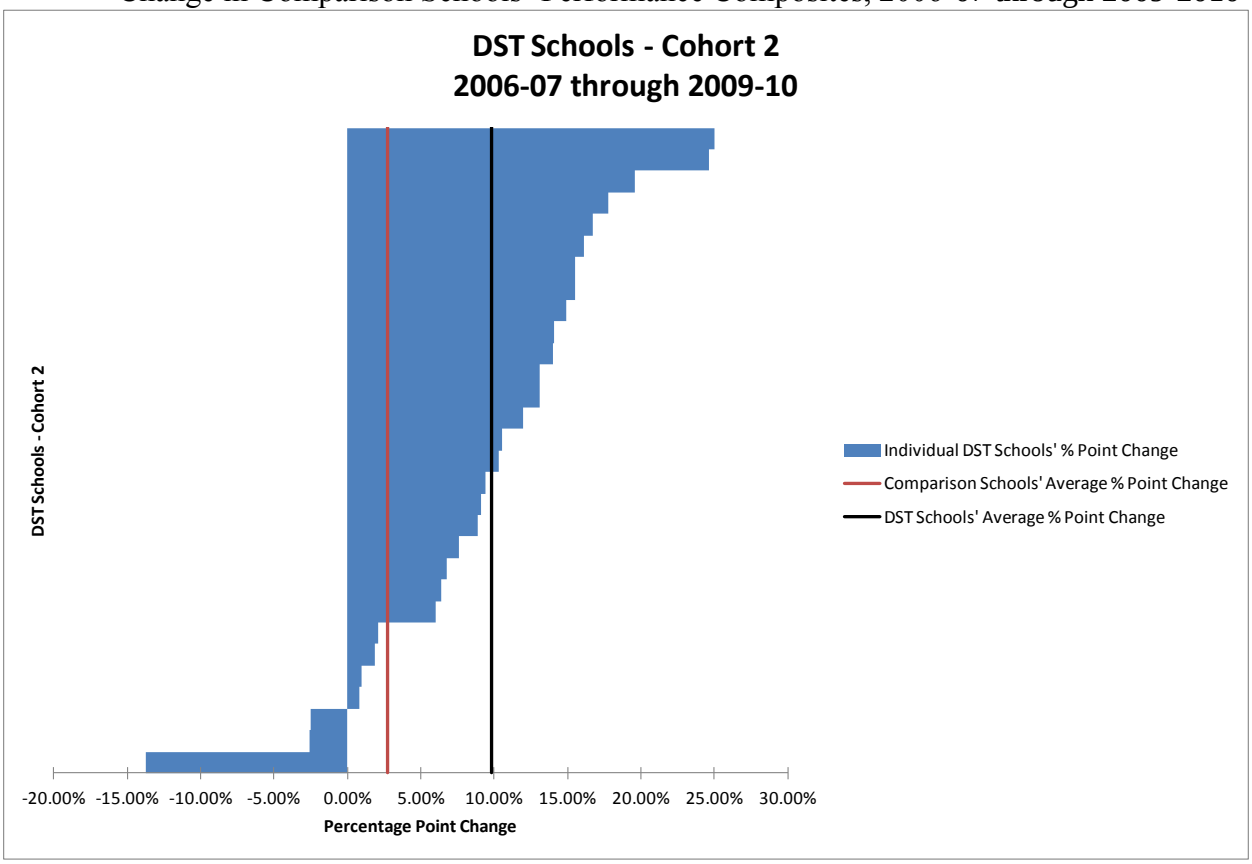


Figure 2: Percentage Point Change in Turnaround Schools' Performance Composites Compared with Change in Comparison Schools' Performance Composites, 2006-07 through 2009-2010



How Turnaround Worked: Scaffolded Craftsmanship

To learn how change took place in the schools that did improve and what frustrated change in those that 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 20 percentage points or more), one third that had improved moderately (about 12–15 points), and one third that had made little or no progress. 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.

We found that in the improved schools, 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 changes focused on key areas of school operation, including (1) the commitment, climate, and culture affecting student learning; (2) the knowledge and skills that school leaders, teachers, and other staff bring to their jobs; (3) the structures and processes that support instruction within the school; and (4) the strength of linkages between the school and both the district central office and the community served by the school. We coined the term *scaffolded craftsmanship* to characterize this change process.

Relationships and Assertive Accountability

The principal of a small rural high school whose performance composite had soared 28 points in only two years began a sentence with a deadpan poker face, "I don't want to brag, but …"—and here he could not resist breaking suddenly into a brilliant smile—"… my teachers love me." Our interviews with teachers bore him out. His teachers did love him. Teachers could not contain their own smiles when they talked about the principal: 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.

Yet on the white board behind the 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 this year. He explained that early in a semester, he sat down with each teacher of an EOC course to review her students' prior scores and the Education Value-Added Assessment System (EVAAS) prediction for the student's likely score in the course. They would then discuss what the teacher would have to do to help the student make a passing score and set a goal 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 whiteboard, each teacher could compare her students' performance relative to the goals with those of other teachers in the same and other EOC courses. This spurred competition among teachers, but it also prompted teachers to seek help from colleagues with better success rates.

The scaffolding consisted of the Framework for Action, professional development, and coaching provided by the NCDPI and its partner organizations. With these supports, school leaders and staff gradually learned how to improve performance by crafting improvements in the four key areas just mentioned. At the high school level, some schools incorporated selected components of comprehensive school reform models, but the heart of the improvement process was guided reconstruction of key functions rather than implementation of externally designed models.

Commitment, Climate, and Culture

In the area of commitment, climate, and culture, successful school leaders simultaneously asserted strong accountability pressures as they also cultivated relationships of trust and engaged the teaching staff more actively in planning, making policy, and solving problems within the school. In improved schools, it appears to have been this 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 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.

Piecing together the evidence from our interviews across schools into a pattern, we concluded that this is how a culture of high expectations was made. Accountability pressures within the context of strong relationships and engagement of teachers in planning and problem solving generated commitment to new goals and standards for student

More Orderly Environment

The clearest illustration of how a more orderly and caring environment was created comes from a 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. There were small-scale scuffles almost daily, and periodically, large group fights and near riots would erupt. The atmosphere of conflict and disorder permeated halls and classrooms and contributed to rapid turnover of principals as well as teachers.

Leadership came from an unexpected quarter. A man who had grown up in the county, left to pursue a military career, and returned to join the local police force took note of the problems in the high school. Believing that his military and police experience gave him a special perspective on the issue, he approached the chairman of the school board with his ideas for addressing it. The school board chair asked him to lay out a more specific plan and hired him to implement it.

The plan had two sides. First, the new chief of security added two more 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, however, the security officers were instructed to chat with students, get to know them personally, eat lunch with them, attend sports events they played in, and ask the students to come to security officers, teachers, or the principal with information about 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 and 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.

behavior and learning. Similarly, strong and consistently enforced discipline policies together with energetic efforts to cultivate caring relationships with students combined to help schools create safer and more orderly environments. But while the initial mobilization of commitment seems to have been crucial, it does not seem to have been sufficient to consummate 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 told themselves, "Wow, this is possible! So we can go higher!"—a development that was recognized and reported across the improved schools—a new culture had started to take shape. By then, teachers had newly recruited colleagues, had learned new skills, and had begun to take action in the new ways we outline in this report. In the improved schools we studied, culture-building and improved performance were part of a spiraling process. 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.

In the successful turnaround schools, a parallel combination of tough assertion and strengthened relationships between the leaders and staff on the one hand and students on the other appears to have produced an environment that was substantially more orderly and conducive to learning.

Improved Knowledge and Skills

The Turnaround Principal

The common image of a "turnaround principal" is 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. In general, the principals of improved high schools seemed quieter people, distinguished more by their ability to develop rapport with teachers and students, by their knowledge of instruction, and by an unshowy determination to improve academic performance rather than by an outgoing, expressive personality.

School leaders' and teachers' knowledge and skills—the "human capital" available to the school—were improved through three main approaches: selectively replacing administrators and teachers, focusing professional development on the school's most pressing problems, and providing sustained follow-through with coaching at both the leadership and instructional levels. 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 fewer than a third of the staff. New teachers brought new energy and commitment as well as new talents to the school, but in the short term, personnel replacement sometimes exacerbated mistrust between administrators and staff as well as among teachers themselves. Successful principals devoted substantial time and care to mending these frayed bonds. Especially when teachers who were new to the school were also new to teaching, professional development to strengthen their classroom management skills and knowledge of the

North Carolina Standard Course of Study was also necessary to transform the new potential into improved performance. Without this follow-through, personnel replacement is simply another form of turnover.

In most of the improved high schools, replacement of a substantial number of teachers came at the same time or soon after a new principal was installed. In a comprehensive urban high school that was divided into a series of smaller schools on the same campus, an entirely new faculty was hired for the most improved of these smaller schools. At one rural high school, half of the faculty was replaced by Teach for America teachers in a single year. In the remainder of the improved schools, the first wave of teacher replacements was not the result of a deliberate policy decision, but a side effect of serious discipline and morale problems, sometimes exacerbated by principals trying to get control of the school and raise scores through stern unilateral action alone.

Coaching from leadership and instructional facilitators complemented personnel replacement as a strategy for building human capital. 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 discuss what they had learned during the day. Leadership facilitators sometimes served as neutral discussion leaders during leadership team and School Improvement Team meetings as well as planning retreats. In addition, they took the initiative to organize special meetings to address problems they had identified. Facilitators' written reports also show them providing tools such as classroom observation protocols and common lesson planning formats to principals and teachers, 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.

Stick with the Plan

Another function served by leadership facilitators was to support follow-through on the schools' Framework for Action plans. 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." From the written reports the leadership facilitators filed and the recollections of our interviewees, however, it appears that the facilitators virtually never tried to dictate actions to either principals or others.

"These Teachers Are Killing Your Scores"

In contrast, once they had discussed a problem several times with a principal, NCDPI managers sometimes urged certain actions in a very pointed way, an example being the portfolio manager who told a principal point-blank, "You need to get rid of these teachers. They are killing your scores."

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. Many were National Board Certified. 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. Reports filed by instructional facilitators also reflect more variation in the frequency of visits across facilitators, schools, and time.

Particularly when working with new teachers, instructional facilitators often focused on the NC Standard Course of Study, breaking it down goal by goal and objective by objective to clarify exactly what teachers should be focusing on. Instructional facilitators taught demonstration lessons, observed as teachers tried the new techniques or materials, and provided a combination of encouragement and corrective feedback. The demonstration lessons and the fact that the instructional facilitators were themselves practicing teachers recently out of the classroom gave them credibility and leverage. Most teachers' comments about instructional facilitators were positive, if general in nature. For example, "They were incredibly helpful on our Framework for Action plan." The main complaints we heard from teachers about instructional facilitators—more at the middle and elementary school levels than the high school level—were about seeing them too seldom. 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.

Structures and Support for Instruction

As important as increased commitment, order, and demands for performance as well as new knowledge and skills were, carefully crafted structures and support for instruction were required to make effective use of the new commitment and skills. Instruction had not been strategically organized or managed in turnaround schools. The improved schools in our sample used a variety of strategies to shepherd individual students through curricular paths matched to their evolving skills and to ensure that students encountered solid teaching and re-teaching along the path to proficiency. Improvements included more systematic attention to (1) coordinating curriculum and assigning students and teachers strategically, (2) supervising instruction, building professional community, and using multiple

Not Forms but Functions

The director of NCDPI's District and School Transformation division emphasized that what was essential to improved performance was not whether a specific model or organizational form is implemented, but that the functions featured in the Framework for Action be implemented. Thus, the Framework for Action called not for a Freshman Academy, but for a "Plan for Ninth Grade Transition." What we learned from our school interviews bore out the wisdom of emphasizing essential functions rather than specific organizational forms.

Supporting Instruction

Having constructed curricular pathways designed for students of varying skill levels and having "hand-scheduled" individual students through them so that they would encounter the most effective teachers available to teach each course, the improved schools in our sample did not then leave teachers on their own to teach as best they could. They took a number of additional steps to ensure that the Standard Course of Study for each course was actually taught, was taught well, and was taught again when necessary. With the support of leadership and instructional facilitators, principals structured and supervised instruction closely, organized teachers into collaborative groups (professional learning communities), and promoted the use of benchmark and formative assessment to check students' learning regularly, to guide assistance for struggling students, and to shore up weak spots in teaching.

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 (3) 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 NC Standard Course of Study, then route individual students through the right courses in the right order. The right courses in the right order were those that a given student could handle at each point along the way, provided that s/he gave a solid effort.

External Support

Finally, improved schools also featured stronger links with district central office administrators and with the broader communities served by the schools. For example, districts sometimes took the initiative to replace poor-performing teachers, responded to requests for new funds to staff the extra assistance for students who had been falling behind, and helped principals and teachers create more effective formative assessment programs and interpret data from a variety of sources. School leaders hosted meetings and offered building tours to school boards and county commissioners, involved parents in major school clean-up efforts, organized mentorship programs in partnership with local businesses, spoke at churches and civic clubs, and used a variety of other devices to improve the school's relationships with the surrounding community.

Conclusion

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 change 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.

Yet principals and teachers did credit the NCDPI and its partner organizations with important contributions as well. Principals reported that the leadership facilitators helped them stay focused on implementing their Framework for Action plans and provided useful guidance on rebuilding many essential systems. Instructional facilitators' recent classroom experience, competent delivery of demonstration lessons, and concrete advice and feedback gave them credibility with most teachers. But because instructional facilitators visited less frequently than leadership facilitators (once every month or six weeks rather than weekly), they appear to have found it more difficult to develop trusting relationships with some teachers. A few teachers in low-progress schools complained that the instructional facilitators knew too little about them and their schools to advise them appropriately. In general, however, most administrators and teachers offered positive assessments of the leadership and instructional facilitators' assistance, and when they did offer critical feedback, it was mainly to call for more frequent visits from instructional facilitators. For a review of the contrasts between the schools that made substantial progress and those that made little or no progress, see Table 1 at the end of this Executive Summary.

Summing Up

All in all, the NCDPI's Turnaround Schools program appears to have succeeded in providing high-quality assistance to most of the low-achieving schools targeted by the program. When this external assistance was matched by energetic and sustained local leadership, schools succeeded in breaking out of the doldrums of low performance and made significant, measurable progress over a three- or four-year period.

Since the period covered by this report (2006-2010), the District and School Transformation Division has taken several steps to strengthen their interventions. With assistance from the Boston Consulting Group and Cambridge Education, LLC, an international firm with special expertise in the area, DST has moved to systematize the comprehensive needs assessment process. To ensure better use of the needs assessments, DST has also tightened the links between the needs assessment unit and the school and district facilitators. In addition, school facilitators are now employed directly by NCDPI rather than through a contract with the Leadership Group for the Carolinas. Further, the facilitators now provide professional development as well as coaching. The consolidation of professional development with coaching along with direct employment of the facilitators helps lower costs, but it also poses the challenge of training and managing a number of people who are new to the job. DST has also increased its focus on the district level. District transformation coaches will assist the 16 districts where the majority of low-achieving schools are located. (Funding for 12 districts will be provided by Race to the Top funds. Assistance to the other 4 will come from state funds.) With these changes and some adjustments in the frequency of visits by instructional facilitators, DST seems poised to make a significant contribution to the ambitious improvements sought by the Race to the Top effort. We would caution against expectations for instant improvement, but DST has shown that with persistence and thoughtful adjustments throughout a four-year process, low-achieving schools can indeed turn around.

Table 1. Summary of contrasts between high-progress and low-progress or "stuck" schools

School attribute	Improved schools	"Stuck" schools
Focus and continuity	Sustained focus on improving key functions	Profusion of stop-and-start initiatives without continuity or follow-through
Principal replacement and district support	District installation of new instructionally oriented principal committed to reform, with continued district support for assertive accountability	Without strong district support for principal and assertive accountability, continued principal turnover
Teacher replacement	Replacement of ineffective teachers with energetic new teachers committed to turnaround agenda, with district support	Without improved discipline and accountability for student achievement, continued uncontrolled teacher turnover
Accountability and teacher-principal relationships	Principal actively holds teachers accountable for improving student achievement AND builds positive relationships with teachers.	Ineffective leadership, ranging from unilateral demands for improved achievement without relationship building, to nurturing relationships without accountability
Discipline and order	Tough, well-enforced discipline policy combined with strengthened adult-student relationships produce orderly environment for learning.	Without an assertive principal with strong district support, teachers lack incentives and confidence to enforce discipline.
Professional development (PD) and coaching	PD with sustained coaching follow-up at school and classroom levels strengthens principal and teacher skills and knowledge.	Continued turnover undermines the effects of PD and coaching; spottier classroom level coaching
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	Curricular pathways less carefully constructed, both student and teacher assignment less strategic
Instructional supervision	Frequent classroom observation and feedback from school leaders	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	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	Assistance less organized, not clearly focused with use of formative assessment

Introduction

Over the next four years, North Carolina's $400 million Race to the Top grant will enable the North Carolina Department of Public Instruction (NCDPI) to intervene to improve student achievement in the lowest performing 5% of North Carolina's schools—some 118 schools and 12 school districts where a majority of these schools are located. As part of an overall evaluation of Race to the Top activities, the Carolina Institute of Public Policy at the University of North Carolina (UNC) at Chapel Hill, the Friday Institute for Educational Innovation at North Carolina State University, and the SERVE Center at UNC–Greensboro will study the process and assess the impact of the interventions. Our primary purpose is not simply to render a thumbs-up-or-down assessment of the effort's impact, but to contribute insights that can improve its effectiveness.

It is in this spirit that we undertook the present study of NCDPI's prior efforts to improve low-achieving schools. The premise was that lessons from the prior work could strengthen the current Race to the Top-funded interventions. Between 2006 and 2010, NCDPI worked with 66 low-achieving high schools, 37 middle schools, 25 elementary schools, and 6 school districts with substantial numbers of low-achieving schools. At the high school and middle school levels, the Turnaround Schools program improved student learning to a modest but statistically significant degree. (Resource limitations and policy shifts interrupted intervention in elementary schools so we did not make an assessment of impact at that level.)

For the purpose of informing future interventions, the more important questions were how progress was achieved in the schools that did improve and what frustrated improvement in the schools that continued to struggle. To address these questions, we selected 30 schools for closer study: 12 high schools, 9 middle schools, and 9 elementary schools. At each level, we chose schools with contrasting levels of progress—one third of the schools had made great progress, one third had made moderate progress, and one third had made little or no progress. The notion was that the contrasts among schools with different levels of progress would illuminate the dynamics of change in successful schools and the obstacles to progress in the little-improved schools. To learn about the dynamics and obstacles, we interviewed principals, teachers, district officials, and others associated with each school as well as facilitators ("coaches") from NCDPI and other assistance agencies that worked with the schools. We also reviewed available documentation, including plans and reports filed with NCDPI.

In this report, we present our findings and conclusions. First, we provide more background on the Turnaround Schools program, outlining why and how the effort was initiated, how the schools were targeted for intervention, and the types of support that NCDPI and its partner organizations provided. Then, we examine the schools, beginning with the schools' own accounts of why and how they came to perform poorly and why the low-progress or "stuck" schools were unable to make much headway. After that, we turn to an account of the process of improvement in more successful high, middle, and elementary schools. We characterize this as a process of "scaffolded craftsmanship," in which NCDPI and its partners provided a framework, professional development, and coaching to support local educators as they learned how to build more functional schools. We conclude with a series of overall observations on the successes and continuing challenges of NCDPI's efforts to turn low-performing schools around.

Background on the Turnaround Schools Program (2006–2010)

NCDPI began to organize its program to turn around low-achieving schools in 2005 in response to judicial and gubernatorial actions (Fiscal Research Division, 2007; SERVE Center, Friday Institute, & Carolina Institute for Public Policy, 2010). The judicial action was a ruling by Judge Howard Manning, Jr. in the *Leandro v. State of North Carolina* school finance suit. Judge Manning held that North Carolina's constitution obligates the state to give every child an opportunity to get a "sound basic education." The judge defined a sound basic education not simply in terms of the educational services provided to students, but in terms of the skills and knowledge that students acquire. Nor did he set a low bar for the level of skills and knowledge entailed in a sound basic education. Rather, he held that students should graduate prepared to compete on an equal basis for employment and postsecondary education. Whether students were making adequate progress toward a sound basic education thus defined could be measured by whether they achieved proficiency on the state's End-of-Grade and End-of-Course tests. By Judge Manning's standards, a high school that was failing to enable at least 55% of its students to achieve proficiency was failing to fulfill the state's constitutional obligation, and a school that persistently fell short of this bar deserved to be closed unless urgent steps were taken to turn it around. Thus, he ruled in 2006 that all high schools with performance composite scores below 55% must be assessed to determine why they were achieving so poorly and how they could be improved. Soon thereafter, Governor Mike Easley raised the bar to 60%.

In response, during 2005 and 2006 NCDPI sent assessment teams to 44 high schools with performance composites below 60% for two consecutive years (either 2003–04 and 2004–05 or 2004–05 and 2005–06). Of the 44, eight schools raised their performance composites above the 60% bar in 2005–06, and a ninth chose to undergo a whole school redesign that saw it divided into several smaller, theme-based schools. The remaining 35 entered the high school turnaround process in 2006–07. In 2007, an additional 31 high schools with performance composites below 60% for 2005–06 and 2006–07 were identified and entered the turnaround process during the 2007–08 school year, bringing the total number of turnaround high schools to 66.

That same year (2007), with advice and support from the Boston Consulting Group—funded by the Bill and Melinda Gates Foundation—NCDPI established the District and School Transformation (DST) division to manage a more fully developed version of the turnaround process. A plan developed in consultation with the Boston Consulting Group called for a shift from working with individual schools to a focus at the school district level. Working with districts was held to be more efficient than working with individual schools. The premise was that by improving districts' capacity to assist their own schools, DST would be able to reach more schools, more economically. DST began to move toward a focus on districts, but an inability to secure funding for the new orientation along with political complications frustrated full implementation. The unit did initiate intervention with six districts, five by mutual agreement and one on the basis of a consent order from Judge Manning. The judge had grown impatient with the rate of change in the sixth district and ordered NCDPI to intervene more forcefully. But the main focus of the DST's work remained at the individual school level.

After they had undergone a comprehensive needs assessment, the 66 turnaround high schools were permitted to choose among several different paths to improvement (SERVE Center et al.,

2010). By partnering with other organizations offering support and by permitting schools to choose among sources of support, NCDPI made use of a broad range of existing capacity to assist struggling schools. Fifty-three high schools elected to work primarily with NCDPI itself, or with NCDPI in cooperation with a third-party organization that specializes in assisting struggling schools. Of these, 23 worked solely with NCDPI and 30 with NCDPI and a third-party organization. The latter included America's Choice, the Coalition of Essential Schools, Creating Great Classrooms, Focused Leadership Solutions, High Schools That Work, IMPACT Model, McREL Success in Sight, Solution Tree, and Talent Development, LLC.

In these 53, NCDPI used a "transformation" model emphasizing professional development and coaching at the school and classroom levels. The transformation model sought to change the leadership approach and practices employed in a school, sharpening the school's focus on student learning and raising academic expectations, improving the use of data to inform decisions, increasing collaboration among teachers, and strengthening parent and community engagement. In addition to professional development and coaching, the transformation model sometimes involved replacement of the principal and several teachers as well as other instruments of improvement.

The remaining 13 high schools worked with the North Carolina New Schools Project, an organization created by Governor Easley and the Education Cabinet in 2003 to support high school reform. Most of the 13 involved NCDPI as well, but a few partnered solely with the New Schools Project. In addition to funding the Boston Consulting Group's assistance in developing plans for the District and School Transformation (DST) division, the Gates Foundation also had played a role in the initiation of the New Schools Project, providing an $11 million grant to match the state's investment as well as a second supplementary grant in 2006. Using a "redesign" model, each of the high schools served by the New Schools Project was subdivided into a set of smaller, independent theme-based schools. These schools received professional development (PD) and coaching that was broadly similar to the PD and coaching provided to the schools served via the transformation model, though it differed in some particulars. (More details on the New Schools Project and its approach can be found in the Coaching sections of this report.)

In broad terms, 53 high schools went through some version of the transformation model emphasizing change within the existing school. The other 13 went through some version of the redesign model that involved division into smaller, theme-based units. Both models included professional development and coaching.

