Meeting the Challenge:
The Role of School Leaders in
Turning Around the Lowest-Performing High Schools

In the face of economic uncertainty and stiff global competition, the national policy community has coalesced around the priority of graduating all students ready for college and careers. To achieve parity with the highest-performing nations, government and education leaders must address the staggering and persistent problem of low-performing high schools. The drive to ensure equitable opportunities for all students demands solutions—not only to raise the level of students' preparedness, but also to address the huge achievement gaps based on race/ethnicity and income that exist across all levels of the system.

More than one quarter of the nation's public schools did not make Adequate Yearly Progress under the current federal law known as the No Child Left Behind Act. Forty percent of the nation's students—18 million—attend schools in districts that have been identified as in need of improvement, and the number of such districts identified for "corrective action," one of the most severe designations of poor performance under the law, increased fivefold between School Years (SY) 2005–06 and 2006–07.[1] The sheer scale of the ongoing challenges and the solutions needed to overcome them has raised a host of issues about designing viable strategies and building capacity to turn around low-performing high schools. The nation cannot afford to neglect the long-standing problems of high schools, particularly those serving the most challenged populations.

Overall graduation rates in the United States are dismal: seven thousand students leave high school without a regular diploma every day; the graduation rate for low-income students and students of color hovers around 50 percent; and in 1,883 of the nation's lowest-performing high schools—so-called "dropout factories"—fewer than 60 percent of students graduate on time.[2] Researchers at Johns Hopkins University reported that these chronically low-performing high schools together produce 58 percent of all African American dropouts and 50 percent of all Hispanic dropouts.[3]

While a great deal is known about the key elements associated with effective elementary and middle education, much less is known about how to improve high school performance, particularly in districts serving large numbers of high-poverty, highly challenged students. Certainly, the vast majority of urban public education systems have been unable to bring even half their students to proficiency in academics and readiness for college and careers. These districts account for about 25 percent of dropouts in the nation and pose one of the gravest social inequities of our time.[4] McKinsey and Company, reporting on the economic impact of the achievement gap, concluded, "The persistence of these educational achievement gaps imposes on the United States the economic equivalent of a permanent national recession."[5]

During the two decades of standards-based reform, policymakers anticipated that state standards not only would define what students needed to learn but also would improve how teachers taught. Unfortunately, years of almost-stagnant graduation rates and proficiency levels show that these good intentions have not been realized, particularly at the secondary level. External demands for accountability are necessary, but they are insufficient in and of themselves to produce consistent, high-quality instruction in high schools. The challenge of turning around low-performing high schools requires that critical decisions be made about what policies actually result in school improvement. These efforts raise fundamental questions about the design of high school improvement, the implementation of accountability systems that leverage practices found to be effective, and the best means to aggressively improve the effectiveness of principals and teachers in the lowest-performing high schools.[6]

The nation is currently moving to adopt internationally benchmarked common core state standards in English language arts and mathematics, toughen high school graduation requirements, and create rigorous aligned assessments to measure college and career readiness. Resolving outstanding questions about how to improve educational outcomes is crucial to ensuring that all students attain levels of achievement on par with the world's highest-performing nations. In a 2010 report, the Center on Education Policy addresses the compromises that the twenty-eight states requiring graduation exams face in terms of balancing accountability and ensuring acceptable graduation rates. As states expand the use of high school exit exams for high school accountability, they struggle to develop standards and testing systems that are sufficiently demanding but also achievable and fair.[7] States must face the daunting challenge of increasing high school graduation requirements while ensuring healthy graduation rates. How can education be transformed and teaching effectiveness increased to engage and support students with widely divergent learning needs?

This policy brief addresses high school improvement and the imperative to focus on advancing the ability of principals and teachers to significantly increase student learning and school performance. This brief will review the limitations of previous high school reforms and examine the conditions under which evidence-based designs for school improvement can lead to improved student learning. Generally, the implementation of many top-down reform strategies has failed to produce substantive changes in secondary-level classroom teaching and student learning.