In 2007, Judge Manning turned his attention to middle schools and held hearings focused on those that fed into the turnaround high schools. That summer, NCDPI identified a set of 37 middle schools that were feeders to the 66 turnaround high schools (SERVE Center et al., 2010) and fell below a 60% performance composite in 2005–06. Thirty-six of the 37 entered the turnaround process during the 2007–08 school year. The superintendent of the district where the 37th was located declined for the school to participate. The same year, 20 elementary schools also entered turnaround. The 20 were either low-performing under North Carolina's ABCs assessment and accountability model or were in at least the third year of sanctions for failing to make Adequate Yearly Progress (AYP), as defined by the federal No Child Left Behind Act

(SERVE Center et al., 2010). In 2008–09, however, budget constraints meant that DST was able to provide support to only those elementary schools in the six districts that it had begun working with the previous year. In 2009–10, resources again permitted limited instructional coaching support to 20 of the state's lowest performing elementary schools, some but not all of which had received help in 2007–08 (SERVE Center et al., 2010).

The turnaround process included three major components: (1) development of a plan consistent with NCDPI's Framework for Action, (2) a centralized program of professional development for a leadership team from each school, and (3) onsite coaching and school-specific professional development designed to support implementation of the plan as well as other needed changes in the school. The three components were designed to work together to bring about major improvements in student achievement. As its name suggests, the Framework for Action was designed to provide an overall shape and structure for the improvement process. The professional development was designed to help the schools' leadership teams understand the Framework for Action and begin to acquire the knowledge and skills necessary to implement it. And the onsite coaching and school-specific professional development were designed to help schools develop the practical know-how to carry out their plans and to make adjustments along the way.

Framework for Action Plans

Soon after the initiation of NCDPI's turnaround interventions at the high school level, the leaders of the effort formulated the High School Framework for Action, which enumerated nine points 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

After middle and elementary schools were added to the effort, the High School Framework for Action was generalized to accommodate the additional levels. For example, "plan for ninth grade transition," which called on high schools to address entering students' skill deficiencies and to prepare them in other ways for the greater independence and challenge of high school, often led to the creation of separate freshman academies, with a team or teams of teachers working with ninth graders in small groups, often in a separate wing or building. In the generalized Framework for Action, this component became simply "Transition," and called on schools to ask themselves, "How have we modified experiences to help all students successfully transition from grade to grade?" In formulating this component of their plans, schools were to consider such matters as

location (where in the building classrooms for students in different grades would be placed), use of teaming, common planning times for certain groups of teachers, support systems for struggling students, advisory programs, summer opportunities/orientation, and use of data to support students. Also specific to high schools were the decisions about (a) whether the school would reform within the existing structure (transformation model) or would redesign, breaking the school up into a series of smaller units (restart model), and (b) which combination of NCDPI and/or other organizations would provide the school with ongoing assistance.

The generalized version of the Framework for Action specified several questions and issues for schools to consider as they developed their plans on each point. For example, the point calling for review of school processes and procedures asked (a) whether the curriculum is aligned in subject areas, across grade levels, and with feeder schools; (b) whether the master schedule is arranged to provide common planning time for teachers who need to collaborate in order to meet students' individual needs and prepare them for the next academic level, work, and citizenship; and (c) whether routine policies on such matters as attendance and discipline are well designed to support high student achievement. The point on professional learning community posed questions on such matters as how the school promotes (a) collaboration and reflection, (b) a student-centered rather than a teacher-centered orientation, and (c) ongoing improvement in lesson planning and assessment.

Professional Development

In 2006, Judge Manning issued a call for assistance to low-achieving high schools, UNC system President Erskine Bowles responded by offering professional development services by the Principals' Executive Program (PEP) in collaboration with the Kenan-Flagler Business School at UNC-Chapel Hill. PEP, based at the Center for School Leadership Development, a unit that housed several educator preparation and professional development programs operated by UNC General Administration, PEP had over 20 years of experience in running programs for school leaders. But President Bowles, himself a businessman of some accomplishment, was skeptical that PEP could do the job alone and believed that expertise from Kenan-Flagler would strengthen the training for the leaders of turnaround schools. While PEP-Kenan-Flagler professional development was not a part of NCDPI's Turnaround Schools program—indeed, in the early stages of turnaround implementation, NCDPI was not even consulted about the professional development—leadership teams from virtually all of the turnaround schools received the training. So, it must be included in any account of the state's intervention in these low-achieving schools.

The business school's contribution to the professional development program was based on a model that Kenan-Flagler had developed with the UNC School of Public Health, the Management Academy for Health Professionals (SERVE Center, 2007). The Academy "teaches public health managers to better manage people, information, and finances. Participants learn how to work in teams with community partners and how to think and behave as social entrepreneurs. To practice and blend their new skills, teams develop a business plan that addresses a local public health issue" (Orton, p. 409 in SERVE Center, 2007, p. 6). According to SERVE, PEP complemented Kenan-Flagler's contribution with sessions focused on "helping principals understand and monitor instructional practices in a variety of content areas." The

program for the first cohort of 17 schools (offered from July 2006 through April 2007) was extensive, including an orientation session, a week-long session in July, plus five additional three-day sessions held every other month during the year.

Participants reported that the program had improved their skills in managing people, information, resources, and instruction and that they had implemented some new practices in these areas, but the new skills were not reflected in significant improvements in either Teacher Working Conditions survey data nor in student achievement scores for the subsequent school year. SERVE evaluators acknowledged that the challenges these schools faced were great, perhaps too great to permit such rapid change. But they also allowed that, "At least part of the explanation for the slow change in these schools, however, may be that traditional leadership/executive training sessions focus on management skills and knowledge that are important for long-term sustainability but that are unlikely to have an immediate impact on student achievement" (SERVE Center, 2007, p. 41).

Consistent with this observation, participants reported the greatest impact from sessions that were easy to connect to "their everyday work … such as using data and managing instruction." They found other sessions, such as those on managing resources or developing a business plan, harder to connect with the work of turning a school around. Concerning the requirement that participating schools develop entrepreneurial business plans, SERVE reported that "it was extremely challenging for participants to develop a plan that would generate resources while simultaneously making a direct contribution to improved student outcomes. In general, the plans that were strongest in their ability to generate revenue had less of a direct connection to the goal of improved student achievement. In contrast, plans that were designed to directly address student achievement issues had much less income generating potential" (SERVE Center, 2007, p. 9). The evaluators recommended that the professional development for subsequent cohorts of school leaders be revised to focus more on strategies connected directly to the improvement of student achievement.

From December 2006 through June 2007, PEP and Kenan-Flagler provided a second round of professional development to a cohort of 18 additional turnaround high schools—the balance of the 35 schools that entered the high school turnaround process in 2006–07. This second round included 13 days of sessions, just over one half of the 24 days of sessions in the first round. Agendas for the sessions indicate that as SERVE had recommended, this round focused more on topics clearly connected to the improvement of instruction and related school functions, including data-driven decision making; flexible use of resources; classroom walk-throughs and other approaches to monitoring instruction; inducting, retaining, and supporting teachers; classroom management and instructional routines; using the master schedule for improving student achievement; effective science instruction; culturally responsive teaching; and the use of resources from UNC's online program LEARN NC to improve student achievement. But Kenan-Flagler faculty also continued to offer sessions on more general themes such as performance management and the human value chain; business communication; managing ourselves and developing others; leadership, management, and change; and leading in times of crisis. Rather than developing business plans for entrepreneurial initiatives, participants worked on plans responsive to NCDPI's Framework for Action.

After the professional development (PD) for these first two cohorts of high schools was concluded, the North Carolina General Assembly shifted funding for and thus control of the program from UNC to NCDPI. As an observer of the earlier PD sessions, Dr. Pat Ashley, director of the forerunner to the NCDPI's District and School Transformation division (then called the Turnaround Schools program), had heard principals' complaints that Kenan-Flagler's emphasis on entrepreneurship was not helpful but actually distracted them from what they saw as the real business of turnaround—improving instruction. During the summer of 2007 and continuing into the 2007–08 school year, Dr. Ashley worked with Center for School Leadership Development Director Mike Williams to focus the PD for leadership teams from the third cohort of 31 high schools—those with performance composites below 60% in 2005–06 and 2006–07—more directly on instruction and to bring it into closer alignment with NCDPI's overall turnaround approach. Also consulted during this realignment process was Dr. Gus Martin, managing partner of the Leadership Group of the Carolinas, the organization that NCDPI had contracted with to provide leadership facilitators ("school coaches") for the turnaround schools.

The 31 high schools in this third cohort were divided into two groups (one of 14 and the other of 17 schools), each of which received an orientation plus four two-and-a-half-day PD sessions at intervals from October 2007 through May 2008. Kenan-Flagler continued to offer sessions on the broad themes of strategic planning, resource allocation, and leading change, but the PD was focused primarily on "… provid[ing] each turnaround team the knowledge, skills, and access necessary for the school to design and implement a … Framework for Action Plan" (Montrosse, 2009a, p. 5). Each session addressed two or three elements of the framework, and on the last day of each session, the schools' leadership facilitators worked with the teams to sketch out an outline they could use to guide development of their plans during the weeks between sessions. SERVE's report indicates that at the end of the training, over 90% of participants agreed that the sessions were well aligned with the nine elements of the Framework for Action and provided the information, knowledge, and skills they needed to produce plans that addressed their schools' needs. Sessions on professional learning communities, formative assessment, and using data to improve teaching and learning received particularly high marks.

Thus, across the three main rounds of professional development that the Principals' Executive Program, the Kenan-Flagler School of Business, and the Center for School Leadership Development provided to teams from the 66 turnaround high schools, reports from the SERVE evaluators reflect increasing focus on processes and skills directly connected with NCDPI's Framework for Action and the daily work of improving student achievement. Dr. Pat Ashley, director of the District and School Transformation division (formerly the Turnaround Schools program) confirms the trend, especially for the third round.

During 2007–08, the first two cohorts of high schools received another round of professional development, not from the PEP-Kenan-Flagler team but from Mid-continent Research for Education and Learning (McREL), an organization based in Denver. The McREL training focused on the development of "purposeful community" within a school (McREL, 2007). According to McREL training materials, in a purposeful community, administrators and staff work out explicit agreement on shared goals, operating procedures, and principles (for example, accountability, inclusiveness, transparency, and trustworthiness). The McREL training also

emphasized the development of "collective efficacy," the shared sense that by working together in agreed-upon ways, the school can achieve its goals. After this second round of PD for the first two cohorts, resource constraints precluded further rounds of standardized PD for the high schools. (As indicated below, some tailored, school-specific PD was provided by NCDPI along with ongoing school- and classroom-level coaching.)

Turning now to middle schools, from November 2007 through July 2008, the Center for School Leadership Development and Kenan-Flagler provided a similar program of professional development to 36 of the 37 turnaround middle schools. (The district superintendent for the 37th declined participation.) The 36 middle schools were divided into two cohorts, each of which attended an orientation session plus five two-day sessions in the Research Triangle area. According to the SERVE evaluation report, the central goal of this training—like that for the third round of high schools—was "to provide each turnaround team the knowledge, skills, and access necessary for the school to design and implement a … Framework for Action Plan" (Montrosse, 2009b).

SERVE also noted that the Framework for Action for the turnaround middle schools was aligned with the Schools to Watch criteria developed by the National Forum to Accelerate Middle School Grades Reform, an omnibus group comprising some 65 middle school-related organizations. Though expressed in different terms, these criteria addressed themes similar to those addressed in the Framework for Action discussed above. Each session dealt principally with one or two components of the middle school Framework for Action, but Kenan-Flagler also continued to offer training on the themes of strategic planning, resource allocation, and leading change.

During and between these professional development sessions, the middle school teams received support from two sources: (a) leadership facilitators employed by the Leadership Group of the Carolinas under a contract from NCDPI, and (b) Schools to Watch coaches, most of whom were principals of schools designated exemplary in their implementation of the Schools to Watch criteria by the North Carolina Middle Schools Association. According to the SERVE evaluation, most teams found the leadership facilitators' assistance helpful as they developed their Framework for Action plans, but reactions to the Schools to Watch coaches were more mixed, in part because their roles overlapped with those of the leadership facilitators (Montrosse, 2009b). It appears that during this period, the Center for School Leadership Development, Kenan-Flagler, NCDPI's District and School Transformation division, and the Leadership Group of the Carolinas were continuing to sort out their respective roles.

During the spring semester of 2008, the Center and Kenan-Flagler also provided professional development to three-person teams from the 20 turnaround elementary schools. The PD began with a one-day orientation in January and continued through five two-day sessions ending in late June. As with the third cohort of high schools and the middle schools, the program for elementary schools was designed to support development of their Framework for Action plans. According to SERVE, the components of the Framework for Action for elementary schools were taken from NCDPI's comprehensive framework of support for districts and schools (Montrosse,

2009c). Threaded through the sessions focused primarily on the Framework were portions devoted to Kenan-Flagler's themes of strategic planning, resource allocation, and leading change.

Coaching and School-Specific Professional Development

All turnaround schools served by NCDPI using a transformation model (middle and elementary as well as high schools) received at least two types of additional support that began during the professional development sessions outlined above and continued as long as their performance composites remained under 60%—school-level coaching from leadership facilitators and classroom-level coaching from instructional facilitators.

Leadership facilitators were provided by the Leadership Group for the Carolinas (LGC) under contract to NCDPI. LGC was founded in 2003 to provide assistance to struggling schools and to support the creation of new high schools. In the same year, working with the NC Public School Forum, Governor Easley's education office created the New Schools Project. The New Schools Project contracted with LGC to provide coaching to the small, theme-based academies that the New Schools Project was creating with funding from the Gates Foundation. By the time NCDPI established its District and School Transformation division in 2007 to manage the school turnaround process, LGC had in place a cadre of experienced school coaches, all of whom had been successful school and district leaders. Thus, NCDPI turned to LGC to provide the leadership facilitators for its turnaround schools program.

An internal LGC document outlines the organization's model for coaching the leaders of turnaround schools, including assistance in developing a Framework for Action plan, helping the principal and other leaders build a professional learning community, and at the high school level, helping the school choose and implement a school reform model approved by NCDPI. Recognizing both commonalities and variations across schools, the model includes a series of questions and issues that a coach should address in designing an approach appropriate to each school at different phases in its development. These ask, for example, whether the principal engages a broad range of faculty and other stakeholders in decision making, selects and assigns teachers to classes based on evidence about their effectiveness, and monitors instruction and provides feedback on a regular basis; whether the master schedule is carefully constructed to support smaller learning communities; whether the curriculum is well aligned with the NC Standard Course of Study and reflects high expectations for all students; whether data are used both to improve instruction and guide interventions to help struggling students; whether resources are budgeted and used strategically; and whether effective policies and procedures are in place to maintain a safe and orderly environment.

Leadership facilitators began working with turnaround schools during the extended professional development provided by the Principals' Executive Program, Kenan-Flagler Business School, and the Center for School Leadership Development. The distribution of the training over the year was designed to permit the teams to consult with colleagues in their schools and work on their plans in the weeks between sessions. Schools varied considerably in the degree to which they took advantage of this opportunity, but on average, the leadership teams met four to six times between sessions (Montrosse, 2009a). In a survey of teams in the third round of high school

training, over 75% of the participants reported that their between-session meetings with leadership facilitators "helped a great deal" in the development of their plans. During interviews with the SERVE evaluators, "Interviewees repeatedly mentioned their leadership facilitators being incredibly helpful. At many schools, this facilitator visited the school on a weekly basis, and was available to provide support, ideas, and suggestions to the principal. Only at one school was the leadership facilitator not seen as helpful, but that was a result of … not visiting enough" (Montrosse, 2009a, p. 25).

According to SERVE, most middle school teams also found their facilitators helpful, but some complained that their facilitators visited too infrequently (Montrosse, 2009b). Reactions to facilitators by elementary school teams were more mixed, reflecting the stop-and-start services at that level (Montrosse, 2009c). After the initial professional development period, leadership facilitators were generally scheduled to work with schools one day per week throughout the school year, and they often provided assistance during summer planning and professional development activities as well. Two portfolio managers employed by NCDPI joined DST Director Pat Ashley and Drs. Gus Martin and Bob McRae of the Leadership Group for the Carolinas to coordinate the work of the leadership facilitators.

In addition to the assistance provided by leadership facilitators at the overall school level, schools using the transformation model also received classroom-level assistance from instructional facilitators, employed directly by NCDPI, specialized by subject area. At the high school and middle school levels, the subjects included English/language arts, mathematics, science, and social studies. At the elementary school level, the instructional facilitators were generalists, providing support in both reading/language arts and mathematics. Because of resource constraints, instructional facilitators visited the schools less frequently than did 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 that a school was struggling with. Where appropriate, leadership facilitators and portfolio managers also provided this kind of school-specific professional development.

As indicated earlier, 30 of the high schools served through the transformation approach chose to work with other change partners as well as NCDPI. Each of these organizations provided professional development to support implementation of their comprehensive school reform models. As discussed later in this report, however, none of the "transformation" high schools in the sample that we studied through onsite interviews fully implemented the model designed by these third-party organizations. Instead, the generally reported that they had incorporated one or two components of the models at most, and at some point during the turnaround process, all of the nine "transformation" high schools in our study sample abandoned the externally developed model in favor of a model that they themselves designed. DST Director Pat Ashley confirmed the reports of our interviewees. According to Dr. Ashley, full implementation of the comprehensive school reform models was rare across the high schools served through the transformation approach. Because of the apparently modest contribution of these models to improvement in the schools we studied and because the time and resources available for this study did not permit a detailed breakdown of exactly which components of which models were

implemented in which high schools, we will not describe their programs of professional development here.

Thirteen of the 66 turnaround high schools elected to "redesign," which involved breaking them up into smaller academies or schools, often oriented to certain professions or career fields, such as health care, technology, or oceanography. These schools were assisted by the North Carolina New Schools Project (NSP), either in collaboration with NCDPI or independently. As indicated earlier, NSP was established in 2003 by the Office of the Governor and the Education Cabinet as an independent, non-profit corporation. It was originally funded by the North Carolina General Assembly, with a matching $11 million grant from the Bill & Melinda Gates Foundation, and has since received additional funds from these sources. According to an NSP publication, the organization "works closely with the State Board of Education, the NC Department of Public Instruction, and local school districts… [as well as] … community colleges, universities, hospitals, private businesses, and other community-based organizations that have a stake in the quality of tomorrow's workforce" (North Carolina New Schools Project, n.d., "Innovative," p. 5).

In addition to helping to redesign and reform existing high schools, NSP also helps establish entirely new high schools. Both types of schools "share a commitment to making learning relevant for today's youth, fostering close relationships between students and teacher-mentors, and promoting high standards of achievement for all students, regardless of their background" (NSP, n.d., "Innovative," p. 3). According to NSP, all focus explicitly on getting students ready for college, with decision making and responsibility for meeting the standards shared by teachers and administrators.

In light of the Gates Foundation's role in supporting the creation of both NSP and NCDPI's District and School Transformation division and the role of the Leadership Group of the Carolinas as a contractor to both organizations, it is not surprising that NSP's approach to working with schools and NCDPI's approach share many features. But there are significant differences as well. In NSP's approach, a School Change coach works with a school only during a planning year and the first year of implementation, and a sole instructional coach works with the school regularly for the remaining four years of NSP support. An NSP staff member continues to track developments in the school and provide support as needed. NSP also provides closely aligned professional development for both school leaders and teachers. For school leaders, the professional development includes a visit to the University Park Campus School in Worcester, MA, which serves as an exemplar of the kind of school organization, shared leadership, and teaching that NSP seeks to promote.

To sum up, then, between 2006 and 2010, NCDPI's District and School Transformation division partnered with a number of other organizations to provide assistance to 66 low-achieving high schools, 37 middle schools, and approximately 25 elementary schools. All of the schools were required to submit plans consistent with NCDPI's Framework for Action, which evolved over time and which was designed to call the schools' attention to aspects of their operation that the leadership of the District and School Transformation division regarded as essential to effective school functioning and that needs assessments had shown to be weakly developed in many of these low-achieving schools.

All participating schools also received professional development from some combination of the Principals' Executive Program, Kenan-Flagler Business School, and the Center for School Leadership Development (CSLD), with consultation from the NCDPI District and School Transformation division. Both during the PEP-Kenan-Flagler-CSLD professional development and for the balance of their time in the turnaround process, all but one of the schools received school-level coaching from leadership facilitators or School Change coaches employed by the Leadership Group for the Carolinas or from the New Schools Project. They also received classroom-level assistance from one or more NCDPI instructional coaches and PD targeted to Framework for Action components that were giving them trouble. Schools in a total of six districts also received support via district-level coaches provided by NCDPI. Turnaround high schools and middle schools continued to receive service through the program until their performance composites rose above 60%, at which point they moved into "self-directed turnaround." Schools in self-directed turnaround were required to submit annual Framework for Action plans and to report their progress until their performance composites rose above 70%. Coaching for the participating elementary schools was less consistent. It began in 2007–08, was interrupted in 2008–09 for all but those served as part of a whole-district effort, and resumed in 2009–10 for most of the original 20 schools plus a small number of others.

Methods

Our study of NCDPI's Turnaround Schools program included both a quantitative assessment of the program's impact on the schools where the District and School Transformation unit intervened and an extended qualitative study to learn what facilitated improvement in some schools and frustrated improvement in others. In this section, we provide a brief account of the methods we used in each study component.

Impact Assessment

To assess the overall impact of high school and middle school turnaround efforts, we aimed to isolate the effects of turnaround on both student test scores and graduation rates and remove to the greatest extent possible all other influences on the estimates of effects. During the period in which turnaround efforts occurred, many other forces could have influenced student performance, including the recession and continued unemployment, state and local budget cuts, and reductions in the teaching workforce. The estimates of turnaround impact account for these forces, as we briefly describe in the subsections on research design, data and sample, and analysis.

Research Design

The research was designed to answer the primary impact questions for the quantitative part of this evaluation: Did students' test score gains in the 66 turnaround high schools exceed the gains in the 64 high schools in North Carolina that were most similar to them? Did the graduation rates in the turnaround high schools exceed the graduation rates in the comparison high schools? Did students' test score gains in the 36 turnaround middle schools exceed the gains in the 37 middle schools in North Carolina that were most similar to them? We addressed the first and third questions by estimating the extent to which gains in student test scores in the turnaround schools after turnaround implementation exceeded gains in these schools prior to implementation and then comparing this difference to the difference between student test score gains in the most similar schools in the post-implementation period versus the two years prior to beginning turnaround. This design sets a very rigorous standard for judging the effectiveness of the Turnaround Schools program. It is referred to as a difference-in-differences design (or non-equivalent comparison group pretest-posttest design), and it often used in higher quality evaluations of effectiveness of large-scale educational programs (Angrist and Pischke, 2010; Henry, 2010).

Addressing the graduation rate question was more difficult because of data limitations. NCDPI began calculating four-year cohort graduation rates for high schools in the state in 2006-07, the year that the first cohort of high schools entered turnaround. Therefore, we have no baseline graduation rates and simply compare the annual graduation rates in the 66 turnaround high schools to the 64 comparisons schools.

Data and Sample

This student test score analysis relies on statewide data collected by NCDPI for the time period 2004–05 to 2009–10, which includes two years prior to the intervention and four years after the

intervention for the first cohort of turnaround high schools and three years prior and three years after implementation for the second cohort of high schools and the middle schools. For the high school analysis, we included End-of-Course test results in English I, math (Algebra I, Algebra II, and Geometry), science (Biology, Physical Science, Chemistry, and Physics), and social studies (Civics/Economics and U.S. History) in the analysis. For the middle school analysis, we included End-of-Grade tests in reading and mathematics.

We linked students and teachers using actual class rosters, which allowed us to match students to approximately 93% of individual instructors over the six-year period. We also matched students' test scores to their prior reading and mathematics scores, which allowed us to estimate "value added" models. Finally, numerous other student and school characteristics were merged into the files used for the analysis.

We compare 66 turnaround high schools to 64 high schools that had the performance composites below 66% in 2004–05 or 2005–06 but were not included in the Turnaround Schools program for both the student test score gains and graduation rate analysis. Also, we compared 36 turnaround middle schools to 37 middle schools that had performance composites below 75% in 2004–05 or below 55% in 2005–06 but that were not included in the Turnaround Schools program.

Analysis

To estimate the intervention's effects on student test score gains, we employed multi-level models that allowed us to isolate the effect of the Turnaround Schools program on student achievement by controlling for the influence of many student and school variables. It is important to point out that any variables that could have been changed by the Turnaround Schools program itself, such as measures of teacher quality or school resources, were excluded as control variables from the models estimating the analysis of Turnaround Schools impacts in order to capture the total effect of the program. Multi-level models with random effects at student and school levels were estimated, which appropriately calculate standard errors that are used for testing the reliability of the effects. We estimated both an average treatment effect for the entire period that the turnaround schools were engaged in the program and an average treatment effect by year, which separates out the turnaround school gains for each year that they participated in the program. For the graduation rate comparison, we analyzed the differences for each year between turnaround and comparison schools and for the post-intervention period as a whole, controlling for a variety of school variables.