Recent studies reveal promising results from an approach to high school improvement that focuses on the role school leaders and districts must play in shaping a coherent response to transforming high schools. To meet the nation's educational goal of ensuring that all graduates are prepared for college and careers, states and districts must craft comprehensive systems based on principles of accountability, leadership, and empowerment, thereby creating the conditions to dramatically improve high schools, particularly those serving the most challenged populations.

The pending reauthorization of the federal Elementary and Secondary Education Act, currently known as No Child Left Behind, offers an opportunity to bring attention to the large numbers of students who are underserved in the current educational systems. This brief concludes with a set of federal policy recommendations that would foster the conditions for states and districts to develop strategic approaches to improving the lowest-performing high schools. It calls for legislation, regulations, and incentives to help states and districts attend to the central role of human capital and the priority of fostering the expert performance of principals and teachers in order to create high-quality learning environments for high school students.

Shortcomings of Efforts to Improve High Schools

Between the late 1980s and early 2000s, schools, districts, states, and the federal government devoted enormous resources to the implementation of Comprehensive School Reform (CSR) models as a central reform strategy for their lowest-performing schools. Despite billions invested in externally developed school improvement models that were fairly prescriptive in their curricular materials or instructional routines, minimal evidence exists to support their overall effectiveness in improving high schools nationally.[8]

A careful review of the CSR studies shows that success depended less on the type of program model than the depth to which the different reforms were implemented. Based on scores in reading, math, and science, schools achieving more than 90 percent implementation of research-based strategies experienced gains three to five times higher than schools with less than 10 percent implementation. This suggests that a clear focus and a deep implementation of evidence-based practices at the instructional core are essential for positively affecting student learning and performance.[9] In less successful schools, however, reform efforts typically were introduced in a one-time presentation without follow-up or support on how to implement them effectively. As a result, the process proved to be ineffective and frustrating to educators, who were left with only general ideas about how disparate programs and practices could be employed to increase students' skill and content mastery.

Researchers from the Consortium for Policy Research in Education (CPRE) derived similar conclusions in a study of three schoolwide reform models designed to improve literacy instruction and student achievement: the Accelerated Schools Project, Success for All, and America's Choice.[10] The study was designed to uncover the reasons for the significant variability in the impact on student achievement from program to program. The researchers found that this variability stems in part from two key factors that must be considered when scaling educational reforms: the nature and extent of the instructional practices that are used, and the way in which schools are organized to support the process of instructional improvement.

When teachers were left to their own devices, the patterns of instruction did not significantly change. The lack of clear instructional focus, coupled with principals who lacked the knowledge and skills to foster adult learning, tended to produce quite ordinary instruction that did not differ from the kind of instruction implemented in comparison schools not undergoing reform efforts.[11] The CPRE study concludes that (1) school improvement initiatives can make a difference in instruction and student achievement when teachers collectively learn to use evidence-based instructional practices through extensive training and feedback, and (2) effective school improvement depends on principals creating the organizational conditions to promote improvements in how teachers respond to student learning.

The intransigent problems of low-performing high schools have been well documented. Myriad evaluations chronicle shortcomings in "light touch" efforts that fail to create the conditions necessary to produce substantive changes in teaching practices by not concentrating on the adult learning required to deploy systematic interventions. For example, from 2000 to 2005, the San Diego Unified School District—the nation's eighth largest district—adopted a literacy program, known as the Blueprint for Student Success, designed to provide students reading below grade level with extended instruction time in reading, speaking, and writing.[12] The results show that the Blueprint reforms boosted reading achievement in elementary and middle schools, but *slowed* gains in reading achievement for high school students. The researchers hypothesized that a number of factors could account for the negative effects: (1) administrators had little experience implementing the reforms at

the high school level; (2) high school English teachers were unprepared and reluctant to teach basic reading skills; and (3) high school students were vulnerable to being stigmatized for participating in double- or triple-length English classes.[13]