Qualitative Study of Turnaround Dynamics

In order to learn why and how some schools managed to improve student learning while others remained "stuck," we selected 30 schools with contrasting levels of progress (12 high schools, 9 middle schools, and 9 elementary schools). At each level, one third of the schools had shown strong progress over the three or four years they received assistance from the NCDPI and its partners, one third had shown moderate progress, and one third had shown little or no progress. More specifically, we began by ranking schools by their 2009–10 performance composite. With

the rankings in hand, we first selected schools that had made consistent progress from 2007–08 to 2008–09 and from 2008–09 to 2009–10 and identified those with the highest levels of total improvement from 2007–08 to 2009–10 (some 25 points or more). Then we selected a set that had made significant but more moderate levels of progress, averaging about 15 points; and a set that had either slid back or had improved by less than 5 points. To complete sample selection, we chose schools so that the total set reflected variation in community context (urban vs. rural), region of the state, school size, ethnic composition, and poverty (free and reduced-price lunch percentages). At the high school level, we chose nine schools using the transformation approach (emphasizing change within the existing school structure) and three that had undergone redesign, which involved breaking up the schools into smaller theme-based academies.

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 whom the principals identified as especially knowledgeable about the school's experience during the turnaround process. In addition, we planned to interview the one or two people from the central office 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. As it was sometimes difficult within our schedule to interview the facilitators, 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 generally visited the schools for one or two days to conduct the interviews; in some cases, second visits or follow-up telephone interviews were necessary. 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.

On the basis of the transcriptions and notes, we wrote field notes on each school in a common format. Field notes captured not only the main themes across the answers to each of our questions, but also included quotations that expressed the themes in striking or economical ways as well as anecdotes that would help us illustrate them in a clear and graspable way. We then boiled the field notes on each school down into a one- or two-page summary table, organized into sections corresponding to the major questions in the interview protocol. Using these summary tables, we met with researchers who had conducted the interviews to identify similarities and contrasts across schools, first by level (high, middle, and elementary schools) and then across levels. We then organized these themes into a graphic model to portray the dynamics of the turnaround process in schools that made significant progress. The graphic model served as the primary organizer for the account of the change process offered in this report.

Impact of the Turnaround Schools Program

Overall, we found that at the high school level, the Turnaround Schools program had a modest but positive and significant effect on student test scores. We estimated the annual effect of the high school Turnaround Schools program participation to be a .75 point average gain on End-of-Course tests (five percent of a standard deviation gain). This shows that students taking End-of-Course tests in Turnaround high schools were scoring an average of ¾ point above the pre-implementation years for these schools when compared to the gains posted during the same time period by similar schools.

The average treatment effect was larger in 2008–09 and 2009–2010, after the first cohort had participated in the program for three and four years, respectively. In the first two years of the program's operation, the average effects on high school exam scores were estimated to be approximately three percent of a standard deviation, but they were statistically insignificant. In the third year, the gains increased to nearly five percent of a standard deviation. In the fourth year of the turnaround effort, the effects were estimated to be eight percent of a standard deviation, which is statistically significant. Thus, through the first four years of implementation, the average performance of turnaround high schools has continued to rise. Effects are not significant in the first two years, perhaps indicating that the effects of the turnaround intervention on student test scores take time to register. While the Turnaround high schools appear to have graduation rates that are two percentage points higher than the comparison schools each year since 2006-07, the differences are not statistically significant.

For the middle school turnaround effort, the average effects of the Turnaround Schools program were not reliably large enough to be statistically significant through the third year of the program's operations for either reading or mathematics. There is some indication that reading scores are trending up in the turnaround middle schools in comparison to similar middle schools between 2007–08 and 2009–10, but the overall average trends are not sufficiently reliable to make us confident in their direction.

In addition to the analyses comparing the improvement in student learning in Turnaround high schools with improvement in student learning in the comparison schools, we also compared improvement in the performance composites of the two sets of schools. Performance composites represent the percentage of students in a school who have achieved proficiency in tested subjects. The graphs on the following pages show that improvement in performance composites varied widely across the high schools served by the Turnaround Schools program, but on average, the Turnaround schools' performance composites improved more than those of the comparison schools. In the first cohort of high schools, where intervention began in 2006-07, by the end of 2009-10 performance composites in the Turnaround Schools had improved by an average of about 12 percentage points, compared with an improvement of about three percentage points in the comparison schools. In the second cohort of high schools, where intervention began in 2007-08, by 2009-10 average performance composites had improved by about 10 points, compared with the 3-point improvement in comparison schools. Note also that the degree of improvement varied widely across Turnaround schools in both cohorts. It was to understand this variation in improvement that we undertook the closer study of selected schools summarized in the next

section. Although we have not independently verified their accounts of the conditions that produced low performance, much of what they told us about their schools seems both plausible and remarkably candid.

Figure 1: Percentage Point Change in Turnaround Schools' Performance Composites Compared with Change in Comparison Schools' Performance Composites, 2005-06 through 2009-2010

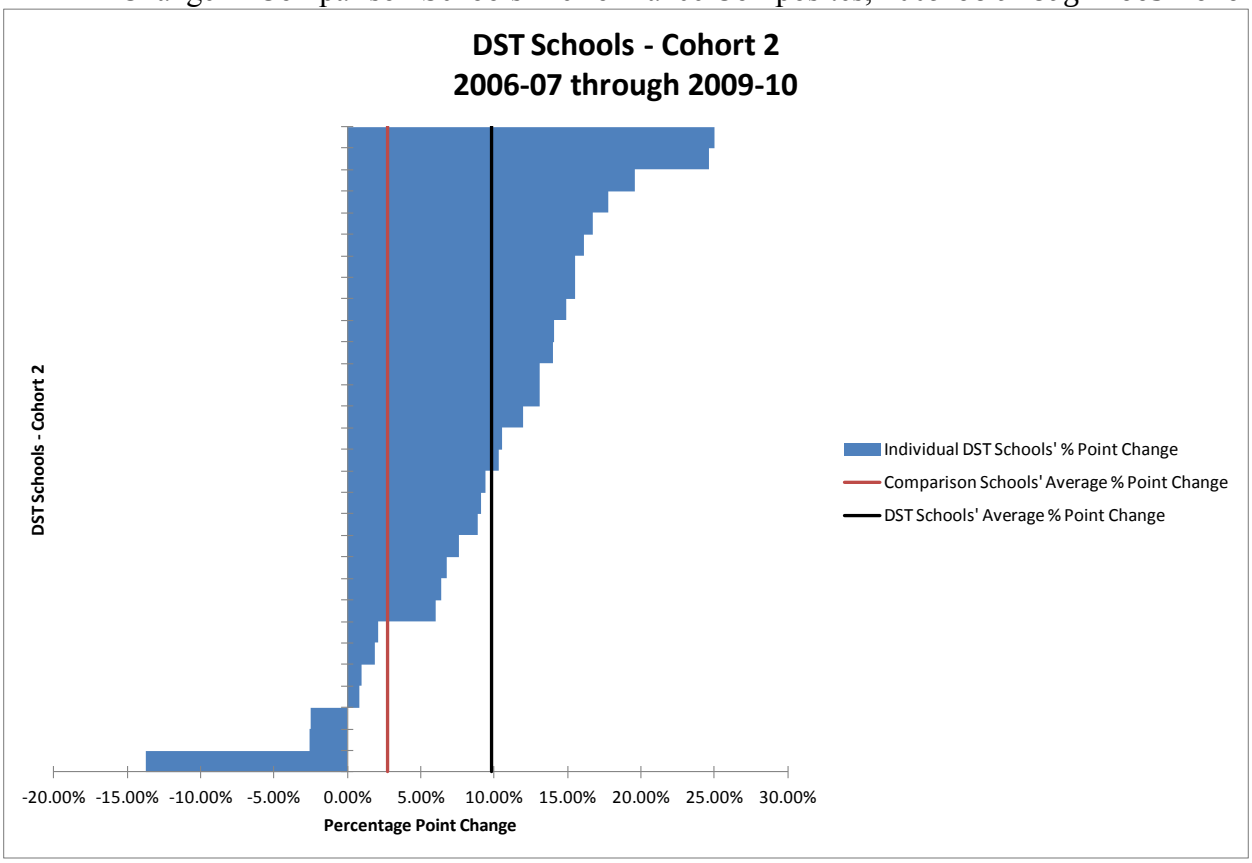
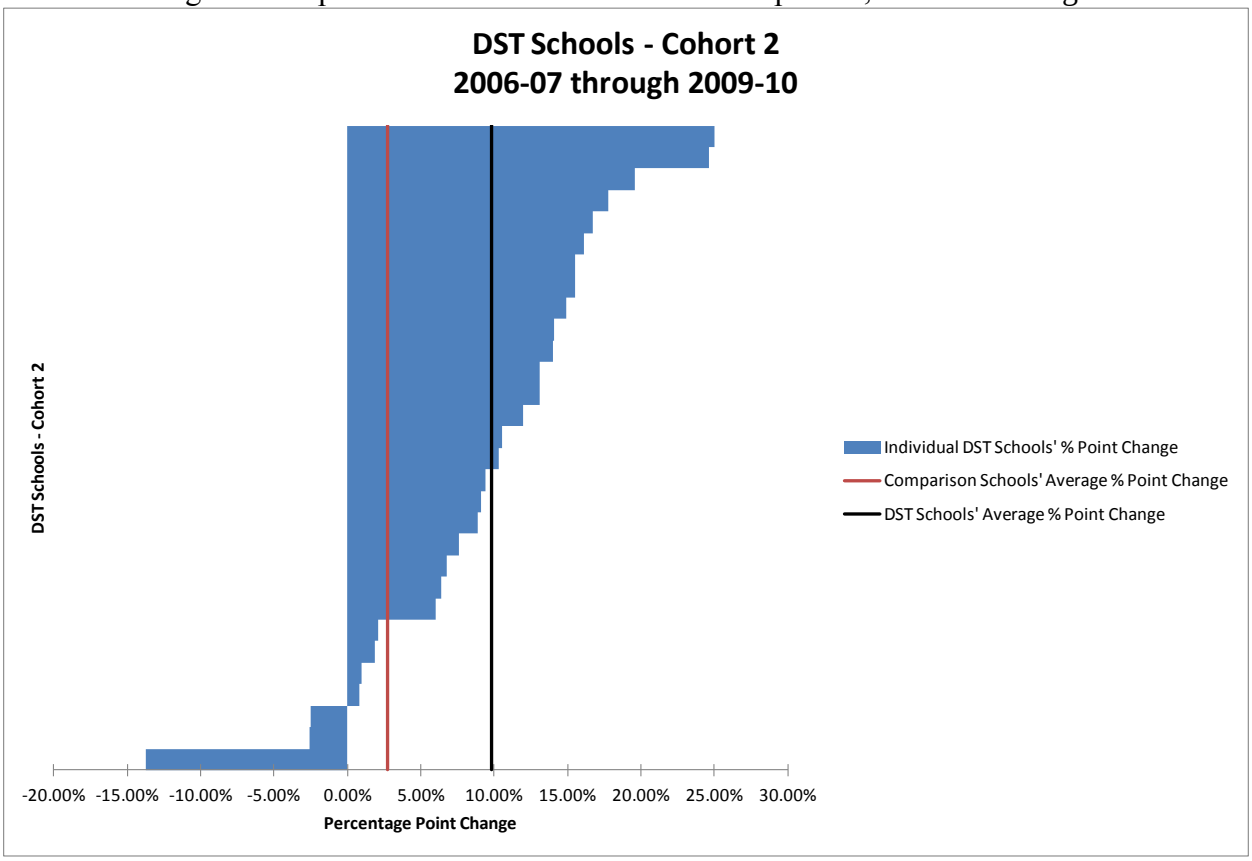


Figure 2: Percentage Point Change in Turnaround Schools' Performance Composites Compared with Change in Comparison Schools' Performance Composites, 2006-07 through 2009-2010



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's District and School Transformation division and its partners 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 plants that formed the economic backbone of the area closed or moved elsewhere in pursuit of cheaper labor. Middle- and upper-income families left in droves as well, pursuing jobs. Enrollment at 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. "The other [problem] is that we lost administrators with good management abilities. The ship basically was either micromanaged or just left adrift." A teacher who had come in recently 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." Further, another teacher added, "There were no supports … for discipline. There was no consistency in discipline, let's put it that way. There was no support in that you didn't get any backing. If you followed the rules and did what you were supposed to do and somebody objected to it, you were automatically wrong. You were wrong. There was no upper management support."

Nor was there 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 bandwagon 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." An administrator remembered it this way: "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, teacher?' 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—hope to survive through the next round of miracles that were coming through. This, of course, leads to very bad performance because everybody is sort of doing their own thing. There's no [common] vision, and at the risk of a Biblical quote… without a vision, people die. That's essentially what was happening." Of the lack of follow-through, another teacher observed, "It was very hard for the administrator … in charge of follow through. His goal was to make sure his staff was happy."

In the community served by another low-achieving high school that had made little progress on turnaround, the economic environment had not shown a precipitous recent decline but was chronically depressed. To the difficult economic environment was added an ongoing feud between students from two of the small communities served by this consolidated rural high

school. Fights regularly broke out as students from the two communities got off their school buses—not small scuffles but all-out brawls. On one occasion things, got so bad that the principal broke off the process of unloading, put all of the students back on their buses, sent them home, and called off 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.

Efforts to improve this school were, if anything, more futile than at the first school described. The school's leadership facilitator told us that during the three years he worked there, the school had five different principals, and there have been three more since another facilitator took over two years ago. The leadership facilitator's initial encounter with the school's problems came when he first tried to make contact with school and district officials by telephone and email. They returned neither calls nor emails. They simply did not respond at all. He took it personally at first but gradually came to realize that this was just the way things were done (or not done) in the district.

The facilitator said that the pattern reflected a situation in which there was a lack of even the most basic policies and procedures, and those few that were in place were often outdated and dysfunctional. As an example of the latter, when students misbehaved outrageously (for example, cursing a teacher to her face), district policy called for a 10-day out-of-school suspension. The policy had been instituted in the days of traditional year-long courses and had not been updated to fit the block scheduling adopted in recent years. In a block schedule, the facilitator noted, 10 days is the equivalent of an entire month in a traditional system. A student who was suspended—and this was not an uncommon occurrence—had virtually no chance of passing his courses, and thus no incentive to cooperate when he returned to school.

A more far-reaching example is what happened after the facilitator began examining the school's student achievement data, using the SAS Education Value-Added Assessment System (EVAAS). He discovered that only 17% of the students entering the ninth grade could read at grade level. He told the principal and others in the system, "Look, this is not just a problem in language arts. Even in math, a lot of the problems on the [End-of-Course tests] require reading, and if the kids can't read the problems, they can't pass the test." He tried to get agreement on a reading program that could be adopted and implemented in grades K–8, with follow-through into high school. But by the following June, school and district officials were still "nowhere close" to agreement on a reading program. At one point during the year, he had arranged for representatives of three different publishers to come in to make presentations about their programs, but he was unable to get the people who would need to participate in a decision to come together for a meeting. "There was just no one who could say, 'There is going to be a meeting at such-and-such place and time, and you need to be there.' It was a totally different mindset from anything I had ever seen." Yet he was no stranger to the area—he had grown up and gone to school in a neighboring district.

One September, the facilitator grew excited because he was able to schedule a meeting to hear presentations by representatives of three formative assessment systems. Those who attended

discussed the presentations, filled in their rating sheets, and sent them forward. By October, they had had no response, so he tried to check with the assistant superintendent for Curriculum and Instruction responsible for taking action on formative assessment. He got no response at that point, but around Thanksgiving, the high school principals in the system were informed that they were to conduct the formative assessments when the students returned after the break.

The facilitator wondered whether anyone had checked to see whether the schools had the classroom computer capacity to administer the tests, and who had selected the items from the as-yet-unidentified vendor to make up the test. He learned that the assistant superintendent had developed the test without consulting the teachers in the school about the appropriate topics to cover. The assistant superintendent said that she figured that students were about one third of the way through the school year, so she got out the textbooks for the relevant courses and chose topics from the first third of the books. When the facilitator pointed out that the high schools were on a block schedule, and so by Thanksgiving the classes were really two thirds of the way through the tested courses, the assistant superintendent seemed unperturbed by the news. To make matters worse, without pacing guides (which did not exist), no one could actually be sure which topics were really supposed to be covered during the first two thirds of the courses.

Nevertheless, the assistant superintendent insisted on administering the tests, which were plagued by all sorts of computer capacity and connectivity problems on top of the content coverage problem. The tests therefore took substantially more time than had been scheduled, other students arrived for classes that were scheduled in the classrooms in use for the testing, and the students being tested had to leave to go to other classes. But in a subsequent public meeting, the assistant superintendent blistered the high school principals for the fiasco.

According to the leadership facilitator, this sort of breakdown and subsequent finger-pointing was commonplace. District officials were "almost bipolar," meaning that they would go for long periods without giving any information or instructions, and then suddenly insist that action be taken immediately without proper preparation. At the same time, the facilitator noted ruefully, he was attempting to train the principals and teachers in collaborative leadership. During the three years he was there, he said, no principal had ever received a formal performance evaluation, and the superintendent visited the schools only when some special occasion called for it, not to help them identify and address fundamental problems.

The leadership facilitator reported spending a great deal of time working with the school's teachers on what he characterized as "Harry Wong training"—training on 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.

NCDPI's portfolio manager for the area where this school is located confirmed the picture painted by the leadership facilitator. She emphasized the lack of "leadership capacity" in the school. By this she meant that the principals did not understand the Framework for Action well enough to connect the elements of it with each other or with its central purpose. So they could not communicate an understanding to teachers. Since they didn't understand it well, they would try to implement components of it, but only in compliance mode rather than through purposeful, adaptive action. In some schools, she said, after she worked with them for a time, "a lightbulb goes off" and they begin to get the idea and to act in a purposeful, coordinated way. But this never happened at this school, in part because of the rapid turnover in the principalship. "It takes time and concerted effort" to bring people to this point, she said.

With the exception of a handful of unique circumstances, the causes of low performance identified by the principals and teachers we interviewed in other schools were similar to those in the two schools described above—at the middle and elementary levels as well as the high school level:

- 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

In the "stuck schools" we studied—those that had made little or no progress despite strong pressure from Judge Manning and assistance from NCDPI and/or the New Schools Project—we heard about the same stop-and-start reform initiatives, undermined by continued turnover, lack of consistent district support, and breakdowns in basic policies and procedures. Yet challenging demographics and difficult circumstances did not necessarily doom schools to poor performance. With external pressure and assistance, other schools that had suffered from the same problems managed to overcome the difficulties they faced, and some made very dramatic progress, improving their proficiency rates by up to 30 points over a three-year period. We turn now to their story, a far more encouraging one.

The Process of Improvement: High School Level

Although the low-achieving high schools originally spotlighted by Judge Manning and Governor Easley were encouraged to choose and adopt a comprehensive school reform (CSR) model and many did so, it would be misleading to portray the process of improvement in the turnaround schools primarily as the implementation of externally designed models. Indeed, after a year or two of struggling to implement a CSR model, all but one of the schools in our sample that adopted an externally designed CSR model abandoned it and substituted their own locally developed plans. They incorporated parts of the CSR models, but treated the parts as building blocks to fit into their own locally developed approaches rather than carrying out model developers' blueprints in their entirety.

DST Director Pat Ashley confirmed that this pattern was not limited to the schools in our sample but extended to the full set of high schools that adopted CSR models. The CSR models contributed components, ideas, and skills to the schools they served, but anything approaching full implementation of the models was rare. Dr. Ashley theorized that one variable that could explain the pattern of no more than partial implementation was the compliance orientation of many of the models' assistance providers. Believing strongly in the effectiveness of their own model, they were keen to ensure that all of its key features were implemented. According to Dr. Ashley, they often focused too much on fidelity of implementation, falling into a "checklist" mentality rather than thinking primarily in terms of the key functions that the components were designed to perform. This tended to alienate teachers in the turnaround high schools, communicating a sense that model representatives cared more about their models than about teachers' challenges and student learning in the receiving schools. Another possibility is that the models were inadequately funded to support the level of onsite assistance necessary to ensure full implementation. Model developers faced a quandary: They had to price their models low enough to make sales, but prices low enough to attract customers may have generated too little revenue to support robust follow-through.

We cannot be sure why so few of the 12 high schools we visited were able to implement the CSR models, but several principals and teachers cited the lack of fit between certain features of the model and their schools and communities. For example, one small high school dropped the Talent Development High School model because its "academy" approach, in which a team of teachers taught the core subjects to a set of students, required more teachers of core subjects than they could muster—one of each for each academy. The model also called for internships in local businesses, too few of which existed in the small town. A sense that the CSR model developers were purveying packaged programs and had little appreciation for local circumstances was also widespread. For example, teachers at a school served by High Schools That Work described the professional developers who visited the school as "condescending" and said, "They criticized us, but they really didn't know anything about [name of school]." Thus, the fact that model developers were located far from adopting schools and that resources seldom permitted them to visit the schools frequently enough to develop close, trusting relationships with local educators or gain familiarity with school realities may help explain the puzzle. But local educators themselves sometimes seemed stumped. In another district where the high school had adopted the Talent Development model, we asked central office administrators why the school had abandoned the model. "It just kind of fizzled out," one shrugged.

The contrasting experience of the one school in our sample that did fully implement its chosen model (from the New Tech Network) provides some additional clues. The New Tech Network is certainly based far from North Carolina, in Napa Valley, California, where the first New Tech high school was founded. But the NC-based New Schools Project—more likely to understand local realities and located close enough to visit the school more regularly—played an important role as a well-informed local intermediary. Further, the New Tech model does not require any particular organizational structures, such as small academies. In fact, in New Tech schools, grouping is deliberately flexible and changes over time as students undertake new projects with supervision and support from sets of teachers who may also change. But in our judgment, the primary explanation for this instance of successful implementation is probably that the New Tech adopter was in essence an entirely new school, built up grade by grade with a principal, teachers, and even students specifically recruited for their commitment to implementing the New Tech model. In the other model-adopting schools we studied, fully implementing a CSR model would have involved changing an existing organization with an established faculty and established ways of doing things. On a small scale, at least, it appears to be easier to implement a new design by starting anew rather than by trying to change an existing school.

If model implementation is not an accurate way to characterize the turnaround process, then what is? In briefing us about the program, Dr. Pat Ashley, director of NCDPI's District and School Transformation division, explained her view of the process:

> "It is very complicated. It is a lot of what I call *craft work.* It's really using processes and procedures with fidelity and quality. Where you put kids, how you hire and develop your teaching population, then your other systems, like how you manage student behavior, how you manage time, how you manage instructional practice—all those systems. In a low-achieving school, generally you find none of them are functioning very well. So you have to rebuild them. But if you get the right routines flowing in a school … each piece kind of fits together."

Our research strongly confirmed Dr. Ashley's characterization of the process. Rather than model implementation, a more accurate term for the turnaround process would be something like *scaffolded craftsmanship*. That is, improvement came through a process of painstaking, piece-by-piece reconstruction, guided or "scaffolded" by NCDPI and/or the New Schools Project facilitators but depending at least equally on the energy, commitment, and inventiveness of local educators. As our interviewees described the turnaround 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. Throughout, of course, they also had to go on handling the daily tasks of "keeping school" while they were rebuilding the school.

If it is illuminating to view the turnaround process as scaffolded craftsmanship, it is also helpful to see it as a process of learning. That is, principals and teachers in the improved schools in our

sample were learning *how* to construct and operate a well-functioning school as they were constructing it. The learning process seems nicely captured in contemporary learning theorists' notion of *cognitive apprenticeship*. Such apprenticeships are "cognitive" in the sense that they involve the acquisition of new ideas and intellectual skills rather than manual arts or crafts. So, the content of what is learned differs from the classical craft apprenticeship. But the processes of teaching and learning resemble those in the classical craft apprenticeship. An accomplished practitioner teaches novices by first modeling and explaining good practice, then guiding and coaching the novices as they try it for themselves, and gradually withdrawing support as they gain skill and confidence. New skills are acquired right in the context of use, "scaffolded" by the accomplished practitioner. Consistent with the concept of cognitive apprenticeship, principals and teachers in turnaround schools learned largely from accomplished practitioners in the context of actual use—that is, from leadership and instructional facilitators who were accomplished principals and teachers modeling and coaching good practice right in their schools. So, the process of improvement entailed a process of learning that supports a process of reconstruction.

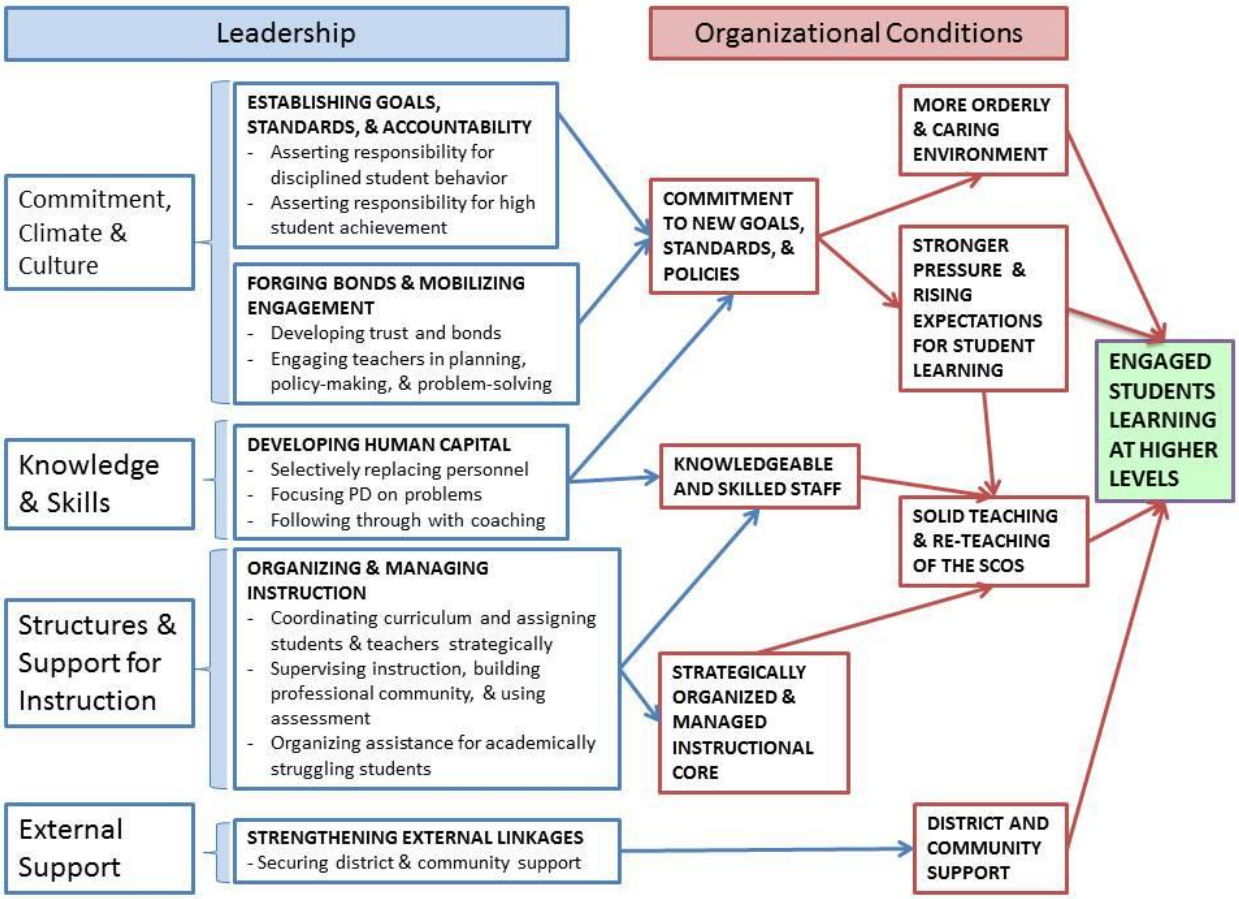
Because our study was a retrospective examination of developments that took place over several years, we cannot be certain how much of the credit for the reconstruction of these schools to attribute to the inventiveness of the principal, other administrators, teachers, and counselors and how much to attribute to the professional development providers, leadership facilitators, instructional facilitators, and others in the organizations that supported them. But in the improved high schools partnered with NCDPI, the reconstruction process was clearly shaped to a substantial, if varying, degree by the Framework for Action planning process and by the professional development and coaching that NCDPI and its contractors provided. The New Schools Project provided similar guidance, professional development, and coaching to the schools it assisted.

When asked explicitly about the types of assistance they had received, principals and teachers generally praised the leadership and instructional facilitators who worked with them, but only occasionally attributed particular organizational arrangements or practices to these facilitators. When they told the turnaround story of their school, the principals and teachers themselves were the protagonists, at center stage. NCDPI, the New Schools Project, and other external support organizations were in the background. Teachers would often credit their principals with kick-starting the process, putting on the pressure for change, establishing discipline, raising morale, and providing ongoing support, but for the most part they mentioned help from external organizations or facilitators only later in the interviews.

This came as no surprise to NCDPI officials. In fact, during our very first interview with her, Dr. Ashley told us that people in the turnaround schools would explain their progress in terms of what they themselves had done to improve performance, "and they will be right about that. When all is said and done, they are the ones running these schools and teaching the kids, and what they do is what actually makes the difference." Local educators have to own the process, she explained, and if they do not, the school will not improve. Facilitators were instructed and trained to take a background role, modeling and suggesting and coaching, not taking charge, directing, or starring. As we shall show, they occasionally stepped out of character, urging principals to take specific actions, but these occasions were exceptional.

In sum, in the schools we studied, the turnaround process was not a matter of engineering, of initial external design and subsequent implementation, but a non-linear process of planning, inventing, adjusting, and re-planning as well as a process of learning, doing, and learning from doing. NCDPI's District and School Transformation division provided the planning framework, but the Framework for Action did not outline all of the components that successful turnaround schools put in place. NCDPI and New Schools Project facilitators seem to have worked not solely from the explicit Framework for Action, but also from a tacit, experience-based understanding of what well-functioning schools and classrooms looked like. The order of development varied greatly from school to school, based partly on facilitators' and principals' sense of the strengths and weaknesses of a school and the best strategic focus for a given school at a given time, but the process of improvement generally began with the installation of new leadership and involved the construction of four main components: (1) new commitment, climate, and culture, (2) improved knowledge and skills, (3) strategically organized and managed processes of instruction, and (4) strengthened external linkages. Figure 1 provides an overview of how the dynamics of improvement played out in the schools that made moderate or striking progress.

Figure 3. The School Turnaround Process



In the sections that follow, we describe the turnaround process in the improved schools in our sample. We begin with an examination of the process in high schools, then turn successively to middle and elementary schools, commenting on similarities to the high schools but also highlighting the differences.

Commitment, Climate, and Culture

At their low ebb, most of the improved high schools were challenged simultaneously by serious problems of discipline and low expectations for student achievement, and the early actions that successful leaders took combined attention to both issues. Interestingly, action on both issues generally involved a combination of tough assertion on the one hand and active efforts to forge bonds and mobilize engagement on the other. Over time, these processes led to the creation of a more orderly and caring environment and to the establishment of a climate of stronger pressure and rising expectations for student learning.

Safe, Orderly, and Caring Environment

The clearest illustration of how a more orderly and caring environment was created comes from a small rural high school that was plagued for more than 20 years by conflict between students from two communities that had been consolidated into this county-wide facility. The school was overwhelmingly African-American, so the conflict was based not in racial differences, but solely on long-smoldering enmity between the two communities. There were small-scale conflicts and scuffles almost daily, and periodically, large group fights and near riots would erupt. The atmosphere of conflict and disorder permeated halls and classrooms throughout the school and contributed to rapid turnover of principals as well as teachers. The problems in the school were quite similar to those in one of the "stuck" schools previously described, but in this case, they were addressed successfully.

Leadership on this issue came from an unexpected quarter. A man who had grown up in the county, left to pursue a military career, and returned to join the local police force took note of the problems in the high school. Believing that his military and police experience gave him a special perspective on the issue, he approached the chairman of the school board with his ideas for addressing it. The school board chair asked him to lay out a more specific plan, which the chair found persuasive enough to hire the man to implement it.

As suggested above, the plan had two sides, carried out in close cooperation with a grateful and responsive principal. First, the new chief of security added two more 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, taken to jail, charged with crimes, and prosecuted. At the same time, however, the security officers were instructed to chat with students, get to know them personally, eat lunch with them, attend sports events they played in, and ask the students to come to security officers, teachers, or the principal with information about developing conflicts or planned fights. Teachers were also asked to show more of a presence in the halls and to listen for signs of trouble in their classrooms. The combination of a get-tough policy and relationship building worked. After an arrest or two, students began to approach the staff to head off fights and talk through the conflicts that would previously have sparked them.

The leadership provided by the school's chief of security was unusual, but the serious discipline problems stemming from inter-community conflict were not. They were common in the consolidated rural high schools in our sample, and when they were addressed successfully, it was through similar approaches that combined hard-nosed enforcement with relationship building. Another school also deployed a police deputy on campus and made sure that students who fought were charged with assault, with the potential for jail time. The principal implemented a dress code, banned gang attire, and suspended students who wore it. He instituted an in-school suspension center and empowered teachers to send students directly to the center with work that they had to complete. But the principal and staff also went out of their way to build rapport with students and prevent conflicts from getting out of hand. The principal got to know every student in the school by name, and we observed him stopping to talk amiably with students as he circulated through the halls. As one administrator explained, "At the beginning of the year, when we lay the expectations, we tell them, 'If you have a conflict, come to me, or go to [Assistant

Principal] Mr. M., or to the guidance counselor. We'll spend an hour, two hours—we don't mind. You will have an adult in the middle, and we will get your problem resolved. If you don't go that route, you want to resolve it yourself, you get into a fight, you're going to get charged with assault.' I'm telling you—girls, boys, underclassmen, seniors, they come to our office all the time."

At a large urban high school with what a central office administrator characterized as the worst gang problem in the city, the discipline challenge was addressed in part by breaking down the comprehensive school into five separate schools, each with a distinctive theme. The most successful of the five was built up, grade by grade, over a four-year period. The ninth grade teachers were hired and sent away for a week's residential training, during which they formed close collaborative relationships. Rising eighth graders from the comprehensive high school's feeder middle schools were informed about their options, applied to the academy corresponding to their interests, and entered as the first ninth grade class. The academy's small size and the staff's close relationships made it relatively easy to set common expectations for behavior and to form close relationships with students. According to teachers, it took them only a few weeks to integrate students into a community with high expectations and norms for behavior. Once that was established, they say, in each successive year when a new grade level with new students was added, the new students could be assimilated rapidly into the academy's culture. In fact, the "older" students did most of the work. When new students got out of line, the older students "would look at them like they were crazy" and would make it plain that "we don't act that way here."

At this school too, the principal was revered by teachers for his knowledge of and close relationships with individual students. 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." The principal was also famous among teachers for the home visits he made in some of the city's most dangerous neighborhoods. "At first, people kind of looked at me suspiciously," the principal recalled. "A wonky-looking white guy with glasses in a pretty tough black neighborhood. But now even the guys selling something they shouldn't be selling on the corner know me and nod hello." Not long before our visit, a student told him, "Mr. B, when you come to our neighborhood, we know every step you take, from the time you get there til the time you leave." When Mr. B. expressed doubt about that, the student pulled out his cell phone and showed him the trail of dated and timed text messages that tracked his progress the previous day. "Mr. B. just came down X Street and turned left on Y. He's probably headed to see [student's name]'s mama." Mr. B. often followed up on these visits 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.

Mr. B. also requires teachers to call at least five parents every week, as often to tell them about a student's accomplishments as to discuss a problem. He explained that he does not encourage teachers to make home visits because he considers it too dangerous. We encountered the practice of requiring calls to parents in several other schools that were making progress—enough to infer that it may have been promoted in professional development sessions or by leadership facilitators. The image of the school we took away from our interviews was of a richly developed web of relationships among teachers, between teachers and the principal, and between the school and

parents. Sociologists have long noted that such a complete web of relationships gives rise to norms – unwritten rules that shape behavior more powerfully than formal rules and policies. Yet accountability for carrying out formal policies also helped cultivate the development of the connections.

Throughout the high schools that had made substantial progress, principals not only instituted policies that combined a get-tough side with a relationship-building side, but followed through by holding all teachers strictly accountable for implementing the policies; they tracked implementation by gathering information from classroom visits, chats with students and other teachers, records of referrals, and reports from assistant principals. Recognizing that an orderly environment made their work lives easier and set the stage for learning, most teachers seemed to appreciate consistent enforcement of the standards rather than resenting it.

In the "stuck" or low-progress schools in our sample, teachers often reported frustration with colleagues who let students get by with disrespectful behavior, cursing, dress code violations, tardiness or skipping classes, and the like. The behavior carried over into their own classrooms and made it hard for them to keep order and teach. One NCDPI coach told us, "That's a sure sign that there's no enforcement or follow-through by the principal. 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." Indeed, during the late spring week when we conducted our interviews in one "stuck" school, a student had told one teacher, "Why should I do what you say? You're not gonna be here next year anyway." Remarks like this showed us that not only are there two sides to successful efforts to establish an orderly environment—getting tough and building relationships—but also that the two are linked. As a career and technical education (CTE) teacher in a rural high school explained to us, without close, caring relationships with students, a school's principals and teachers lack the emotional clout to impose discipline. "If they don't think you care about them, they're not gonna cooperate with you, no matter what you threaten them with. They're gonna carry a grudge, and they're gonna find a way to get around it. The same thing goes for principals and teachers. Teachers won't work hard for a principal who doesn't care about them."

Stronger Pressure and Rising Expectations for Student Learning

The wisdom of the CTE teacher came clearer and clearer to us as our interview visits progressed through the spring. Late in our interview with the principal of a small rural high school whose performance composite had soared 28 points in only two years, he began a sentence with a deadpan poker face, saying, "I don't want to brag, but …"—and here he could not resist breaking suddenly into a brilliant smile—"… my teachers love me." Our subsequent interviews with teachers bore him out. His teachers did love him. Teachers could not contain their own smiles when they talked about the principal: 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.

Yet on the whiteboard behind the principal as we interviewed him, we could see teachers' End-of-Course examination passing rates and average scores displayed, together with the goals that the principal and each teacher had jointly set for the number of students in each class who would pass the exam this year. He explained that early in a semester, he sat down with each teacher of an EOC course to review her students' prior End-of-Grade and End-of-Course scores and the EVAAS prediction for each student's likely score in the course. They would then discuss what the teacher and others would have to do to help the student make a passing score, focusing especially on students who were not predicted to pass. After reviewing the prospects and requirements for each student to pass, they would set a goal for the number of students the teacher should be able to get over the bar. Periodically during the year, they would meet to review benchmark and formative assessment results, not to revise the goals they had set but to adjust the program of extra support required to meet the goals. Because the goals set for every teacher are displayed on this public whiteboard, each can compare her own goals—and, at the end of the semester, her own students' performance relative to the goals—with those of other teachers in the same and other EOC courses. This spurred competition among teachers, but it also prompted teachers to seek help from colleagues with better success rates.

As teachers' tales about the principal suggested, part of his success in commanding their loyalty and mobilizing their support seemed to derive from his hard work, dedication, and readiness to listen to the teachers' problems, needs, and ideas for addressing them. Their stories about him showed that in their view, he treated them with respect, cared about them as people and not solely as cogs in the test score machine, 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 evenhandedly rather than playing favorites. He was in their classrooms on a regular basis, not only observing but also making useful suggestions for improvement. When a math teacher had to be out of school, he often taught her classes himself. In one of the regular reports filed by NCDPI's leadership facilitator, she recounted the development of the school's Framework for Action during a retreat that she facilitated the previous summer. What struck her most about the process was that on several occasions, the principal accepted decisions of his leadership team even when they went against his personal preferences.

As the principal recalled:

> Leaving that leadership retreat, those teachers felt pretty much empowered—that it wasn't the principal's ideas that they have to carry through. They were … their ideas. So … they were able to come back and go to the departments and be able to sell it because they had input throughout the process. And we set up our goal. We said at the end of the year, we're going to be at 70% with students passing the EOCs. The goal was specifically 70%.

To offer another example, according to central office administrators in a small city district, the principal of an improved high school took his cues from the residential training program provided by the Center for School Leadership Development as well as NCDPI's Framework for Action. He recalled, "Some pretty difficult discussions—long days and at least once a week,

every week from November through April, designing that Framework [with his School Improvement Team] … What are our issues under Literacy? What are our three main problems with this? What are our three main problems with assistance to struggling students? And I think that was the nucleus of why we are able to do what we have done. I know it was."

In the rural high school dominated by inter-community conflict described earlier, a principal who began his tenure with a tight top-down drive to gain control through intimidation was 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. The facilitator recalled that his "overwhelming" first impression of the school's main problem was the revolving-door series of superintendents and principals over the previous few years, as well as the consequent teacher turnover. "Good teachers will not allow themselves to be in places where there is no stable leadership," he explained. So his first priority was "to stabilize the leadership and get the new person to see what he would have to do to shore up the teaching staff." Over time, the facilitator was able to distribute leadership broadly in the school. "I don't have any authority," he said. "Only influence." So his approach was to point out problems and engage the principal and others in an exploration of what should be done about them. With the principal, he would figure out who would need to be involved in order to solve a problem, get them to recognize the problem—generally by presenting specific data that dramatized the problem—and then orchestrate discussions about how to address it. In this way, he was able to mobilize multiple groups of people across the school, each working more or less independently on a specific problem. "I told the principal, 'Think how much better it is having all of these groups putting their energy into solving your problems instead of fighting you.'"

In only one of the improved schools did we see a sharply different process. This was another small rural high school afflicted by inter-community conflict, depressed by a negative image in the community, and dragged down by the belief—shared by students and staff as well as parents—that the mediocre education provided by the school was good enough for local circumstances. Here, a dynamic new principal came in, decided that the situation required urgent action, tore up the Framework for Action plan developed under the previous principal, wrote a new one, and sold it to the School Improvement Team. Here the new principal's persuasiveness and force of personality was apparently enough to get most of the faculty behind him, and at the time of our interviews, the plan had produced impressive results: a 15-point rise in the school's performance composite, figured on a one-semester basis.

Another major factor in most of the successful principals' ability to mobilize teachers' energies behind the push to improve performance in their schools was the replacement of a substantial number of teachers and other staff. The principals of the most improved schools and some moderately improved schools had hired as many as half of the teachers in the school, and in one case, all of them. In the small rural school with the well-loved principal featured above, about a dozen teachers left at the end of the school year before he came in, and the principal took an active role in selecting their replacements, most of them young new teachers. In another rural high school that almost doubled its performance composite over a two-year period, rising from about 36% proficient to 70% proficient, approximately half of the faculty was replaced at the instigation of the superintendent, and virtually all of the new teachers who were hired came in

through the Teach for America program. In the small, close-knit urban school described earlier, the entire faculty was new, all hand-selected by the principal. In some cases, the number of teachers replaced was considerably smaller. The rural school with the dynamic new principal had made sharp improvement (15 percentage points in one semester) with the help of a handful of new teachers and an assistant principal recruited by the new principal. In a moderately improved school, the authoritarian style of the prior principal, together with persistent discipline problems, had prompted numerous departures, opening the way for the new reform-minded principal to bring about a dozen new teachers on board.

In addition to the energy boost that new teachers brought to many of the improving schools in our sample, they also seem to have stirred the competitive juices of veterans who remained in place. As the NCDPI school facilitator at one rural high school with large numbers of new teachers recalled, "That first year (2007–08), 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, there was a … friendly competition, not cutthroat … 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?'"

We shall say more about the process and consequences of substantial personnel replacement when we discuss building human capital in the *Improved Knowledge and Skill* section below. Our point here is simply to acknowledge that 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 notable 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. So, personnel replacement clearly played an important role in the turnaround process. 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. 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.

So: through a combination of (a) holding teachers responsible for student achievement and for enforcing discipline, (b) simultaneously cultivating close, trusting relationships with teachers, and (c) bringing in a new cadre of teachers with energy for reform and allegiance to the principal and his reform program, the principals in our most improved and moderately improved high schools mobilized broad commitment to the school's new standards, goals, and policies.

It was mainly through a committed staff that the principals of improving high schools created an environment of higher expectations for student behavior and achievement, but principals also took the message of higher expectations directly to students:

> Then the students … meeting with them that first day and telling them, "Okay, this is where we were—26% [on one set of exams], 40% [on another]. This is where we are going this year: 60% [across the board]. And this is how we are going to do it: You will come to school. You will be here on time. You will not be in the hallway. You will take everything you need to class. You will work from bell to bell. You will give us your best effort." Just telling them that, they were like [sat up and took notice].

And, addressing students:

> I want you to do your best, but I promise you the teachers are going to care about you. We [principal and assistant principals] are going to care about you. We are going to take an interest in you. We are going to give you the benefit of the doubt. We're not going to yell at you. We're going to treat you with respect because that's what we are asking you to do. And if there is a time when you feel maybe you were not treated fairly, I don't want you arguing with teachers. You come and see me, and then all of us, we can sit and talk together.

Here again, in the process of raising academic expectations, we see the combination of relationship building with tough assertion that characterized the push for discipline, leading to a safer and more orderly school environment.

Of course, simply announcing new goals and standards did not engage and energize students by itself. 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 End-of-Course 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, sometimes in the face of resistance from parents, community members, and school board members. Several schools organized visits to universities, colleges, and community colleges to give students images of what they were working toward. To keep these images prominent in students' minds, the names, colors, mascots, and information about colleges were displayed in hallways and classrooms. Incentives, rewards, and celebrations of various sorts also played a role. One principal promised to shave his head if the school reached the performance composite they had set as a target for the year—and actually did so when the target was achieved ("Next year I'll have to wear a dress and lipstick.") During weeks when students school-wide behaved well and worked hard, principals relaxed the dress code on Friday. To reward students for good performance on benchmark or End-of-Course 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. They used the proceeds of fundraising events to launch incentive programs through which students could win iPods, Wii systems, digital cameras, and other prizes.

As we describe more fully in subsequent sections, schools also expressed the higher standards and expectations in the daily instructional program. They reviewed their honors courses to make sure that the courses actually deserved the honors designation. One principal who taught a

regular American History course used the Advanced Placement (AP) syllabus, materials, and vocabulary list—all without letting the students know what he was doing until late in the semester. When principals and leadership facilitators observed classes—which they did frequently—they stressed the importance of setting demanding tasks in the feedback they gave teachers. And teachers regularly included higher level tasks and goals along with more basic ones in their non-honors classes.

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 that one teacher gave us was echoed in other improved schools:

> But when the new administration came in and put just as much pressure on the teachers as the teachers put on the students, that's really when the change started taking place. And yes, it was pressure. I mean, it's like trying to make a diamond. It was pressure. But after the end of last year, we saw, "Okay, wow, this is possible! We did raise scores." So at the end of the first semester, now we're like, "Okay, well, we can go higher." And now the test score expectation for this end of year is way above anything that any of us would have even imagined three years ago.
>
> [Before the change, there was] … a mindset that excuses would be taken. And 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, then I'm going to work from there."

It is commonly assumed that attitudes and expectations shape behavior. But in the improved schools in our sample, interviewees often told a different 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. Or, perhaps it is more accurate to say that 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 expectations.

Piecing together the evidence from our interviews across schools into a pattern, we concluded that this is how a culture of high expectations was made. Accountability pressures within the context of strong relationships and engagement of teachers in planning and problem solving generated commitment to new goals and standards for student behavior and learning. Similarly, strong and consistently enforced discipline policies together with energetic efforts to cultivate caring relationships with students combined to help schools create safer and more orderly environments. But 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 told themselves, "Okay, wow, this is possible" and "Okay, well, we can go higher"—a development that was recognized and reported across the improved schools—a culture of improvement had started to take shape. But by then, teachers had newly recruited colleagues, had learned new skills, and had begun to take action in the new ways we outline in the next sections. In the improved schools we studied, culture building and improved performance were part of a spiraling process. 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.

In the next section, we describe how what economists refer to as *human capital* was built in schools that improved their performance. That is, we explore how committed and talented new colleagues replaced alienated, low-skilled teachers and how teachers' and administrators' knowledge and skills were strengthened.

Improved Knowledge and Skills

The moderately improved and most improved schools in our sample built up their human capital in part by importing it. That is, they brought in new principals and replaced departing teachers with talented and energetic newcomers. But they also strengthened the skills of the newcomers as well as the veterans on their staffs through school-specific professional development and ongoing coaching.