Similar results were found in Chicago, where, beginning in 1997, Chicago Public Schools mandated that all ninth-grade students take Algebra I and English I, eliminating the large array of remedial courses. Researchers from the Consortium on Chicago School Research (CCSR) at the University of Chicago used longitudinal data on the entire population of students entering fifty-nine high schools as first-time ninth graders over one decade—from 1994 to 2004. Although the policy reduced disparities in advanced course enrollment stemming from race, incoming ability, or special education eligibility, the researchers found few positive effects and several negative effects for the 25,000 freshman who entered high school in 2004.[14] Ninth-grade mathematics grades declined, math failure rates increased, and test scores failed to improve. Students were no more prepared for college, and overall they were no more likely to obtain credits in upper-level math courses, graduate from high school, or attend a four-year college than before the changes were implemented. In fact, the citywide graduation rate fell by 4 percentage points. Not surprisingly, the researchers found that teachers had *reduced* cognitive demands by watering down course content when lower-achieving students joined more advanced students in algebra and English classes.[15]

The researchers theorized that the policy failed because it did not take into consideration fundamental changes in the organization of schools and the substantial changes needed in pedagogical practices to increase academic rigor for all high school students.[16] The authors concluded that more attention is needed to studying the way students learn, the quality and depth of tasks in which students are engaged, and the methods school leaders and teachers use to make decisions about instructional practice and individual learning in relation to curricular expectations.[17] The findings also suggest that schools must examine the reasons for students' underperformance that may include their weakness in areas such as classroom attendance and participation, study skills, and homework completion. The researchers noted that in Chicago schools, students' academic behaviors are eight times more predictive of failure than their test scores.[18] They also concluded that for policies designed to increase the rigor of high school course work to succeed, positive behaviors must be instilled in earlier grades and further developed when students get to high school.

Broad agreement can be found among researchers and policymakers about the attributes that describe effective high schools serving challenged student populations, such as high expectations, quality teaching, and accountability for student outcomes. However, without focused attention on how to build educator capacity to address the technical challenges of teaching highly diverse learners in complex subject areas, the outcomes from enforcing higher standards and curricular reforms have proved disappointing. In other words, district and school policies that focus only on *what* is taught rather than *how* have been largely unsuccessful in altering high school performance.[19]

A look at top-performing nations such as Canada, Japan, Korea, and Finland suggests that they have adopted this different approach to school reform and enjoy both high levels of educational attainment and reduced disparities in educational outcomes. Sir Michael Barber, a partner at McKinsey and Company, and Mona Mourshed examined the policies and practices used to improve academic achievement in twenty-five of the world's school systems, including the top ten performers.[20] In an interview with Learning Forward, Barber noted that despite vast disparities in the cultures of high-performing nations, their educational systems had similar attributes. The systemic uniformity includes expecting every child to succeed, identifying barriers that cause children to struggle to keep up with

their peers, focusing on improving pedagogy as part of teachers' routines, and conducting professional development close to the classroom.

In contrast, the top-down school reform and staff development models typically employed by U.S. schools do not address the lack of highly skilled principals and teachers in secondary schools, particularly those serving the most challenged students. Studies show that quality teaching outweighs students' social and economic background in accounting for differences in student achievement.[21] Yet, across all levels of the system, evidence shows that teaching quality within schools is widely uneven and inequitable even when the curriculum is constant and the school well resourced. Consequently, the United States fares poorly on a key indicator of equal opportunity in society: the degree to which economic status predicts student achievement. Studies measuring the impact of family background on international assessments show that the United States ranks in the top quarter of the most unequal countries based on the performance gaps for students from different family backgrounds.[22] To advance overall performance, the United States must follow the example of high-performing nations and move beyond solely attending to student test scores to improving the quality of teaching and building the human capital elements of the system.