Personnel Replacement

As indicated earlier, in the formerly low-achieving high schools that had made substantial progress, the process of improvement generally began with the installation of a new principal, though in a few cases, successful principals had recently come on board -- after Judge Manning issued his list of schools slated for closure if they did not take decisive steps to raise performance. The common image of a "turnaround principal" is 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. In general, the principals of improved high schools seemed quieter people, distinguished more by their ability to develop rapport with teachers and students, by their knowledge of instruction, and by an unshowy determination to improve academic performance than by an outgoing, expressive personality.

This is not to say, however, 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 and pressure for improvement. The district administrators we interviewed emphasized knowledge of and experience in managing instruction as their primary reasons for choosing these principals. The day of picking principals mainly for an ability to manage operations and keep order were long gone, they told us. If the ABCs and No Child Left Behind had not made this totally clear, Judge Manning certainly had.

In most of the improved high schools, replacement of a substantial number of teachers came at the same time or soon after a new principal was installed. In the comprehensive urban high school that was divided into a series of smaller schools on the same campus, an entirely new faculty was hired for the most improved of these smaller schools. At one rural high school, half of the faculty was replaced by Teach for America teachers in a single year. In this case, the principal expressed some hesitation about the move, but a determined superintendent took the action over her initial objections, and after she saw the beneficial effects, the principal acknowledged the wisdom of the action. In the remainder of the improved schools, the first wave of teacher replacements was not the result of a deliberate policy decision, but a side effect, if you will, of serious discipline and morale problems, sometimes exacerbated by principals trying to get control of the school and raise scores through stern unilateral action alone.

Except in the case of the urban school subdivided into separate schools, many of the teachers in these mass replacements were new to teaching as well as new to the school. This was true not only in the case of the wholesale engagement of Teach For America teachers, but also in schools that suffered extensive departures due to discipline and morale problems: "We were all babies," one teacher said of the group who entered the school when he did. Considerable research shows that particularly during their first two or three years, inexperienced teachers produce lower test score results than their more experienced counterparts. Yet the sharp rise in performance composites at schools with many new teachers suggests that with strong professional development and coaching, plus a well-developed structure and supports (described in the next section), new teachers can make a positive contribution to a school's performance. As one instructional facilitator recalled, "That first year, we hired a lot of new teachers, fresh out of college… and we worked really hard with those teachers [in their classrooms]." Across the schools, teachers credited extensive professional development from multiple sources, including NCDPI, the New Schools Project, and in one case, the Teach For America program, for bringing bright, energetic, but inexperienced teachers quickly up to speed, sometimes enabling them to outperform more experienced teachers.

The replacement of teachers in improving schools did not end with the initial wave of new teachers but continued with the deliberate discharge of underperforming teachers who failed to respond to pressure and assistance to improve. A prominent feature of strategically managed instruction was frequent classroom observation by principals, assistant principals, and other administrators, leadership facilitators, and instructional facilitators. Reports filed by leadership facilitators document numerous concerned discussions with principals about teachers with lagging performance. Facilitators' reports initially recounted the feedback and suggestions that they had provided, but when teachers showed no progress or outright resistance, discussions turned toward the need for principals to put recalcitrant teachers on action plans and eventually to encourage them to find new jobs or retire.

It was generally low End-of-Course scores that initially occasioned extra classroom observations and follow-up discussions with principals, but low scores alone were not sufficient to trigger action plans. In some cases, it was clear that principals took action on teachers with lagging performance only when NCDPI facilitators pressed them to do so. An NCDPI portfolio manager—the supervisor of a set of facilitators—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. Although the conventional wisdom says that it is very difficult for an administrator to fire a tenured teacher—and in terms of formal procedure, it is—we heard similar stories repeatedly. In school after school, teachers with lagging scores, poor classroom observation results, and a reluctance to change were reported to respond to low evaluations, action plans, and pressure by retiring or moving on.

Obviously, creating a vacancy was only step one in replacing a teacher. Perhaps the harder problem was recruiting and hiring a replacement with stronger commitment and skills. Asked how he managed to do so, one principal 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 and minority students a good education and a fighting chance in life. As his leadership facilitator remarked in a separate interview, "Good teachers don't allow themselves to be in places where there is no stable leadership … But if teachers see that a school is improving achievement, they want to be part of it." In several schools, other incentives were mentioned, including an increase in the local supplement to make the district competitive with surrounding districts and the chance to teach relatively small classes. One district joined in a partnership with the local branch of the State Employees' Credit Union, secured a special appropriation from the North Carolina General Assembly, and built a complex that offers teachers low rents on attractive, air-conditioned apartments near the school. Districts' central offices also provided help in advertising positions, finding candidates, and screening applicants. But across the improved schools, the most compelling draw seemed to be the opportunity to pursue the mission in a school that was on the move. Even so, recruitment was not easy. For example, one leadership facilitator said the school "went through several civics and economics teachers before they finally found one who could do the job."

Professional Development

As described earlier, in 2006–07 and 2007–08 the Principals' Executive Program (PEP) partnered with UNC-Chapel Hill's Kenan-Flagler School of Business to provide extensive professional development to leadership teams from turnaround high schools. Initially, PEP and Kenan-Flagler worked in isolation from NCDPI's District and School Transformation (DST) division, but after funds for the program were transferred from UNC to NCDPI, and the Center for School Leadership Development (PEP's parent organization) got involved, coordination between professional development (PD) activities and NCDPI's coaching support improved substantially. In fact, during the last of three rounds of PD, NCDPI's leadership facilitators actually helped the turnaround high schools develop their Framework for Action plans. After a school's initial year in turnaround, PD was provided by the DST unit itself or by the Mid-

continent Regional Education Laboratory (McREL), one of several organizations that DST drew upon to extend its own capacity to support turnaround schools. In addition, schools that adopted comprehensive school reform models developed by such organizations as America's Choice, Talent Development, the Southern Regional Education Board, or the New Tech Network received professional development designed to support model implementation.

Across the high schools in our sample, interviewees told us that PD from these sources played an important role in the improvement process. As we saw earlier, leadership teams generally found the PEP-Kenan-Flagler PD helpful, especially the sessions closely connected with curriculum, instruction, and assessment. An assistant superintendent in one small city district credited the PEP-Kenan-Flager PD with focusing the principal of an improved high school in productive directions: "I think it helped [principal's name] to see how to guide the staff. Without that training, I'm not sure he would have known which direction to go." She went on to cite sessions on data use ("how to read and understand it and what to do with the data once you have got it"), professional learning communities ("how to involve his teachers in real discussions of what they were doing"), and networking among principals ("Everybody had the same problems. 'What are you doing about this?' Just sharing ideas about what works, what doesn't work"). The main complaints about the PEP-Kenan-Flagler PD concerned the sheer amount of time that the leadership teams had to be out of their schools, the sense that the Kenan-Flager sessions were too general and that the initial entrepreneurial business plan requirement distracted school leaders from their focus on instruction.

One portfolio manager recalled that after the initial centralized PEP-Kenan-Flagler PD, subsequent PD efforts focused on the specific needs of each school rather than more rounds of centralized sessions. An example was a series of sessions on teaching literacy across the curriculum that she provided in a school that lacked local resources in this area. In a larger district with more central office capacity, PD on literacy was provided by local trainers. One principal appreciated the New Schools Project PD, which was designed to build from year to year. She noted, however, that "…in '09, we should have been on the fourth year of PD, but the staff was new, the administrators were new, and … frankly I had not seen these strategies used in the [veterans'] classes. So I felt that it would benefit them to start over again, as well." She went on to explain that the New Schools Project coach "takes each one of these strategies such as cooperative groups or writing to learn and does a PD on each one, and then she'll come back and do rounds in the classrooms." In most high schools, we heard praise for the PD provided by NCDPI and the New Schools Project, but principals' and teachers' remarks tended to be general rather than specific about the topics or issues addressed: "Our new teachers got a tremendous amount of valuable professional development from both NCDPI and NSP."

Remarks about the PD provided by developers of comprehensive school reform models were more mixed. Where the tone was positive, interviewees tended to speak only generally about the model developers' PD. The exceptions were the New Tech Network PD mentioned earlier and James Comer's School Development Program. The New Tech PD began with a "shadowing" opportunity at an established New Tech school for the principal and selected teachers, followed later by a week-long training session for New Tech schools nationwide, held in Grand Rapids, MI, followed by onsite and technology-based coaching on a regular basis. Both the principal and

teachers reported that both experiences were very productive. The principal recalled with a wry grin that he "butted heads with the New Tech people" from time to time, but clearly found New Tech's support valuable. The school where Comer's School Development Program provided PD did not formally adopt the program's model, but found that the PD on how to support students emotionally as well as academically to be useful. As indicated earlier, teachers in several schools saw their model developers' representatives as uninformed about the realities they faced, and at times, as condescending. In these schools, teachers described the periodic workshops as drudgery, and their own participation as just going through the motions for the sake of compliance.

Coaching and School-Specific Professional Development

Employed by the Leadership Group for the Carolinas (LGC) under a contract from NCDPI, leadership facilitators were recruited for their experience as successful principals, which was seen as crucial both by DST Director Pat Ashley and LGC managing partner Gus Martin. Before beginning their work in a school, all leadership facilitators received three days of training in the LGC's coaching approach, and they met quarterly as a group for more training and to debrief with NCDPI and LGC managers. As their title indicates, they were trained to work in a facilitative rather than a directive way. Leadership facilitators generally visited each of their assigned schools once a week and filed a written report describing what they had done after every visit.

These reports show that they performed a range of functions, often beginning by carrying out their own needs assessments by reviewing data on the school, interviewing principals and teachers, observing in classrooms, and moving about the school informally. A separate unit within the District and School Transformation division carried out needs assessments using a process designed by Cambridge Education with support from the Gates Foundation. But the rapid start-up of the turnaround process meant that leadership facilitators often began their work before the needs assessment unit could get to the school. Perhaps for this reason, turnaround school administrators, teachers, and leadership facilitators seldom mentioned the formal needs assessment. On the one or two occasions when they did, it was to say that the needs assessment report confirmed what they already knew about the school's problems, giving them helpful if not crucial validation.

According to LGC's Gus Martin, building relationships with a turnaround school's administrators and teachers was a major emphasis during early phases of the work. This emphasis is reflected in reports filed by leadership facilitators, which frequently refer to positive feedback they have given to principals and teachers as well as to sessions when they had restricted themselves to lending a sympathetic ear as a principal reviewed his or her thoughts on the school's problems. As the relationship permitted, a typical leadership facilitator visit might involve 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. Reports filed by one leadership facilitator show that over the course of a school year, she observed for a full period in the classroom of every teacher in the school and met with each

teacher afterward to provide feedback and make suggestions. At the end of a day in a school, leadership facilitators usually met again with principals to discuss what they had learned during the day. From one point of view, the leadership facilitator's client was the whole school, but in practice, they seem to have oriented their help and advice primarily to principals.

A common concern that was expressed during discussions with principals was how to deal with weak teachers. Initial discussions about a teacher focused on the need for more observation and feedback from the principal or how to get the teacher more help from an instructional facilitator. If the teacher failed to show improvement, then leadership facilitators' reports began to reflect increasing concern, often culminating in the principal's placing the teacher on an action plan. Action plans specify the performance problems a teacher is having and the improvements s/he is expected to make. They also include the types of assistance s/he will receive, including professional development and coaching. No teacher can be dismissed without negative evaluations on file or without documenting the difficulties and supports in an action plan.

Leadership facilitators sometimes served as neutral discussion leaders during leadership team and School Improvement Team meetings as well as planning retreats. In addition, they took the initiative to organize special meetings—"leadership discussions," as one facilitator called them—to address problems they had identified. Facilitators' written reports also show them providing tools such as classroom observation protocols and common lesson planning formats to principals and teachers, modeling the use of the tools in joint instructional monitoring and feedback sessions, and then following up by observing and coaching principals and teachers as they used the tools.

Leadership facilitators suggested things to bear in mind or ways of handling important tasks, such as reviewing the data on incoming ninth graders and developing a master schedule that would assign them to appropriate courses and teachers while also providing their teachers with common planning time. The facilitators' reports also show them working closely with testing coordinators to ensure that NC Wise, the new student information system, would come on line properly in the school and on how the data from End-of-Course, benchmark, and formative assessments might be reported to and interpreted for teachers. Facilitators' focus on the master schedule, NC Wise, and formative assessment calls to mind Dr. Ashley's comment that in many low-achieving schools, "none of these systems work very well."

Another function served by leadership facilitators was to support follow-through on the schools' Framework for Action plans. As one portfolio 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." From the written reports that the leadership facilitators filed and the recollections of our interviewees, however, it appears that the facilitators virtually never tried to dictate actions to either principals or others. In contrast, once they had discussed a problem several times with a principal, portfolio managers sometimes urged certain actions in a very pointed way, an example being the portfolio manager who told a principal point-blank, "You need to get rid of these teachers. They are killing your scores."

Employed directly by NCDPI, 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. Many were National Board Certified. 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. Reports filed by instructional facilitators also reflect more variation in the frequency of visits across facilitators, schools, and time.

Although most high school teachers' comments about instructional facilitators were positive, most were also general in nature. For example, "They were incredibly helpful on our Framework for Action plan." In one moderately improved high school, teachers recalled that two of the instructional facilitators initially assigned to work with them were too directive and harsh, but were soon replaced by people who were more congenial to work with. The only other complaints we heard from high school teachers about instructional facilitators were about seeing them too seldom. One portfolio 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. She herself typically managed instructional facilitators serving a total of 18 schools. In the high schools served jointly by NCDPI and the New Schools Project, the New Schools Project facilitators were able to complement the support provided by NCDPI staff, and they also earned praise from our interviewees.

Particularly when working with new teachers, instructional facilitators often focused on the NC Standard Course of Study, breaking it down goal by goal and objective by objective to clarify exactly what teachers should be focusing on: "The coaches… were very good working with our teachers. Because we had all new teachers … they were really dedicated to making sure that our teachers understood the curriculum, understood best teaching practices. They came in at least once or twice a month to work with different content areas." Instructional facilitators taught demonstration lessons, observed as teachers gave the new techniques or material a try, and provided a combination of encouragement and corrective feedback. In one school, an instructional facilitator team-taught with the chair of the science department, leading to major improvements in science instruction: "Our significant change came when [name of facilitator] was working with us in 2008–09." According to the principal of an improved school, the demonstration lessons and the fact that the instructional facilitators were themselves practicing teachers recently out of the classroom gave them credibility and leverage.

On request and sometimes at their own initiative, instructional facilitators brought in classroom materials and lesson plans to shore up observed weaknesses. They also helped teachers understand End-of-Course, benchmark, and formative assessment data on their students' performance and suggested strategies to deal with objectives on which many students scored poorly. On occasion, instructional facilitators offered targeted professional development: "I noticed that one of the things we needed help with was differentiation [of instruction]…. All of the coaches came in together and did that workshop for us." Like the leadership facilitators, instructional facilitators often met toward the end of a day with principals or assistant principals to discuss their observations.

In the next section, we describe how instruction was organized and managed in improving schools, and we also include additional specific instances of the types of assistance provided by leadership and instructional facilitators.

Structures and Support for Instruction

The improved schools in our sample used a variety of strategies to shepherd individual students through curricular paths matched to their evolving skills and to ensure that students encountered solid teaching and re-teaching along the path to proficiency. This sounds simple, but it required the construction of many distinct components, each carefully crafted to perform its function within a coordinated whole. No single person among those we interviewed articulated this strategically constructed whole in an explicit, integrated statement, but as we examined the elements our interviewees described, the overall pattern came into focus. It was as though a number of different craftsmen showed us how they cut and fit and adjusted a series of parts, but left it to us to see how the parts fit into a functional whole. Here we outline the overall pattern they showed us as well as describing and illustrating what the components looked like.

Coordinating Curriculum and Assigning Students and Teachers Strategically

One key to improvement was to break the curriculum down into course-sized chunks leading up to as well as through the objectives in the NC Standard Course of Study, then route individual students through the right courses in the right order. The right courses in the right order were those that a given student could handle at each point along the way, provided that s/he gave a solid effort.

NCDPI's High School Framework for Action required that schools in Turnaround develop and implement plans for "Freshman Transition Programs" as an important step in this process. The logic was simple: "If the youngsters are not ready for Algebra I and English I, it's obvious that they are not going to be successful in those courses," one leadership facilitator said as he began the story of how a rural school created its Freshman Academy, a separate unit designed to support students during the ninth grade year, when they are making the transition from middle to high school. In response to the mandate to adopt "a reform program," the school considered several possibilities and settled on the Talent Development High School (TDHS) model, in large measure because it included a "strategic reading" program as well as a program to prepare students for algebra. The school eventually abandoned the TDHS model as an integral model, but retained the Freshman Academy component with its strategic reading and algebra prep programs. (In addition to the Freshman Academy, the TDHS model also included small academies for groups of students in grades 10–12, each with its own set of teachers in core subjects. The school recognized the importance of the teacher-student bonds that the smaller groupings were designed to promote, but it had too few teachers of each subject to support this arrangement—"it was just more than the teacher allotment would stand.")

As the assistant principal in charge of developing the academy explained, it is one thing to "adopt" the Freshman Academy idea, and quite another to make it a functioning reality. She and

the principal did extensive reading, visited two NC schools that were already operating academies, and got training from TDHS as well as coaching support from the leadership facilitator, but still found setting up and managing the academy a daunting task. The academy was located in a former middle school building separate from the high school. "It was like opening a whole new school," she said. "We had to arrange everything from classrooms to desks and tables to materials to assigning teachers and making schedules and setting up all the routines that make a school go." She and her colleagues managed to overcome the challenge, however, and the principal credited the academy with helping to improve discipline in the school as well as academic performance and graduation rates.

Another high school that eventually achieved a performance composite above 90% tried the Freshman Academy idea but foundered in implementing it. "It was a debacle," one teacher recalled. "We had started the Freshman Academy, and scores went up immediately because all of the best teachers were in the academy. But the next year, we put a lot of inexperienced teachers in academy [to even things out], and scores went down. It was just a huge debacle." Yet the school did eventually implement a successful freshman transition program, retaining "ramp up" courses designed for students coming in with weak skills but abandoning the separate academy organizational structure. Two of the substantially improved schools in our sample did operate solid Freshman Academies, but equally common were variants on the academy approach that combined ramp-up reading and mathematics courses with seminars emphasizing study skills and socialization into the work habits and behavior required to succeed in high school.

In our initial interviews, NCDPI's Dr. Ashley emphasized that what essential to improved performance was not whether a specific model or organizational form is implemented, but that the functions featured in the Framework of Action be implemented. Thus, the Framework for Action called not for a Freshman Academy, but for a "Plan for Ninth Grade Transition." What we learned from our school interviews bore out the wisdom of emphasizing essential functions rather than specific organizational forms. As the principal of the sharply improved school that dropped the academy as a separate unit expressed it, "When I took over, a lot of schools were getting different kinds of programs—America's Choice and that kind of stuff. But our philosophy was pretty simple. 'We're going to come up with the approach that is [name of school] Senior High, that's going to fit our population, our community, our school. We did not buy a product from anybody else."

This principal explained that crafting the details of the ramp-up or bridge courses was crucial:

> What is so essential is what you teach. In Algebra I, we have four goals. When you look at the EOC … you may have 60% of the test come from Goal 3 and Goal 4. So we design our curriculum in a way that the Foundations of Algebra [students] will get Goal 3 and Goal 4. So … if they're successful in Foundations of Algebra, they pretty much master the bulk of what the state exam is going to be. By the time they get to Algebra I, it's mostly a repetition of those tough goals, Goals 3 and Goal 4. And they get Goal 1 and 2 along the way as well. So the pacing guide is crucial. You may have a bridge course, but if it does not have a good pacing guide, it's a failure. [In my former district] I've seen

> students go into Algebra1A and 1B still struggling because of the way the pacing guide was designed.

The principal's mention of "Algebra 1A and 1B" is also important: the ramp-up Foundations of Algebra courses prepared the way for students to take the EOC-tested Algebra I course, but even in a block schedule, many still needed two semesters of instruction to master the content. Above the main entrance to the school 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 different abilities to make progress toward proficiency, albeit at different rates.

Yet detailed planning of the courses comprising the various pathways only prepared the way for another essential step. In each of the substantially improved schools, principals told of long summer days working with counselors and assistant principals to choose an appropriate series of courses 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 Christmas break. Principals and leadership facilitators consistently pointed to the master schedule as a key instrument for improved academic performance. One principal referred to the painstaking assignment of individual students to appropriate courses and teachers as "hand-scheduling."

Even when students were hand-scheduled to ramp up through strategic reading and other courses designed to bolster weak entering skills, many still needed additional preparation to read material in EOC-tested courses effectively. So responding to the Framework for Action's call for "a plan for identifying and addressing literacy issues and needs" required going beyond the Plan for Ninth Grade Transition to develop students' content-specific reading skills. Yet as an English teacher in a moderately improved high school told us, "I had never been trained in how to teach reading. We had just assumed that kids would come to us with reading skills." But after the "wakeup call from Manning" and the Framework for Action requirement, 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." The district's central office as well as NCDPI and its facilitators provided training in teaching literacy in the content areas. The instructional facilitators in particular provided concrete, subject-specific suggestions and materials.

In this and other improved schools, explicit vocabulary teaching and review was a central feature of the "literacy across the curriculum" initiative. In interviews, teachers did not explicitly credit Robert Marzano's *Six Steps for Teaching Academic Vocabulary*, but their Framework for Action plans indicate that Marzano's work had informed thinking and practice in these schools. The science department chair in one of the most improved schools laid particular stress on vocabulary work, explaining that in her EOC-tested biology class, students learned over 200 important terms through daily vocabulary drills, with a 20-word cumulative assessment every week. She believed

that in the past, even when students understood the concepts she was teaching, they scored badly on tests simply because they lacked the correct vocabulary. She credited the regular vocabulary work for a significant part of the uptick in Biology EOC performance. Teachers at other improved schools described similar practices.

Supervising Instruction, Building Professional Community, and Using Assessment

Having constructed curricular pathways designed for students of varying skill levels and having "hand-scheduled" individual students through them so that they would encounter the most effective teachers available to teach each course, the improved schools in our sample did not then leave teachers on their own to teach as best they could. They took a number of additional steps to ensure that the Standard Course of Study for each course was actually taught, taught well, and taught again when necessary. With the support of leadership and instructional facilitators, principals structured and supervised instruction closely, organized teachers into collaborative groups (professional learning communities), and promoted the use of benchmark and formative assessment to check students' learning regularly, to guide assistance for struggling students, and to shore up weak spots in teaching.

Interviews with central office staff, principals, and leadership facilitators indicate that when the turnaround process began, little real teaching was going on in many classrooms. The following excerpt from a leadership facilitator's report illustrates what appears to have been common:

> My first observation today was in the classroom of a science teacher whom [the principal] and [the school's instructional coordinator], had requested that I observe. En route to the classroom, I met [an assistant principal]. Upon learning of my destination, he remarked that he had observed the teacher and was interested in knowing my reactions after the observation. All three administrators have observed this teacher and share concerns. The class observed was Honors Biology with 25 students. Although this class size is large for [name of school], the size would be average for most schools. My experience in the classroom confirmed their concerns. I saw no teaching. A quiz lasted for half the period and for the remaining 45 minutes, the teacher instructed the students to read the next chapter. He did point out several things they should remember. When students became a little chatty, he had them answer questions at the end of the chapter. I understand the administrators' concerns… with this type of instruction (?). I will be visiting this classroom again.

As the excerpt indicates, classroom observations were frequent in this school, and this Honors Biology teacher had received special attention. Yet, as the facilitators observed, he exhibited essentially "no teaching." This was not an isolated case. As two central office administrators observed about another school, "We always got the sense that teachers were not really teaching the Standard Course of Study. If they were teaching at all, they were teaching whatever they enjoyed teaching."

One step toward assuring that the Standard Course of Study was taught was simply to stress its importance and help teachers—especially new teachers—understand it. In the rural high school with large numbers of Teach for America teachers, one interviewee reported:

> We had DPI last year because we were a low-performing school. The thing I liked about that is that we got the content area people, the coaches or facilitators, and they were very good coming in and working with our teachers. Because we had all new teachers, and I liked the fact that they were really, really dedicated to making sure that our teachers understood the curriculum.

Other teachers gave similar reports of instructional facilitators breaking down the Standard Course of Study, objective by objective to "make sure that our teachers understood the curriculum."