Increasingly, experts echo the imperative of shaping a human capital strategy to build educator capacity. Elaine Allensworth and her colleagues from CCSR noted that "schools that have successfully detracked classrooms and improved instruction for low-ability students tend to be exceptional—with a shared belief in diversity among staff, successful professional development that led teachers to use inclusive pedagogical practices, and additional supports for struggling students."[23] A growing number of high-performing secondary schools can serve as a "new world" model of schooling and as an opportunity to understand and replicate the hallmarks of what contributes to their success. This success rests on building the collective capacity of leaders and teachers to move schools from the traditional conveyor-belt, teaching-driven model (*what is taught*) to a student-centered, learning-driven model (*what is learned*). These schools take into account not only outcomes but also the root causes within the sphere of influence of teachers and school leaders.[24] Unfortunately, high-performing high schools that serve mostly low-income students and students of color are the exception, not the rule. Scaling improvements across all high schools, particularly in large urban centers, has proved elusive in most areas of the country.

High School Leaders

High school leaders who take on the challenge of leading a learner-centered culture face a wide range of technical, organizational, cultural, and policy obstacles.[25] Limited understanding exists about how high schools and school districts can establish the conditions, change processes, and external supports necessary for producing a culture of effective practice. For decades, high schools have proved impervious to change at the instructional core, in large measure because of the overall complexity of the instructional process. High school leaders are often faced with a number of roadblocks: disconnected departmental subcultures; a resistance to schoolwide interventions, norms for teacher autonomy and teacher tracking; and a lack of training on and support for engaging disconnected adolescents who have significant learning gaps.[26]

Moreover, few district and school administrators are well prepared to lead organizational changes that address the performance gaps of the students they teach while at the same time ensuring acquisition of higher-order thinking skills as part of a rigorous curriculum.[27] Leader development systems are not

providing superintendents or principals with the competencies to advance schoolwide improvements in assessment, curriculum, and instruction.

Programs for preparing educators, for example, continue to be driven by what providers want to offer, not by what schools or staff need, and licensure remains poorly connected to how well educators impact student achievement and school performance. Studies show that the training principals receive across the nation leaves the majority of them ill-equipped for the job of promoting powerful teaching and learning, particularly with those students who need it the most.[28]

A national study of thirty-one preparation programs by Frederick Hess and Andrew Kelly finds a critical lack of emphasis on applying results-oriented management and accountability, making personnel decisions on the basis of performance, or using data or technology to manage school improvement.[29] As a result, secondary school leaders and teachers have little experience or support to use assessment data to make deep instructional improvements, detect specific learning gaps, and design effective instructional interventions—even as demand grows for schools to use assessment data to evaluate and improve performance.[30] In fact, studies suggest that few schools use research and data to substantially improve teaching practice.[31] The challenges preventing greater use of evidence-based practice include differences between administrators' and teachers' conceptions of useful data, difficulty translating knowledge of student learning gaps into instructional interventions, and teaching cultures and school politics that maintain the status quo.[32]

The problems posed by inadequate high schools have proved particularly resistant to change. Questions continue to vex educational policymakers in terms of how to implement effective organizational and instructional practices in high schools across all levels of the system. Studies of exemplary schools highlight the importance of collaborative practice, distributed leadership, and data-based decisionmaking, but they fail to define the leadership behaviors and cultural change needed to promote real transformation. States and districts need to develop coherent theories of action to connect and strengthen leadership practice—and thereby improve the knowledge and skill of teachers, the nature and extent of schoolwide instructional practices, and the level of active learning by students.

Lessons in Scaling High School Reform

Emerging research and practice emanating from New York City's (NYC) decade-long work to transform the lowest-performing high schools have begun to yield evidence that improving high schools on a large scale is possible. Studies consistently show that investing in human capital is paramount to achieving dramatic improvement in high schools serving the neediest students.

Faced with stunningly low graduation and achievement levels, the NYC educational leadership implemented sweeping changes with the goal of creating a system of great schools that used graduation rates as the primary gauge of success. At the time of the program's inception, in SY 2001–02, only 41 percent of all NYC students, and even fewer black and Hispanic students, graduated within four years—and this rate had not improved in more than a decade. By 2009, according to state cohort reporting, the graduation rate had risen to 60 percent.[33]

Eight years later, NYC has begun to cull the lessons from systemwide strategies that would provide high school students and their parents with equitable access to an extensive portfolio of high-performing schools. Their designs incorporated new expectations, personalization, learning-driven instructional models, and more rigorous curriculum. NYC sought to transform high schools by offering

students more high-quality options, building human and social capital through community-based partners, and supporting principals to lead in such a way that larger numbers of underprepared adolescents could achieve meaningful graduation standards. The district also brought in education intermediary organizations—nonprofit organizations such as New Visions for New Schools and the Institute for Student Achievement—which served as central sources of experience and technical support, largely in the areas of leadership development, instructional support, and college-ready services.