Another step in ensuring that the Standard Course of Study was taught was the development of pacing guides to distribute objectives effectively over time, coordinated with benchmark assessments to check students' progress at regular intervals. In some cases, these were developed at the district level, but as we discuss next, in most of our improved high schools, pacing guides and benchmark assessments were either modified or actually developed by collaborating groups of teachers (professional learning communities) within individual schools.

Even with a good understanding of the curriculum and a pacing guide, one leadership facilitator stressed that many teachers had trouble constructing lesson plans that worked well over the 90-minute period afforded by the block schedule. So he drafted and suggested a common lesson plan format based on his familiarity with the principles of effective instruction formulated decades earlier by Madeline Hunter and refined during his own experience as a principal. The format called for the day's objective(s) to be displayed on the board in language that students could grasp, the use of a "bell-ringer" exercise to get students' attention and launch the class immediately, an exercise to get students to call to mind what they already know about the day's topic, a short period of presentation and explanation of new material, a phase during which students worked through the new material with teacher guidance, a phase of more independent application of the material, a question-and-answer phase based on the application, a culminating phase when students were asked to sum up what they had learned that day, and a brief final phase making the assignment for the next day.

The format could be modified to fit the content and circumstances of a particular class, but the elements of explicit statement of the objectives, bell-to-bell teaching, a mixture of presentation with progressively more independent student work, four or five transitions from one mode of activity to another, and a closing summary of what had been learned were viewed as essential. Having shared the format with teachers, the leadership facilitator explained it to the principal, and showed the principal how it could be used as a guide during classroom observations that they conducted together. That is, he modeled its use as a format for making notes during the lesson and for providing feedback to teachers afterwards. Over time, as teachers used the format to guide planning, and the principal, assistant principals, and facilitator used it for observation and feedback, use of the lesson format seems to have become routine in the school.

In several schools, for a time, teachers were required to submit their lesson plans weekly. Before the improvement process got underway in one school, the principal had teachers file their plans online, via a schoolwide server. Teachers said they seldom received any feedback on their plans: "It was mainly a 'gotcha' kind of thing." After a new principal came on board, he and an instructionally oriented assistant principal replaced the online filing system with a multi-tabbed notebook in each classroom. Teachers kept their lesson plans in the notebooks, together with information on individual students' progress, including their scores on benchmark and formative assessments. During their regular classroom observations, the principal and assistant principal could put what they observed into the context of the lesson plans and data about students, and they wrote their feedback and suggestions in one of the tabbed sections. So, the notebooks became a channel of communication with teachers as well as an accumulating record of each class, a record that an administrator and a teacher could review together during periodic evaluation sessions. In several other schools, the requirement that teachers submit lesson plans weekly was dropped as careful planning became habitual.

Although they took different forms in different schools, the use of common lesson formats and frequent classroom observation were regular practices in the improved schools in our sample. Principals, assistant principals, and leadership facilitators seemed to focus primarily on whether Standard Course of Study objectives were being taught, whether lessons seemed well planned, and whether students seemed actively engaged during a lesson. Instructional facilitators had responsibility for multiple schools, so they visited a given school less frequently than leadership facilitators (who visited weekly), but when present, instructional facilitators were reported to provide specific content-oriented guidance to teachers, providing materials and unit plans, demonstrating lessons, team teaching with the regular teacher, and suggesting strategies for test preparation. On a few occasions, we heard about instructional facilitators whom teachers found too directive or critical, but most teachers seemed to find them low-key, helpful, and specific in the guidance they offered. The fact that the instructional facilitators were themselves "real teachers," highly skilled and only recently out of the classroom, gave them special credibility. Many were reported to be National Board Certified.

Although the primary functions of regular classroom observation were to ensure that the Standard Course of Study was taught in a planful way and to strengthen instruction via feedback and suggestions, when teachers failed to respond with observable improvements, principals of improved schools sharpened the pressure by putting them on action plans calling for specific steps toward better performance. As we indicated in the previous section on building human capital, continued failure to respond led to tough advice that "it is time for you to move on or retire." Teachers receiving this advice often followed it before a record of negative evaluations leading toward discharge could accumulate.

As frequent as classroom observation by principals, assistant principals, and facilitators was, in improved high schools this type of administrative supervision was not the sole means of ensuring that the Standard Course of Study was taught and taught competently. A strong complement to administrative supervision came from collaborating groups of teachers. These groups took different forms in different schools but were referred to across schools as professional

communities, professional learning communities, or PLCs, and they performed similar functions across the improved schools in our sample. In these groups, teachers worked together to develop pacing guides and lesson plans, observed and gave each other 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.

One step in the creation of PLCs was to schedule common planning times for the teachers of a subject, or sometimes more specifically, of an EOC-tested course. But principals and assistant principals took additional steps to jumpstart collaboration. In one moderately improved high school, the principal and an instructionally oriented assistant principal led required weekly department meetings, orchestrating discussions focused on curriculum, teaching, specific students' problems, and on how some teachers were able to succeed with particular students whom others could not reach. "People needed to take a long, hard look at themselves in the mirror," the assistant principal said. Yet the sessions were designed not primarily to put lagging teachers on the spot but to help them learn from their peers. In fact, some teachers testified that these collaborative sessions represented more powerful contributors to their professional development than any formal workshops they experienced. There was some initial resentment of and resistance to these sessions, but according to the principal and assistant principal, the meetings have now become routine, and the administrators have withdrawn from them except when invited by teachers or when they need to address some problem. The departments are still required to keep and submit minutes of their meetings.

In one of the most improved schools in our sample, the chair of the science department recalled, "Our significant change began when [instructional facilitator] started working with us." With support from the instructional facilitator, the science chair began team teaching one large group of students with two younger teachers. The science chair took the lead, but all three planned and taught the class together. In classes that each of the two younger teachers taught later in the day, they used the same lesson plan and patterned their teaching after the approach that the chair had modeled. Over time, teachers throughout the department began team teaching during some of their classes. They used the school's common lesson format but put special emphasis on hands-on approaches, including physical models (e.g., of atoms, molecules, cells) along with regular vocabulary drills and review, attention to test-taking strategies, and common formative assessments. The chair was convinced that students could do far better on tests if they learned how to focus their attention on essential points and avoid getting distracted by extraneous information. She modeled the process for her students, first reading test items aloud and walking them through the way she would attack the questions, then having them do the same. Through team teaching, she spread this practice through the department. Teachers in the department even developed a practice they referred to as "rotations," 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 team teaching and student exchange was uncommon, but teachers in improved schools often reported observing each other to pick up ideas and make suggestions. In one school, the principal scheduled the peer observations and structured them via checklists to cue teachers on what to look for as they observed.

The use of multiple layers of assessment data by teachers in these groups seems to have been particularly powerful, ranging from the use of SAS-developed Educational Value-Added Assessment Software (EVAAS) to analyze EOC results to the use of benchmark tests to ongoing formative assessments. An instructional facilitator who was particularly knowledgeable about EVAAS became "a kind of EVAAS guru" for teachers in one improved school. One capability of the EVAAS software is to predict a student's likely score on an EOC exam, based on his or her scores on prior End-of-Grade and End-of-Course exams. With guidance from the "EVAAS guru," the teachers responsible for each EOC-tested subject examined the prediction for each student in each of their classes and brainstormed ways to beat the predictions. One teacher noted that EVAAS helped them "identify which students are right on the borderline, which ones you need to push a little more, and which ones are probably stronger and can work with other students if you want to pair them up." In addition, district-developed benchmark tests administered at nine-week intervals kept teachers themselves on track as well as helping them track student progress: "The nine-week test, which was county-created, is based on that pacing guide. And if you don't follow the pacing guide—you go to a different sequence of things—you're going to be in trouble because your kids are not going to do well on the nine-week test. The questions won't be covering what you taught. So it gives you a little incentive to follow the pacing guide as best you can." In addition to information from the end-of-semester EOC tests and the nine-week benchmark tests, teachers in this school also used the ClassScape system developed at NC State University to assess progress weekly.

According to the teachers, the combined effect of examining all of this assessment data was to focus them on what students were actually learning, on needed changes in their own curriculum and teaching, and on common errors that students make. One teacher illustrated the fundamental shift in her thinking this way:

> If I'm teaching sophomores the research process, before I would just look at their research notecards to grade them. But now, I'm thinking more. I'm looking at the total picture of that class and saying, "Well, 75% of them nailed the notecards, but when I look at it, there's about 25% of them that just didn't get it." So then I go into it deeper, and I say, "Now, why didn't they get it? What was going on with them?" Sometimes they just didn't do the work—you know, it's that motivation factor. But sometimes maybe I didn't address that learning style. So I've got to make a change in the way I teach it. You know, it just makes me think about it, whereas before, I didn't. I really didn't.

Another teacher said:

> We use the data from ClassScape a lot because we do the formative assessments on each unit for Algebra I. [We have a common pacing guide, and] all of the Algebra I teachers give the same assessment, and we can look at the objectives and see, "Which objectives is my class weak in? This class over there was not weak in it, so let me talk to that teacher and find out what I can do better to improve my teaching of that particular objective." Or, "Why were my students weaker here versus there?" And it just lets you know what you maybe need to go back and focus on what the students are not getting. And this processing has helped build teamwork. The teachers teaching the same EOC

> [course] are really working together a lot—far more than they ever did before. They're developing lessons together, they share ideas, they share notes, and see what works best.

With surprising regularity, teachers in 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 they 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 quicker students as well as slower ones, this pattern of rolling review throughout the semester appears to have been important. Although teachers routinely reported the practice as though it had been invented locally, it seems unlikely that the precise practice of weekly 20-item tests with five items from prior weeks would spring up separately in several widely separated schools. The teachers had made it their own and may have thought of it as their invention, but it seems likely that the idea was spread via professional development or by NCDPI's facilitators.

Looking across 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 reshape 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 Standard Course of Study was taught in a planful way, that student learning was checked regularly, and that the checks led to ongoing improvements in teaching as well as interventions with struggling students.

Organizing Assistance for Struggling Students

The High School Framework for Action called on the turnaround schools to submit plans for assistance to struggling students. In improved schools, principals, assistant principals, and teachers did provide extra help to struggling students before, during, and after school, focusing the help by using information from the benchmark tests 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—a former stock analyst who came to teaching as a second career—told us that he arrives at school at 6:30 each morning to tutor students before school, often stays until 5:30 or 6:00 p.m., 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.

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, the 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. The school's instructional coordinator

explained that because some teachers were not using the time well, she and the principal laid down some ground rules for the Great Expectations periods:

> They can't introduce new material. They can't just provide free time for students to work. So after benchmark assessments, we sit down with teachers and we look at [what objectives the students in each class seem to be having trouble with] and we say very clearly, "This is what you need to reteach during Great Expectations time." For classes that are not benchmark tested, we ask teachers to reflect on their own assessments. "If [a certain percentage] of your students did not do well on a test, you need to do item analysis to see what they need help on." So teachers know what they need to reteach.

Great Expectations also served as a time for pullouts for students who need intensive help in any classes. The focus of the pullouts would change over time. For example, there was an intensive focus on writing right before the writing test. Interestingly, teachers of non-tested subjects such as Spanish or Band were also allowed to pull students out for extra help during a Great Expectations period. To allow for more intensive and targeted intervention, virtually all staff members pitched in to help with pullout sessions, including the principal, himself a former mathematics teacher, and the instructional coordinator, a former science teacher. In addition to students who were struggling to achieve proficiency, the students who were performing adequately but not making the growth that teachers thought them capable of making were also targeted for extra help. As a result, at any given time, between one third and one half of the school's students were receiving pullout tutoring. According to the instructional coordinator, the high participation rate reduced any stigma that might otherwise have been attached to being pulled out for extra help.

In addition to ongoing tutoring services during the school day, some schools created special programs to prepare for End-of-Course exams. For example, at one improved school, teachers wore camouflage uniforms, combat boots, and other military gear to stir up interest in two weeks of "boot camp" sessions held after school. "We have about 200 sophomores, and we had at least 100 of them participate for at least one day," an English teacher recalled. Several teachers of other subjects joined the English teachers to staff the boot camp sessions. EOC preparation sessions took different forms across the schools, but some form of special sessions, often with participation by teachers of non-tested subjects, were a regular feature of the improved schools.

External Support

In addition to working with individual schools from 2006–07 through 2009–10, the District and School Transformation (DST) division worked with superintendents and other central administrators in six districts. Five districts participated voluntarily. Work with the sixth was undertaken in response to a consent decree from Judge Manning. The district-level interventions reflected DST's recognition that with some guidance and support, superintendents and other central office officials could play important roles in the turnaround process. Urban districts often had sizable central office staffs with substantial capacity to support turnaround. But, the central office capacities in most rural districts were quite limited. So the DST focused district-level assistance in rural districts.

Within the time and staffing limitations of this study, we were unable to examine the assistance that DST provided at the district level. But we did interview the district officials who worked most closely with many of the schools we studied. We also heard principals' and others' reflections on their district's support for the school—or, in some cases, the lack of such support. So, we do want to offer some limited observations on the district role. In addition, our interviewees often talked about the influence, positive as well as negative, of the communities they serve, and we will offer some observations about the schools' interactions with their communities as well.

From what we heard, the most important single thing that districts did to support the 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 days of choosing principals primarily for an ability to keep order and keep parents happy are long gone, they said. The new principals' mandate was to raise test scores, and to do so quickly. Judge Manning's forceful public criticism of the schools may have been a spur to act more quickly, but the districts had recognized the problems on their own. Indeed, the low performance on End-of-Course tests and widespread discipline problems could hardly be missed.

In many cases, district officials followed up on the installation of a new principal by providing a variety of continuing supports. But in some improved schools, the principals complained about the lack of support they were getting and expressed fears that district decisions would undermine the progress the school was making. It appears that continued central office support was helpful but not absolutely essential to a turnaround effort. Some schools apparently made progress without it. But district intervention was essential at the point of installing the right new principal, and as we emphasize later, it appears that districts also play an essential role in sustaining progress when principals and other key personnel are lost.

One central office intervention was initially unwelcome from the principal's point of view but was also unusually productive: the decision to replace approximately half of a struggling school's faculty with Teach for America (TFA) recruits. At the end of the first school year thereafter, the school's performance composite rose by some 20 points, and by the end of the second school year, by another 10. Even during the first year, the principal recognized the wisdom of the move as the TFA teachers put their talents, commitment, and energy behind the improvement effort. But as noted earlier, the major personnel replacement did not solve the school's problems all by itself. It was followed up with substantial professional development and coaching from the DST and the New Schools Project, as well as by the types of support outlined in the section on strategically organized instruction. The central office also provided extra funds for after-school tutoring, thus raising teachers' morale as well as strengthening support for struggling students.

Another major intervention, this one by central administrators in an urban district, led to the complete redesign of a large, low-achieving high school with a reputation for gang violence. The associate superintendent responsible for the school called in Dr. Tony Habit, president of the

New Schools Project. On the day that Dr. Habit and a colleague first visited the school, police tasered a student who resisted arrest. With support from the central office, the school was divided into five smaller academies, each organized around a distinctive theme. With a hand-picked principal and staff, the academy we chose to study had gone on to achieve remarkable results, including a performance composite in the mid-90s. On the day we visited, there was a fire drill, and students' behavior was remarkably calm. Many chatted amiably with teachers as they returned to the building.

A strikingly innovative type of district support was the apartment complex for teachers that one district built in partnership with the State Employees' Credit Union, with special funding from the North Carolina General Assembly. In describing their difficulties in recruiting new teachers, principals and central office administrators from rural districts routinely mentioned limited housing as an obstacle, but only this district had taken such imaginative action. In the same district, the high school's leadership facilitator slowly became a trusted advisor to the superintendent and central office staff. He was called in to help the superintendent address problems extending across the full range of schools in the district, including the middle school that fed into the high school. In this as in the other rural schools in our sample, until the school began to turn around, its image as a place where students were out of control and learned little weighed on teachers psychologically. Remarks from friends, from people they bumped into in line at the supermarket, and fellow church members left them depressed or defensive. A step toward reversing the negative image was the principal's invitation for the school board to tour the school one afternoon and hold their regular meeting there that evening. This initiative was so successful that the principal followed it up with a similar invitation to the county commissioners.

In another school, at the recommendation of the leadership facilitator, an assistant superintendent joined the principal and an assistant principal to form the three-person team that participated in the PEP-Kenan-Flagler PD. She described the experience as "really intense" and credited the PD and the Framework for Action with focusing the principal on the right points of leverage to improve instruction and student achievement. She was later instrumental in arranging for another central administrator to provide PD on "literacy across the curriculum" mentioned earlier.

At a 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 that may have been aroused by the new GPA requirement, the county commissioners were also persuaded to raise the teacher supplement in this low-wealth community by $1,000.

In at least two other schools, the relationship between the district and community was slow to turn around. The school's identity in the community was shaped by contrast with that of the other high school in the district. The latter, located in the more prosperous county seat, was seen

as "the good high school," while the school we studied filled the role of "the bad high school." The school's image was not enhanced by television footage of a student being lifted out by helicopter after being shot as he was leaving school. The new principal appointed soon thereafter took several steps to improve the school's image. Among them was a Saturday event devoted to cleaning up the school and painting the entranceway and the atrium where assemblies and other events were held. According to the principal, "We got 400 parents and students to work with us that day." When we visited, the atrium was festooned with student-painted banners featuring passing rates on the first semester's EOC exams. One proclaimed, "We made it! 82%!" Yet the principal continued to worry that the school's identity as second best may persist in the minds of the school board and superintendent. He was anxiously awaiting the effects of budget cutbacks, fearing that personnel cuts would leave him without the handful of new people he had managed to bring in to help him lead the turnaround effort.

At another school whose image was slowly turning around in the small city it served, a teacher recalled, "When I first moved here, someone came up to me, an educator, and said, 'Why are you going to that ghetto school?' And I said, 'What do you mean, ghetto school?' And she said, 'Well, you know, they have gang fights over there, and the test scores are not good,' and she just went on with a long list of things. Finally, I said, 'Well, maybe I can make a difference there,' and I came over, and I love the students." As the school's scores improved, its image came along in tow: "Three years ago, only 13 students applied to our Math and Science Academy, but this year they're up, and right now I'm processing 37 applications."

As noted earlier, districts' intervention to choose and install a new principal was essential for initiating turnaround in many of the improved schools in our sample. Another critical point for district action seemed imminent in several of the schools, where continued improvement and high performance appeared to be threatened by the potential loss of the principal and other key staff members. Principals who demonstrate the ability to turn around a struggling school seem to attract attention and job offers from other districts and agencies who need their skills. Especially when they feel unsupported or underappreciated, the outside attention appears to be flattering and tempting. When the culture of a school has changed in a deep way, and productive norms and routines have been established, the school may be able to withstand setbacks of many sorts, but the loss of a turnaround principal and his or her key lieutenants—be they assistant principals, lead teachers, or others—may prove more than even the most resilient school can withstand. Unless, that is, district leaders are ready to step in, reassure the staff, and select a new principal who can rapidly win teachers' confidence and sustain the momentum. Thus, while ongoing support from the district office was helpful to the improved schools we studied, it is at the beginning of the turnaround process and at times of leadership transition that district action is not just helpful but appears to be critical.

The Process of Improvement: Middle School Level

The turnaround process in middle schools was similar to the process in high schools. That is, the account of improvement given by principals and teachers in the middle schools fits the scaffolded craftsmanship metaphor which we used to characterize the process at the high school level. With guidance from leadership and instructional facilitators from NCDPI and/or the New Schools Project, the leaders and staff of the middle schools slowly reconstructed the way their schools functioned, not by implementing an externally designed model but through a purposeful but non-linear process of planning, implementation, problem solving, and gradual adaptation. Although the process was broadly similar to that in the high schools, we also noted some significant differences as well as important pitfalls that can undermine implementation of even well-chosen steps toward improvement. For the sake of brevity, we offer only summary accounts of the similarities to the high schools but address the differences and pitfalls more fully.

Commitment, Climate, and Culture

Safe, Orderly, and Caring Environment

Just as in many of the high schools, discipline problems were rampant in the low-achieving middle schools. Creating a safe and orderly environment conducive to teaching and learning was a crucial first step. Before the turnaround process began, one of the schools that went on to improve sharply had a reputation for severe behavior problems throughout the community. As one teacher reflected:

> I think we're better than a lot of schools as far as the problems that they have with behavior. Unfortunately … right now we're still dealing with that stigma in the public. We're still trying to change that image but we are growing by leaps and bounds. We're increasingly competitive with the surrounding schools as far as behavior and academics.

Similarly, a negative view of the school also prevailed among district administrators, who repeatedly alluded to behavior and classroom management problems in the school's past as one of the causes of low performance. District administrators specifically noted that class-to-class transitions were not efficient or orderly prior to the 2008–09 school year. It was in that year that the school staff decided that they would "take their school back." Like other improved middle schools, they focused on creating structures and processes that would bring order, consistency, and certainty to the school environment. Schools put in place strategies such as implementing Positive Behavior and Intervention Support (PBIS), creating and enforcing new procedures and policies, facilitating orderly class changes, requiring uniforms or modifying existing dress code policies, and above all, ensuring consistency across all staff members.

The PBIS program was mentioned as a foundation for changing the degree of order and discipline in all of the middle schools in the study. Essentially, PBIS is a schoolwide behavior management plan that encourages consistent modeling of expected student behaviors in multiple school settings (classrooms, lunchroom, hallways, bathrooms, etc.) and then provides positive reinforcement when behavior meets expectations. Teachers at a school in the Piedmont region mentioned the schoolwide positive behavior management/support system as a key component of

their success. Securing substantial teacher buy-in was initially challenging (in fact, the program started five years ago but faded before returning in the last couple of years), as it requires dedicated effort and may represent a sharp contrast to previous individual management systems. With sufficient acceptance and leadership, however, the teachers reported that the program was running well and promoting a well-managed school. According to one teacher at this school:

> PBIS instituted a common language, and then it was teacher collaboration, getting us all on the same page—all the math teachers working together, all the language arts teachers. It wasn't, "this is my room, my class, my children," but "it's everybody's kids." I just think it was collaboration, totally all the way around.

And a second teacher:

> Each one of us [teachers] took our area of expertise and did what we thought would be good. I did skits and they got into groups and they had to come up with—each day we did maturity, we did respect, we did cafeteria behavior, we did all this and it was making them aware again of what the expectations were. You have to keep it going all year.

A district administrator at the same school noted a shift in the class-to-class transitions during the day, leading students to be better prepared to learn once they arrived in class. The shift was attributed to a whole-faculty dedication to supporting and implementing PBIS. Students know how they are expected to behave, and they abide by the rules. According to a district administrator, "There's a clear expectation of behavior, and those kids walk into that building every day ready to learn….I don't think that was the case … four or five years ago."

While interviewees strongly believed that PBIS played a key role in getting the school going in the right direction, some respondents in another school emphasized that stable and effective leadership was needed to provide the context for PBIS and other initiatives to be successful. According to one teacher, "Stable leadership had to come first. You have to have stable leaders in place to put the PBIS in place."

Two of the three improved middle schools featured in the study employed school uniforms to unify students and eliminate issues such as the use of colors to signify gang affiliation or the use of name-brand clothing to emphasize a student's economic status. One school called the process of instituting uniforms Standard Mode of Dress (SMOD). In this particular school, students who came to school inappropriately attired were required to use the school-provided SMOD closet to find clothing for the day.

One school used the Comer Model as a backbone for its reform process. The Comer Model, first developed in 1968, seeks to improve student achievement through a comprehensive, holistic approach. To increase students' sense that they are connected to and important in the school, the model stipulates that the staff address the social, language, and character aspects of children. The principal instituted a series of incentives as a way to let children know they are appreciated, including the celebration of birthdays, academic success, and behavior compliance. Approximately 450 out of the 630 students in the school attended the last party organized by the

school. For good behavior, students received a $5 gift card, which, according to the principal, was valuable not just financially but for the recognition it symbolized for students. All special activities are done during time allocated for electives, so no time dedicated for core instructional areas is used. According to the principal, the tone in the school has changed from "We got you" to "We celebrate you."

In one high-progress school, out-of-school suspension was replaced with an alternative setting within the school. The district renovated the basement of the school and converted it into a facility for students who committed violations deserving suspension for at least 10 days. They settled on a name derived from the school's mascot, and the facility is known as "[Mascot] Academy" to signify that it is an excellent place of learning. Students receive instruction from certified teachers, and supplemental services from social workers and counselors from an external organization as needed. Students assigned to the academy remain within the area of the academy and do not interact with the rest of the students in the school. When they return from "[Mascot] Academy" and rejoin the regular school, students are placed on behavior plans. According to the assistant principal, the academy is a "magnificent facility" with certified teachers, who along with the administration hold those students very accountable. The principal indicated that the number of referrals has dropped significantly—from almost 4,000 in 2003–2004 to relatively few today. A school that had made very little progress also adopted the in-school suspension approach but implemented it less successfully. Making in-school suspension work apparently requires careful, detailed planning and follow-through. The lesson: Adoption is easy; implementation is hard.

Stronger Pressure and Rising Expectations for Student Learning

At both low-progress and high-progress middle schools, principals and teachers gave similar accounts of the reasons for low student achievement in the years before the turnaround process began: student family background (socioeconomic status), shifts in school demographics, inadequate community and parental involvement, ill-prepared students, low expectations, lack of academic rigor, and ineffective teaching practices, all exacerbated by high teacher and administrative turnover. At low-progress middle schools, interviewees continued to blame students for their low achievement: "Kids do not want to work hard" or "they do not know how to do this because nobody has taught them at home."

In contrast, principals and teachers at high-progress middle schools took note of the deficiencies stemming from out-of-school factors but provided mechanisms through supplemental services to address any issues with students and their families. In general, these schools accepted students where they were and sought to work on the internal, school-related factors that could be more readily controlled. For example, a principal at an improved school in eastern North Carolina led her teachers in a poverty book study to improve their understanding of their students. She inspired teachers to look beyond students' circumstances and fundamentally change their approach to reaching students academically. She successfully nurtured a "no excuses" culture where teachers used data to craft individualized learning plans for all students. Teachers in this school were actively engaged in shifting their teaching practices through professional

development. As a whole, the school staff was receptive to coaching and suggestions from NCDPI and other external professional development providers.

Forging bonds. Creating a cohesive school community was a challenge in many of the middle schools. The high stress of being labeled low achieving often produced low morale, a high level of distrust, and a lack of collegiality. In turn, the distrust could undermine efforts to mobilize teachers behind the school's reform agenda. For example, several of the middle schools replaced both the principal and a number of teachers. But in many, the newcomers were regarded as outsiders, and veteran teachers questioned their loyalty and commitment to the school. Lateral entry and Teach for America teachers were regarded with particular suspicion, and building trust was difficult for many new principals. Thus, while new principals and teachers could bring new energy to the turnaround effort, careful and time-consuming work was necessary to overcome distrust and to cultivate working relationships between the newcomers and remaining veterans. Personnel replacement was a two-edged sword, bringing new energy and talents but also exacerbating distrust. To reap the benefits of the newcomers' energy and talents, skill and persistence were required to overcome the distrust. The issue of trust also figured in interactions between school and district staff members and NCDPI coaches. An instructional facilitator who worked in several schools in the study reported difficulty in finding teachers who were receptive to the services she was hired to deliver. She used the strategy of identifying one or two individuals with whom she could develop a relationship and work effectively. When word of her helpfulness passed through the teacher grapevine, other teachers began to come around and work with her.

Engaging teachers. In the middle schools, the two most common approaches to engaging teachers in planning, policy making, and problem solving—in effect, distributing leadership—were the formation of a school-based management team and the creation of professional learning communities (PLCs).

One high-progress middle school made its traditional administrative team more comprehensive and inclusive by reorganizing it into a School Management and Project Planning Team (SMPT). The SMPT plays an important role in running the school and ensures that there is balanced representation from every grade level and from electives on each of the committees, representing every aspect of the school (e.g., technology, environment, curriculum, staff development, etc.). Each area and grade elected a strong leader as the department chair. Department chairs meet every other week with their teachers to work on improvement strategies. SMPT members study issues brought up for consideration and communicate decisions school wide. Teachers indicated that elected members of the group drafted the School Improvement Plan. According to the leadership facilitator, this sharing of administrative responsibilities has allowed the principal to focus more on instructional aspects of the school, rather than on day-to-day discipline issues.

Each of the middle schools in the study sought to strengthen PLCs. The moderate- to high-progress schools appeared to have more well-developed PLCs than those in low-progress schools. In one of the moderately improved schools, the principal laid down clear, concrete expectations for the frequency and outcomes of meetings. Teachers were expected to meet with their PLC teams three days a week for half of their planning time. Additionally, the principal provided the

teams with a PLC template that included objectives for the meeting, an agenda, and SMART (Specific, Measurable, Attainable, Relevant, Timely) goals for the quarter, and allowed time for any current concerns. Copies of the completed template were filed in notebooks in the school office.

A high-progress middle school used an approach to PLCs called Collaboration Around Student Achievement (CASA). According to the principal, CASA is an interconnected system of school planning and collaboration activities that involves teacher teams and a local instructional coach, all tied into larger district initiatives. The CASA PLCs met once a week during the 90-minute planning blocks provided to teachers. The first half of the planning blocks was dedicated to language arts and included a targeted intervention strategy (e.g., Just Words, Wilson Reading, Word Build, etc.). The second half was dedicated to mathematics intervention strategies. Teachers of the school spoke about the success of CASA:

> [CASA] has been a huge success in implementing. Where you get to be with other teachers and say, "Here's what I did this week and it worked, and this didn't work."
>
> One time we talk about planning. One time we talk about data. We'll go back to planning, data, planning, data, and it all just kinds of blends together, and you feel comfortable that everybody's doing the same thing you're doing and meeting every student's needs as much as you can.

Improved Knowledge and Skills

Personnel Replacement

As in the turnaround high schools, turnover was substantial in the middle schools we studied. In the improved schools, school leaders often viewed departures as opportunities to further tailor their staff to meet the challenges facing their schools. One principal seized the opportunity to bring in staff who were willing to follow the new direction she was setting for the school. She evaluated the effectiveness of all staff members across the board—teachers, counselors, and professional and clerical support staff—to determine how they would fit into her agenda. When she had the chance to replace staff, she did so using a specific set of criteria. Her aim with new staff was to infuse energy into those who remained on staff:

> There was a lot of turnover, so when I came I had the opportunity to bring in nine people. As you try to change the culture, some people's work habits start to slip back into that old culture. It's not that they can't do or won't do. Sometimes it takes some individual counseling and individual coaching … to get them to see that you've got to do things differently.

In one case, what began as an effort to replace a math teacher lost in the middle of the year turned into a unique case of teacher-principal bonding and skill building. When the principal—herself a veteran math teach—could not recruit the "right" candidate for the job, she took on

responsibility as the instructor of record. She planned with teachers, taught a class, graded papers, and contacted parents:

> Mrs. X has been teaching a class. … How many principals do you see doing that? .... We don't have a teacher in that position right now. And she goes in there and just takes over because she doesn't want the kids to get behind. And they're up to par. She grades papers. Everything! She came in and made … ClassScape tests so that they could go online. She does what the typical teacher would do. And you know I asked, "How do you do all that?" She is serving as a teacher part-time, plus an administrator, and she has no problem with it.

Teachers expressed great excitement and respect for the principal's decision to join their ranks, a move that clearly solidified their support behind her effort to turn the school around.

Professional Development

In the high schools in our sample, we seldom heard mention of NCDPI's comprehensive needs assessment, perhaps because early in the development of the Turnaround Schools program, when most high schools entered the process, the needs assessment component was not yet fully developed. But a central office administrator who had worked closely with one of the moderately improved middle schools gave credit to comprehensive needs assessment for focusing professional development at the school. Comprehensive needs assessment pinpointed the strengths and weaknesses of the school and district and set the direction for the services that DPI provided. Appreciative of the assistance, the district administrator said, "[One of the] strongest things they've [DPI] done for this school is the needs assessment that really showed some pockets that the district needed to focus more on." The thorough, systematic process made it clear that "we had some major leadership issues." It also exposed specific deficiencies in the areas of curriculum, instruction, and discipline. Through the needs assessments, literacy surfaced as a major issue for most schools as well as the need to use various data sources to focus and refine instruction.

At one of the high-progress middle schools, the technology facilitator told us, "Our teachers needed retraining. We had to look seriously at the EOG and how we needed to change our teaching … [of] critical thinking skills." The school provided professional development on higher order thinking skills. Teachers were taught how to craft questions to engage students more deeply. At another high-progress middle school, district-level professional development staff trained teachers in strategies to improve students' literacy skills:

> We're addressing the reading in other content areas…science and social studies, those reading comprehension strategies from the district that are monthly strategies, each month that'll go into [a different aspect of the process]...September was making connections and activating background knowledge, October was visualizing and sensory images, November was determining importance, and December was questioning, January was inferring, February summarizing and synthesizing, March is content literacy, April is fix up strategies, and May is review.

The third high-progress middle school delivered professional development focused on instructional planning and delivery strategies, vertical integration of curriculum, and meeting the needs of diverse groups. During the weekly time set aside for PLCs, professional development was provided by teacher leaders, DPI leadership and instructional facilitators, and other external providers as required.

A principal from a moderately improved middle school shared that the school focused its professional development around the district's Framework for Learning, a structured process for curriculum design that allowed teachers to unpack objectives, design learning targets, and develop activities and assessments related to those learning targets. According to the principal:

> We actually had people from the district come out during our PLC Wednesday early-release days and teach us exactly what the district expectations were, and we started with unpacking, and we moved from there to how to develop, how to identify learning targets, and how to connect those with your essential questions. And then having… teachers plan on how to deliver instruction and then creating formulating assessments to see if the kids are learning or not. And then analyzing that data and then continuing to do it.

Several of the low-progress middle schools reported professional development at similar levels of intensity and frequency, but with less payoff. We are not certain 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.

Coaching and School-Specific Professional Development

Coaching was a major component of the turnaround efforts at the middle schools we studied. The efforts involved a variety of coaches—school- or district-provided instructional coaches (including literacy coaches) as well as NCDPI leadership facilitators, instructional facilitators, and in some cases, district transformation coaches. Effectively coordinating the services of each of these coaches to meet the needs of individual schools and ensure continuity of services was essential for successful implementation.

One of the most improved middle schools involved the use of a district-provided school-level instructional coach who served as a liaison between the administration and teachers. A principal explained:

> [The instructional coach] is our liaison between administration and the teachers. She goes in and does demonstration lessons … helps facilitate the CASA meetings … She'll have the pulse of the staff and she'll come [and say] ... "Listen, this is what I'm seeing" … Teachers feel less threatened … she can actually see them [in a real work context] in that environment.

Similarly, teachers reported that the instructional coach was a great resource, often going above and beyond to seek out the information and materials that would help most:

> "She's awesome—just to help us with anything that we need. She comes, helps interpret the data. We sit down with her and we plan on how we're going to approach inferences [for example].

In this case, the local school-level instructional coach acted as a connector and cross-pollinator of best practices between schools, since each school in the district has an instructional coach on-staff with a specific area of expertise as well as general instructional expertise.

Despite the largely positive assessment of the NCDPI instructional coaches by district- and school-level staff at a high-progress school, many individuals had difficulty identifying a facilitator's name, contribution, role, and organizational affiliation. The number of people in support roles coming from state and district resources was rather large, and most DST instructional facilitators visited the schools only every 4 to 6 weeks. Nevertheless, according to the principal, the types of activities employed by one facilitator appeared to resonate strongly with teachers.

> The math coach helped them see mathematics instruction from different perspectives and urged them to be more introspective and reflective on their instructional practices. Together, the mathematics teachers and coach often gave practice lessons to each other, provided feedback and dialogue, and then retaught to addresses weaknesses.

At some schools, the reviews of the efficacy of DPI facilitators were more mixed. Most of the negative feedback hinged on the frequency of the services provided and the lack of customization for each school. Teachers felt they would better be served by coaches who knew the context of the school and its population intimately. In one of the least improved middle schools, teachers reported that they were required to create lesson plans to submit to the DST facilitators weekly, but the facilitators came to the school only once every month or two:

> [The instructional facilitator] never reached out and said, "I'd like to come in and do this," "I saw this on your lesson so this week I want to come in and show you how to do this." She's never done anything like this.

Another teacher reported that some coaches limited their time spent at the school to PLC meetings and merely presented strategies rather than helping them implement new strategies in their classrooms:

> Get in here with me and help me keep kids in their chairs. Get to know the kids a little bit. Get to know me as a teacher and maybe you'll begin to understand that we are in a unique situation here that is extremely challenging. And quick fixes and that kind of thing don't work. You can't … give me some generic kind of thing I can read online and in a textbook. That's not going to work. This is real. I need something with more substance than talking about my lesson plans or giving me a graphic organizer to use. I need more than that.

Partly because they visited the schools at least weekly, leadership facilitators were perceived the most positively of the DPI coaches across all levels. The frequent and sustained contact time allowed for the development of deeper, richer relationships between facilitators and school administrators. The low levels of trust in many of these schools made relationship building especially crucial. One principal especially appreciated the leadership facilitators' ability to adjust to his level of experience:

> They just give me the support I need. They know I'm not a first- or second-year principal and I very much have appreciated [that]… They know when to help. They know when to pull back. They know when to access resources and champion for me that we need x or we need y from the district or DPI. So they've been great to work with, and I usually see them about once a week.

Structures and Support for Instruction

Supervising Instruction, Building Professional Community, and Using Assessment

Supervising instruction. The high-progress middle schools shifted from blaming students for performance problems to shouldering the responsibility themselves. One school worked closely with their leadership facilitator to identify deficiencies in the way teachers delivered instruction and the type of work they assigned to students, due in part to the low expectations they had of students. The leadership facilitator said:

> In the second year, they started having … training to cover areas such as the roles of adults [teachers], the level of instruction, and the kind of work [mainly low level] they were assigning to students. The administrative team is now attuned to the types of monitoring necessary to ensure continued forward success.

An instructional facilitator at the same school reported that teachers were required to incorporate a series of strategies focusing on the students, including work-walls, a teacher daily agenda that incorporates an essential question, and meaningful and thoughtful lesson plans. Another instructional facilitator confirmed that "the administration … was really on top of teachers and making them commit to meeting and doing what's best for the kids."

In another school, the administrative team increased its presence in classrooms through extensive instructional monitoring:

> We did a huge number of walkthroughs the first nine weeks … We made every teacher a red folder and we required them to put their week's lesson plans in that red folder and put them on the corner of their desk. So that if I walk in or any assistant principal walks in we want to be able to look at your lessons for the week and we use a standardized template… the teachers bought into it and embraced it and are still doing it.

Several of the schools required teachers to turn in lesson plans as well as any handouts to ensure that they were a curricular match and that they had the necessary degree of academic rigor. Like

other schools, the teachers also have a designated place for plans in their rooms such that anyone entering for evaluative purposes can quickly access the plans to ensure they are teaching as they had planned.

Building professional community. Each of the schools worked to develop a greater sense of professional community by employing PLCs. One middle school saw a dramatic increase in the degree of collaboration in the school. Teachers reported that in the past, they worked individually, focusing solely on their own classrooms. Now, they are cooperating with each other more and are more concerned with the entire school. Teachers in the same subject area meet weekly during common planning periods, preparing common lesson plans and making sure that teachers in the same subject are teaching the same concepts across grades. Each week, teachers also had a grade-level team meeting with the principal and with curriculum specialists. A teacher recalled:

> In the past, it was not necessarily always a unified front towards educating the children. I think we at times maybe had the idea that each teacher was responsible for their students in class instead of taking the approach that we are responsible for every student in this building, whether that's helping our fellow colleagues to improve their teaching methods or learn something new from their other colleagues and we just kind of took it as an individual basis. I think that may have been part of the reason because there wasn't as much of a collaborative method to get our students to where they need to be. We were kind of relying on our own individual talents or gifts.

In addition to the Friday grade-level meetings, teachers also observe each other, both to give each other feedback and to see good practices that they can bring to their own classrooms. One teacher said, "I've enjoyed the overall camaraderie of the staff, being able to work together, plan together, to develop the school together." Another teacher added:

> We've got teachers in the school building who have been empowered to be leaders, and we have teachers who are making observations of other teachers … [which allows us] … to see good practices, best practices put into place, but also to provide feedback … [and] when you go into a classroom that you're observing you go, "Oh hey, maybe that should be part of my classroom as well."

Using assessment. A principal in one of the high-progress middle schools concluded that the lack of progress in the past hinged on the fact that the staff was not addressing the needs of individual students. She communicated to her teachers that they were responsible for addressing the needs of each child. "We have to get to the individual child …You're not just teaching a group of students." The school created an individual plan for each student at regular intervals. Additionally, students created a weekly set of goals for themselves. Teachers developed common assessments and used information from the assessment to "regroup the students … we would look at skills that they still need and we would group them according to skills they need to acquire."

The principal also reported that her leadership facilitator helped her acquire and use NCDPI student predictor data. This was echoed by another principal in another school. The principal was

able to use EVAAS data in conjunction with NCDPI data to best make teacher and student assignments. The key was correctly pairing students with the types of teachers who work best with their specific achievement level.

The school transformation coach pointed out that initially the district and the schools lacked data:

> In that district, there was limited data available to schools, performance data on their students, particularly the EVAAS data, for whatever reason. I'm not sure of the reason. The schools did not get the data files that were available. So we began to ask for the data files on the students who were coming in to sixth grade and those who were in sixth grade. So once we were able to view the data files, we found that the predictor scores for students predicted their scores at a higher level than we were getting for the students.

Teachers in several schools reported that they tested students often and used the data to determine students' current level and to make decisions on how to best help best students grow: "We have a quarter test, and we look at the data from those, and we usually look at where we are and where we want the students to grow from there." Similarly, another teacher reported:

> We do pre-testing and post-testing on a very consistent basis with all of our kids so we sort of know where our kids are in all of our teaching. We plan together as a department. All the math teachers get together each week to talk about where they are, where they're going, if they're having a problem.

Organizing Assistance for Struggling Students

At one high-progress middle school, a two-tiered system was put into place with the help of the leadership facilitator—one tier was an acceleration program for students who were experiencing difficulty achieving proficiency and the other was an enrichment program for proficient students. 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:

> There were still some students … [below proficiency]. Therefore, we had to build what we called a safety net process for those students. It is actually an acceleration … concept rather than a remediation concept. We called it acceleration so that any student who in the regular time frame that was … not meeting the standard, then there was in place for that student this safety net process where we would offer additional time, in some cases with a different instructor to accelerate or improve the learning of that student.

Further, the school noted that African-Americans and Hispanic boys scored lower in assessments. Working with the leadership facilitator, the school administration team "identified those sixth grade boys moving into seventh grade, and each of those teachers developed a safety net for those boys, and they were given additional time in reading and math to improve their position." According to the leadership facilitator, by the time they left eighth grade, these students were

performing as well as any other student at that school. Another high-progress school used a similar process to focus extra assistance on African-American males.

The third high-progress middle school featured a mentoring program. Teacher volunteers were assigned students in whom to take a particular interest, both academically and socially. Teachers monitored grades, encouraged good behavior, visited students at home, ate lunch with them, and supported them in extracurricular activities. Speaking of such a student, a teacher explained:

> He can come to my class if he needs time out from another class. But I make sure that he has his regular supplies—his pen and pencil and stuff like that so he has no excuse for not having it…and keeping him accountable. Sometimes he has lunch with me or sometimes I buy him something that he wants as far as his snacks or whatever. And so it varies. It's just his support system to know that he's got somebody else in the school.

According to teachers, the mentor program enabled them to understand student perspectives in a deeper way, and students to feel connected and supported individually.

External Support

As noted earlier, both principals and teachers often cited lack of community and parental support as a reason for subpar student achievement. All of the middle schools were engaged in outreach efforts aimed at strengthening relationships within their communities. In one of the high-progress middle schools, the principal has made a push to involve parents and the community via an automated phone system that delivers updates and messages to parents, regular newsletters, handwritten notes from the principal in every student report card, and the establishment of a parent support organization for the school. The district further supports the school's efforts with a PR specialist, academic announcements at football games, and links between the schools and a local area foundation.

Two of the moderately improved schools used specific events to create a sense of community. One school, located in southeastern North Carolina, invited a wide array of individuals ranging from medical professionals to members of a college football team to participate in specific events. They invited community members to a Read Across America event as a way to inspire students and build relationships with local residents. According to school officials, many community members were pleasantly surprised and remarked that the school they visited did not match the mental picture they initially had of the school. At the second improved school, administrators and teachers engaged parents who would not ordinarily attend school functions by visiting local community centers to invite parents to come to the school to meet the new principal. Their aim was to ensure that parents knew that the new team at the school was willing to meet them on their turf and encourage the parents who attended to take their message of support back to the community.

The Process of Improvement: Elementary School Level

The turnaround process in the elementary schools in our sample was similar to the processes in the high schools and middle schools. As was true of the middle schools, the accounts of improvement given by principals and teachers in the elementary schools fits the scaffolded craftsmanship metaphor that we used to characterize the process at the high school level. With guidance from leadership and instructional facilitators from NCDPI, the leaders and staff of the elementary schools slowly reconstructed the way their schools functioned, not by implementing an externally designed model but through a purposeful but non-linear process of planning, implementation, problem solving, and gradual adaptation. As indicated earlier, however, at the elementary school level, the turnaround process began in 2007–08, was suspended in most elementary schools during 2008–09, and resumed in 2009–10. Leadership facilitators were provided for the elementary schools that entered turnaround in 2007–08 for approximately six months, but not to those that entered the process in 2009–10. The schools served in 2009–10 were largely the same as those served in 2007–08, but performance composites for a few of the original complement had risen sufficiently to exempt them from turnaround, and a handful of new schools were added to round out the complement of 20 turnaround elementary schools. As a result of the stretched resources and stop-and-start nature of the process, school leaders and staff in the elementary schools expressed somewhat more dissatisfaction than those at the high school and middle school levels. To reduce redundancy, we comment more briefly on the similarities to the other levels and focus more fully on the aspects of the process that were unique to the elementary level.

Paralleling what we heard at the high school and middle school levels, virtually all interviewees in the three most improved elementary schools in our sample attributed much of their school's success to the arrival of a new principal. One principal was brought in from another school as an experienced "turnaround specialist" with training in Effective Schools. Another was a seasoned administrator in the district and a highly respected member of the local community. According to one of the district-provided learning coaches:

> Part of the reason this school is doing so well is they had a change in leadership. The principal came in with very high expectations, and he's kind of a no-nonsense, "we're going to get the job done" type. "I'll give you what you need, but we're going to get the job done." Also, he has a staff with a lot of teachers who are very committed and who work very hard who were happy to have him come in and say that. They liked that he just kind of laid a foundation of high expectations, and they were ready for that structure.

One successful principal emphasized the importance of faithfully implementing a few key programs rather than undertaking several different initiatives: "I've seen it happen in so many schools and districts where you adopt one program and you have it for seven months to a year, and then it's on to something else, and now it's something new and different. So I wonder if that spiral within any school leads to not as much growth and productivity." A teacher concurred, saying, "It's almost too many programs, too many things to try." Working under many mandates from the district and the state, the school found it difficult to implement any one strategy or program with fidelity. The school was just trying to "get it all done … it's all mandates. This

mandate and that mandate and do this and train—you never really learn something well enough. You don't have enough time with the children doing it to see the growth."

In contrast to the situation before the turnaround process began, the improved elementary schools have since narrowed, focused, and concentrated their efforts on a few key reform efforts. In this section, we briefly highlight some of the main foci.

Commitment, Climate, and Culture

More Orderly and Caring Environment

Perhaps surprisingly, before NCDPI turnaround interventions began, discipline problems were just as severe at the elementary schools in our sample as in the high schools and middle schools. Constant administrator turnover (for example, one school had five principals in eight years) contributed to a chaotic climate. Inconsistent treatment of the students led to serious discipline issues. One teacher recalled, "There were days when children would throw things. When I first came, we were in a survival mode. We were just trying to survive the day, survive the week, survive the year. And it was because their behavior was so out of control, they couldn't learn." According to several teachers, before the principal in charge of turning the school around came in, there were scores of students who were "completely out of control, disrupting class, and creating an atmosphere in the school that made learning difficult."

Successful new principals focused on high expectations for student behavior and stressed consistent enforcement. Some schools created programs that involved students directly in the development of class- and school-based rules: "Although I'm the principal, it's just as much the kids' school as it is mine. And I try to make sure they feel ownership here, and they're very much a part of the business side of what we're doing in terms of student achievement." This was evident in the students having a voice in daily procedures and easy access to their test scores. A teacher added that a focus on stemming leadership and teacher turnover at her school contributed to consistency and continuity for the students, which in turn sharply reduced discipline problems.

Stronger Pressure and Rising Expectations for Student Learning

Successful new principals were also credited with reversing the culture of failure that had prevailed in their schools, a culture that they found unacceptable and that they quickly challenged. In the schools that made progress, teachers welcomed the higher standards and worked hard to implement them in the classroom, and as a result, morale was enhanced. As one teacher explained, "When you know your principal has your back, you will pretty much do anything to support his plan and the children." In the same school, district-provided learning coaches also worked hard to build trust across teacher teams. They explained that while not every team is at the desired level of working relationships and trust, they are getting there. One remarked that both the third grade and fourth grade teacher teams at her school have been singled out for excellence both in instruction and in their willingness to examine their practice, take risks, and support each other in the classroom.

Another important step to improvement was establishing relationships with parents. One principal explained, "I guess I'm trying to say I won parents over one by one after meeting with them, after them seeing me. And now instead of it being this divisiveness for us, I get, 'Mr. X, can I come in? I need some help.' Or, 'What can I do to make it better for my kid?' Or, 'Thank you for allowing my kid to do _____.' And that's a huge shift in the way that it has been before." Another individual commented, "Even though we have more parent support than we had, that's always a struggle." Staff members reported working diligently to "make sure they [the parents] understand what we're doing here … we're trying to bring them into the fold of understanding what we're doing" and why.

According to the principal of an elementary school that has improved from less than 30% of its students proficient in both reading and math to close to 75% proficient over the past three years, "It's expectations. The whole deal is expectations. That's the most important thing that there is. It really is. If you do not expect kids to learn, they won't … The issue is, do you believe the kids are going to learn it so therefore you teach it, or do you not? That's it."

Improved Knowledge and Skills

Personnel Replacement

As at the successful high schools and middle schools, successful elementary schools made staffing changes to build teacher teams that could and would implement a more rigorous curriculum and raise student expectations. One district contributed significant new resources to a high-progress school and provided the principal with greater flexibility to make staff decisions. The principal reported that past principals had been reluctant, for "political reasons," to make staffing decisions. Another principal commented, "When I came on board, teacher morale was really low. Student achievement was low, obviously. There were some teachers here, in my opinion, that shouldn't have been here. And through the course of the past three years, 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."

One of the most significant changes that one of the districts instituted was a no-transfer policy for teachers. Teachers are not permitted to apply for transfer within the district and must commit to teaching at a particular school. So, there was no more revolving door in and out of high-need schools. Additional district resources were also targeted toward maintaining small class sizes (e.g., no more than 18 students) and hiring both a social worker and a school nurse to support students and their families.

Changes of these sorts appear to have raised teacher morale substantially. The faculty of one elementary school is predominantly African-American, with several African-American males who were actively and strategically recruited. The teacher retention rate since the new principal accepted the position has been close to 100%, with no teachers or staff transferring to another school in the district.

Professional Development and Coaching

Overall, most of the principals and teachers in the turnaround elementary schools were enthusiastic about the reforms that have been instituted over the past three to four years. With resources from the state through the DST program, and additional resources that are available because of Title I status (e.g., Supplemental Educational Services), several schools received multiple types of instructional support, including coordinators, content specialists, interventionists, testing directors, data managers, and ongoing professional development. However, most notable at the elementary school level were the site-based learning coaches. Their weekly, biweekly and/or monthly visits were focused, and targeted such things as curriculum mapping, data collection and analyses, guided reading, behavior management, book studies, observations, problem solving, resource sharing, model lessons, facilitating school improvement, multiple layers of feedback, action research, updates, designing common assessments, instructional planning, test preparation, weekly lessons, walk-throughs, training, and developing a Framework for Action.

Having said this, it should also be noted that some school and district staff members reported frustration with their experience with NCDPI. For example, one principal shared, "The DST is supporting an instructional coach [facilitator] that did not arrive at the school until last spring. Fortunately, the current instructional coach has certification and expertise with special education so that has been helpful, considering the emphasis on this subgroup because of lack of academic growth for these students (as measured by EOGs)." Others commented that state teams came repeatedly to their schools but did not send them the targeted resources that were requested or needed. They expressed hope that NCDPI will listen more attentively to their issues and needs and deploy resources in a timelier, more context-specific manner. For example, when reflecting on the initial professional development provided to a school in his district, an assistant superintendent said, "Well, it certainly did not articulate itself in a useful way, and that could have been the leadership at the time. It could've been lots of things. The few days that I attended were not bad, but I don't know if it was exactly what could've potentially been the answer." Succinctly, one leader said, "I mean, the only help that's going to work is when it's timely and fits the specific needs of that school."

One interviewee expressed concern about "the amount of time that these principals are being asked to be away from their school. He asked:

> What kind of quality professional development are we giving them? What's the follow-through and what's the expectation? What would the impact be? Let's make sure that these are quality, let's make sure that these are purposeful, let's make sure that these are really going to help the leadership, and then move to the teachers and move to the students, because no leader has time to waste, to be out of their building and to be away from school and to have their focus elsewhere.

Others expressed worries about future assistance that NCDPI will provide through Race to the Top funding. Evidence of their skepticism is revealed by a director's statement, "Under the Race to the Top plan, we were told that they would receive an additional learning coach … that goes out and is to work with the school, work with the principal, and then also the principal would

receive a leadership coach. My concern about that already is, who are these people? When is it going to happen? … Is it going to be timely? Are we going to be really able to work collectively and collaboratively with these people, or are they just going to appear? And there are a lot of sort of unanswered questions right now at the DPI level. And also, I understand that Race to the Top funding was just recently released. They're still trying to hire people, but our job is to look out for the school and the best interests of the students, and the sooner we understand that framework and have that knowledge and expectations, we can then help guide the school and teachers and the kids."

Structures and Support for Instruction

Coordinating Curriculum and Assigning Teachers and Students Strategically

Leaders of moderately to greatly improved elementary schools were careful about classroom assignments. Having the right staff members in the right areas and getting a consistent effort among staff was a major focus. In some schools, a shift in teacher morale occurred simultaneously with a change in the teacher allocation strategy across grade levels. One principal commented, "I needed the most nurturing teachers in the lower grades. And the other teachers that were a little more stringent in getting the students ready for testing and ready for middle school, I needed them on the [grade] 3 to 5 side."

Supervising Instruction, Building Professional Community, and Using Assessment

The core work that began three years ago in several of the most improved elementary schools involved each grade level's academic team sitting down and reviewing data about each classroom and each student. Teachers then tailored instruction based on areas of weakness that had been identified. They began using formative assessments, and students began receiving consistent support. Prior to the arrival of the current principals, vertical and horizontal planning teams were not utilized. Now, one of the principals meets with the entire staff every Thursday, and grade-level teams meet every week.

At another school, a learning team specialist meets with each teacher (K–5) at least once a week for at least 90 minutes each. Together they review lessons and discuss work products they have created and how these can be improved. According to a teacher in that building, "No decisions are made without teacher input. In fact, I've never worked at a school where, no matter what degree of a decision it is, he [the principal] always brings the teachers into it, and they have direct input on the outcome, from hiring new teachers to decisions as far as what we do with certain monies that become available to us."

Staff meetings at these schools are now 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 are more open to suggestions and feedback. This has led to a more team-driven, more aware, more adaptable environment. For example, a teacher commented, "Being that this school now has a high ESL population for math, we've really focused a lot on making sure there are lots of visuals in the classroom, focusing on

different learning styles, not just auditory but kinesthetic and tactile … making sure that we're addressing all the different learning styles with the students to meet the students' individual needs." Likewise, a principal added, "A big piece [of improving] was their single school culture and their learning team concept and their utilization of data … it's beginning to make a difference for them."

Other steps for improvement in these schools included the creation of incentive-based programs for students based on student achievement growth (e.g., using quarterly benchmark scores to award field trips) and structural changes to the schedule (e.g., extending the reading block to 90 minutes, or extending the school day). Teachers and principals both talked about "ICUs," focused entirely on interventions targeted to weaknesses identified by the data. One county sent the school a data person who helped train and guide the teachers to analyze and interpret Adequate Yearly Progress data from the county, school, classroom, and student levels. An instructional facilitator also helped guide the development of common, teacher-designed assessments. Together they reviewed the data, identified weaknesses, and evaluated the validity of each test item.

With key support from a learning coach (a district instructional specialist that splits her time between two elementary schools), PLCs in one of the turnaround schools have built collaborative relationships among grade-level teams and are instrumental in supporting new curriculum initiatives (e.g., a new math program that includes a spiral review daily). At the school level, all related personnel have focused on data-driven instruction and are committed to collaborative planning. The PLC requires intensive examination of data and a corresponding plan to work with a targeted area (e.g., the lowest 20 students in reading).

In describing the impact of the learning coach, one principal explained, "When she's here, she makes sure she goes to them, and she also makes sure that she is a resource for them, a support for them for anything they're asking for out of their group, even if it comes back to training. As well, she also keeps the PLC on target to make sure that the right things are being done in PLC. They're always talking about common assessments, and they're always data-driven and talking data questions in the PLCs."

An assistant principal at another successful school added, "Then the other thing that we do is unpacking the standards so the teachers really understand what they're supposed to be teaching and where the students have struggles and then an assignment for the students that can be analyzed later. I think that's a little more structured than the typical PLC." Another turnaround elementary school has created a student achievement data wall, implemented vertical and horizontal professional learning communities, and the acquired a Scantron machine to expeditiously return data to faculty, staff, and teachers, and all of these actions have been instrumental in building consistency among programming and staff.

External Support

District Support

Most of the improved elementary schools have established a strong working relationship with their district office, especially for hiring and instructional matters. Targeted instructional and support services, funded by internal, state, and federal resources and coupled with specific district initiatives, have been helpful in improving classroom instruction and teacher retention. For example, one teacher remarked, "Because those first-year teachers were flying out the door, there was constant teacher turnover within those first years. And the district stopped a lot of transfers so nobody really had a choice. But it's been so good for our children because they can see, oh, that teacher that was here last year is still there." In addition to this, one of the new principals made it clear to the associate superintendent for elementary education that he needed her direct support. He reported that she consistently supported his decisions, helped put out any fires, and was there for him whenever he needed to discuss school-level reform initiatives. She corroborated this account of their relationship and said, "I think my job from the administrative perspective was to definitely let him understand that he had support, that we would stand behind him, because not all decisions were easy. He had to make some changes and have some expectations that may not have been in place before."

Community Support

The community has also been instrumental in supporting these elementary schools in various ways, through donations, after-school tutors, and partnerships with local businesses, from banks to barbers, and through the creation of coordinated volunteer programs with dedicated staff members managing the program. Each of the leaders of successful turnaround schools put a great deal of time, energy, and resources into developing close relationships with members of the community and believes it is a core component of their school's mission and is directly connected to students' continued success. For example, one principal developed a close relationship with a former Title I director who has close ties to the community, leading to the creation of a successful mentorship program at the school. "She beats the bushes along with her church to try and get minority role models into this building. The requirements are you've got to have a job and you've got to have a high school education. You don't have to be male but we want you as a male, and I have 48 or 49 mentors here that come in once a week."

Capacity for Continued Improvement

"Predictions are hard to make," the famous philosopher of baseball Yogi Berra pointed out, quickly adding, "Especially about the future." Gauging the capacity of turnaround schools to continue performing at high levels or to make further improvement is akin to predicting the future. There are bases for optimism, but equally clear bases for concern.

The bases for optimism include deep changes in culture that have occurred at the most improved schools, and the beginnings of such changes at moderately improved schools; more orderly environments conducive to learning; more knowledgeable and committed teachers and administrators, with greatly reduced turnover; the distribution of leadership across schools, with teacher leaders as well as administrators accustomed to identifying problems and taking the initiative to address them; routines for student and teacher assignment that match students to appropriate coursework as well as the strongest teachers for these courses; functional professional learning communities that employ several levels of data to revise instruction on an ongoing basis and to pinpoint student needs for extra assistance; carefully constructed programs of such special assistance; and more positive relationships with district leaders, parents, and community opinion leaders.

Among the most worrisome bases for concern are 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. The principal of a sharply improved high school worried that "we are only four or five teachers from disaster." 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 up to their elbows in alligators.

When we asked people in each improved high school whether they had developed the capacity to maintain a high level of performance or to make further improvements, we got some surprising answers. For example, teachers in several different schools told us in almost identical terms, "If they keep the [EOC] tests, we can keep it up." They explained that the EOCs and the accountability system built around test results were lynchpins of the school's focus on academics. Test-based accountability was not sufficient in itself to spur improved performance, but teachers and principals in many schools were vocal about accountability. In light of the surprisingly widespread view that the EOCs were essential to further progress and even to continued good performance, the recent elimination of several EOC exams seems worrisome. We also wonder how upcoming changes in the state's standards and accountability system will affect morale in

these schools. Having worked so hard to improve performance against one set of standards, one teacher worried that "the state is about to move the goalposts on us again."

In one improved middle school, school administrators expressed anxiety about the loss of support from the leadership facilitator. They were gratified to have raised performance sufficiently to warrant the change, but worried that the loss of support may be premature. Teachers in the school were more optimistic, but appealed for time and patience to make more headway. At two other improved middle schools, stability in key personnel and the presence of an instructional coach employed by their districts promised to hold off relapses: "We're at the point where we have done a good job and we're moving forward, but it doesn't hurt to still have an overseer, somebody to help guide us, to check in, to make sure things are still moving forward."

Although a little wary, principals and teachers in the most improved elementary schools expressed confidence that the reforms implemented over the past three years have laid solid foundations for continued progress. District and school leadership agree that these reforms need to be sustained and that the most important component to any future success is consistency. Most teachers in improved schools came across as confident and committed to their schools. They support the current improvement efforts and are convinced that student success can be sustained.

Asked about his school's prospects for the future, one elementary school principal highlighted his faculty and staff's ability to understand their role within the framework of the larger educational system. He explained, "But now, as they're doing things, they think about life outside of here (the elementary school). What do we want our middle schools students to look like? How about our fifth graders and our fifth grade teachers? Challenging their kids to do certain things that they haven't done before is getting them ready for middle school, and explaining that to the parent is getting them to help in that process. It all just kind of falls together … making sure that we're all really working towards the betterment of this child, not only here, but even far beyond."

A teacher who is already anticipating a change of principals said, "We … have a strong staff here who are dedicated and work together as a team, and we want a new principal who is going to respect that … our staff is not afraid to work hard. Every teacher in this building gives over 100 %. We need a leader who is going to get in those trenches and work hard with us, not just say, 'Here's a program, figure it out and do it' but going to say, 'Let's sit down and figure out how to make this work for our staff' and work with us." An associate superintendent reiterated this sentiment and her strong belief in the faculty to carry the reforms forward as they transition to new leadership. "The teachers in that school have continued to communicate with each other, they continued to look at data, they know where their kids are, they're talking about where they need to go, and it's a collaborative effort, it's not a siloed effort … not just by grade level, but across the school."

Despite the new capacities embodied in the culture, teaching skills, and collaborative, data-based routines of improved schools, we have the strong sense that the keys to continued good performance and further improvement in these schools lie at the district level as much as they do

within the school. 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 could undermine capacity in even the strongest of the turnaround schools.

Conclusion

In summary, from 2006 through 2010, the North Carolina Department of Public Instruction NCDPI) and its partner organizations intervened to improve the performance of 66 low-achieving high schools, 37 middle schools, and some 25 elementary schools. The schools were targeted for intervention primarily because their performance composites fell below 60% for two or more years. Across the high school, middle school, and elementary school levels, local educators pointed to similar factors contributing to low performance:

- 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 as well as leaders who failed to enforce discipline and follow through on decisions
- Alienated teachers marking time in survival mode, isolated within their own classrooms

In the "stuck schools" we studied—those that had made little or no progress despite strong pressure from Judge Manning and assistance from NCDPI, the New Schools Project, and other organizations—attempts at reform were undermined by stop-and-start reform initiatives with no sustained follow-through, continued principal and teacher turnover, principals who were unable to mobilize teachers behind efforts to enforce discipline and step up demands for academic achievement, and breakdowns in basic policies and procedures at both the district and school levels. Without sustained, competent, and authoritative leadership at either the district or school level, these schools were simply unable to break out of the doldrums of despair.

Yet challenging demographics and difficult circumstances did not necessarily doom schools to poor performance. With energetic leadership and sustained effort to complement external intervention by NCDPI and its partners, many schools overcame these challenges and raised student performance, sometimes to striking degrees. NCDPI's program of intervention included (1) a requirement that the schools submit plans consistent with a Framework for Action designed to focus the schools on changing practices thought to affect student achievement, (2) a series of professional development sessions intended to build the schools' capacity to carry out the plans, and (3) follow-up coaching and school-specific professional development that continued for as long as the school's performance composite remained below 60%.

An analysis of student achievement data comparing change in the turnaround high schools with change in a set of high schools that initially performed only slightly better revealed that the program of intervention made a significant contribution to improved performance in the turnaround schools. The average contribution over four years was modest—about ¾ point on End-of-Course exams—but grew progressively larger over the period of treatment. At the middle school level, where intervention began a year after intervention started in the first set of 35 high

schools, the impact was not large enough to be statistically significant, but as in the high schools, it appears to be growing over time. Because of an interruption in the flow of resources to support intervention in the elementary schools, the program at that level was not sustained enough in one set of schools to warrant impact assessment. An important implication of our findings at the high school and middle school levels is that improvement in the state's lowest achieving schools is seldom immediate but requires focused and sustained support over three or more years.

To learn how change took place in the schools that did improve and what frustrated change in those that 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 that had improved sharply (by 20 points or more), one third that had improved moderately (about 12–15 points), and one third that had made little or no progress. 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.

We found that in the most improved and moderately improved schools, the turnaround process began in virtually every case with the appointment of a new principal who sparked a series of changes in key areas of school operation, including (1) the commitment, climate, and culture affecting student learning, (2) the knowledge and skills that school leaders, teachers, and other staff bring to their jobs, (3) the structures and processes that support instruction within the school, and (4) the strength of linkages between the school and both the district central office and the community served by the school. We coined the term *scaffolded craftsmanship* to characterize this change process. The scaffolding consisted of the Framework for Action, professional development, and coaching provided by NCDPI and its partner organizations. With these supports, school leaders and staff gradually learned how to improve performance by crafting improvements in the four key areas just mentioned.

In the area of commitment, climate, and culture, school leaders simultaneously asserted strong accountability pressures as they also cultivated relationships of trust and engaged the teaching staff more actively in planning, making policy, and solving problems within the school. In improved schools, it appears to have been this 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. A parallel combination 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.

School leaders' and teachers' knowledge and skills—the "human capital" available to the school—were improved through three main approaches: selectively replacing administrators and teachers, focusing professional development on the school's most pressing problems, and incorporating sustained follow-through, with coaching at both the leadership and instructional levels. 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 fewer than a third of the staff. New teachers brought new energy as well as new talents to

the school, but in the short term, personnel replacement sometimes exacerbated mistrust between administrators and staff as well as among teachers themselves. Successful principals devoted substantial time and care to mending these frayed bonds. Especially when the teachers who were new to the school were also new to teaching, professional development to strengthen their classroom management skills and knowledge of the North Carolina Standard Course of Study was also necessary to transform the new potential into improved performance. Without this follow-through, personnel replacement is simply another form of turnover.

As important as increased commitment, order, and demands for performance as well as new knowledge and skills were, carefully crafted structures and support for instruction were also required to make effective use of the new commitment and skills. Previously, instruction had not been strategically organized or managed in turnaround schools. Improvements included more systematic attention to (1) coordinating curriculum and assigning students and teachers strategically, (2) 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 (3) organizing extra assistance for struggling students.

Finally, improved schools also featured stronger links with district central office administrators and with the broader communities served by the schools. For example, districts sometimes took the initiative to replace poor-performing teachers, responded to requests for new funds to staff extra assistance for students who had been falling behind, and helped principals and teachers create more effective formative assessment programs and interpret data from a variety of sources. School leaders hosted meetings and offered building tours to school boards and county commissioners, involved parents in major school clean-up efforts, organized mentorship programs in partnership with local businesses, spoke at churches and civic clubs, and used a variety of other devices to improve the school's relationships with the surrounding community.

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 change 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.

Yet principals and teachers did credit NCDPI and its partner organizations with important contributions as well. Principals reported that the leadership facilitators visited weekly, developed trusting relationships with them, helped them stay focused on implementing their Framework for Action plans, and provided useful guidance on rebuilding many essential systems. Instructional facilitators' recent classroom experience, competent delivery of demonstration lessons, and concrete advice and feedback gave them credibility with most teachers. But because the instructional facilitators visited less frequently than the leadership facilitators (once every four to six weeks rather than weekly), they appear to have found it more difficult to develop trusting relationships with some teachers. A few teachers in low-progress schools complained

that the instructional facilitators knew too little about them and their schools to advise them appropriately. In general, however, most administrators and teachers offered positive assessments of the leadership and instructional facilitators' assistance, and when they did offer critical feedback, it was mainly to call for more frequent visits from instructional facilitators.

All in all, NCDPI's Turnaround Schools program appears to have succeeded in providing high-quality assistance to most of the low-achieving schools targeted by the program. Where this external assistance was matched by energetic and sustained local leadership, schools succeeded in breaking out of the doldrums of low performance and made significant, measurable progress over a three- or four-year period. In our view, NCDPI's experience during the turnaround years provides a solid foundation for the interventions to be supported with Race to the Top funds.

Since the period covered by this report, the NCDPI District and School Transformation (DST) division has taken several steps designed to further strengthen the process. With assistance from the Boston Consulting Group and Cambridge Education, LLC, an international firm with special expertise in the area, DST has moved to systematize the comprehensive needs assessment process. To ensure better use of the needs assessments, DST has also tightened the links between the needs assessment unit and the school and district facilitators. In addition, school facilitators are now employed directly by NCDPI rather than through a contract with the Leadership Group for the Carolinas. Further, the facilitators now provide professional development as well as coaching. The consolidation of professional development with coaching along with direct employment of the facilitators helps lower costs, but it also poses the challenge of training and managing a number of people who are new to the job. DST has also increased its focus on the district level. District transformation coaches will assist the 16 districts where the majority of low-achieving schools are located. (Funding for 12 will be provided by Race to the Top funds. Assistance to the other 4 will come from state funds.) With these changes and some adjustments in the frequency of visits by instructional facilitators, NCDPI's DST division seems poised to make a significant contribution to the ambitious improvements sought by the Race to the Top effort. We would caution against expectations for instant improvement, but DST has shown that with persistence and thoughtful adjustments throughout a four-year process, low-achieving schools can indeed turn around.

References

Angrist, J. & Pischike, J-S (2010). The Credibility Revolution in Economics: How Better Research Design is Taking the Con Out of Econometrics. *Journal of Economic Perspectives* 24:2, 3-30.

Fiscal Research Division. (2007, December). *North Carolina high school reform*. [Fiscal brief]. North Carolina General Assembly, Fiscal Research Division. Retrieved from http://www.ncga.state.nc.us/fiscalresearch/frd_reports/frd_reports_pdfs/fiscal_briefs/High%20School%20Reform%20Fiscal%20Brief_Final_12%2021%2007.pdf

Henry, G. T. (2010). Comparison Group Designs in Joseph S. Wholey, Harry P. Hatry, and Kathryn E. Newcomer (eds.) *Handbook of Practical Program Evaluation, 3rd Edition.* San Francisco, CA: Jossey-Bass Publishers.

McREL. (2007). *School leadership that works: Developing a purposeful community* [Participant's manual]. Denver, CO: Author.

Montrosse, B. E. (2009a). *North Carolina leadership for Turnaround High Schools professional development, final evaluation report*. University of North Carolina at Greensboro, SERVE Center.

Montrosse, B. E. (2009b). *North Carolina leadership for Turnaround Middle Schools professional development, final evaluation report*. University of North Carolina at Greensboro, SERVE Center.

Montrosse, B. E. (2009c). *North Carolina leadership for Turnaround Elementary Schools professional development, final evaluation report*. University of North Carolina at Greensboro, SERVE Center.

North Carolina Department of Public Instruction. (n.d.). *High School Framework for Action*. [Handout]. Raleigh, NC. http://www.ncpublicschools.org/schooltransformation/turnaround/archives/framework/

North Carolina New Schools Project. (n.d.). *Innovative secondary schools: Education that works for North Carolina*. [Brochure]. Raleigh, NC: Author.

SERVE Center. (2007). *Evaluation of leadership for priority high schools: Cohort 1, final report*. University of North Carolina at Greensboro.

SERVE Center, Friday Institute, and Carolina Institute for Public Policy. (2010). *Race to the Top proposal*. [Proposal submitted to the US Department of Education]. University of North Carolina at Greensboro, SERVE Center.