The NYC public school system, the largest in the United States, serves more than 1.1 million students each year, enrolled in over 1,200 schools. Beginning in 2002, NYC closed more than twenty large, failing public high schools that typically were graduating only one-third of their students. The city implemented a centralized high school admission process in which approximately eighty thousand students a year indicate their school preference from a wide-ranging choice of programs.[34] By 2008, twenty-three large high schools with graduation rates below 45 percent were closed and replaced with more than two hundred new small high schools, educating no more than 450 students per school. Many of these schools opened in the buildings of the lowest-performing high schools.

A 2010 study by MDRC finds that these "small high schools of choice" in NYC increase students' likelihood of earning credits, progressing through school, and graduating in four years with Regents diplomas, providing the first reliable evidence that transformation at scale within a large, urban public school system is possible. The report notes that these positive effects on the transition into high school were seen among nearly all subgroups, as defined by students' academic proficiency, socioeconomic status, race/ethnicity, and gender.

The MDRC study focuses on 105 small schools of choice (SSC)—small, academically nonselective, four-year public high schools serving 21,085 students in grades nine through twelve. Students were randomly assigned if the SSC were oversubscribed, and lotteries were held to determine placement. At full capacity, the 105 schools will serve more than forty thousand students.

The study points out that the students enrolled in the SSC did not just attend schools that were small. "Size matters, but size by itself does not," noted NYC Schools Chancellor Joel Klein, who led the city's reform efforts under Mayor Michael Bloomberg beginning in 2002.[35]

SSC enrollees attended schools that were purposefully organized around smaller, personalized units of adults and students where principals supported a learner-centered culture; where there was a well-defined approach to instruction; and where teachers knew enough about their students to provide appropriate academic and socioemotional supports. "This was a human capital strategy for the poorest neighborhoods," said Michele Cahill, vice president of national programs and program director of urban education at Carnegie Corporation of New York. Cahill played a central role in shaping the high school reform strategy, which included a new and rigorous organizing process that allowed teachers and school leaders to do something different in schools serving the most vulnerable and underserved students.[36]

New York City's SSC strategy focused on closing the lowest-performing set of high schools where prior school improvement interventions had failed, and opening new schools in their place. The new schools focused on building the capacity of principals and teachers to provide a rigorous curriculum that prepares all students for postsecondary education and the workplace. The schools were created through a demanding competitive proposal process that emphasized the role of empowered leaders and

effective teachers in designing new schools around the common design principles of academic rigor, personalization, and community partnerships. While demanding strict accountability for progress in improving student outcomes, the district provided systemwide support for new principals and teachers by infusing outside design capacity and resources from intermediary organizations and providing specialized training on innovating instructional practices to engage students and accelerate their learning.

By the fourth year of high school, the new SSC increased overall graduation rates by 6.8 percentage points—68.7 percent versus 61.9 percent in other schools. *This gain reduced the size of the gap in graduation rates between white students and students of color in NYC by roughly one third.* Also noteworthy, given the need to prepare students for college and meaningful jobs, the SSC produced modest increases in the proportion of students—by 5.3 percentage points—who passed the English Regents exam with a score of 75 or higher. Incoming students at the City University of New York who achieve this level are exempted from remedial courses.[37] The SSC's positive effects can be seen in a broad range of students, including male high school students of color, whose educational prospects have been historically difficult to improve.

While this study provides promising evidence in support of this particular small school model, the model does not exist in isolation, but rather as one integral component of a comprehensive and coordinated set of district reforms. The report cautions that while the initial results are "uniformly encouraging," further research is needed to analyze the design features of the SSC initiative and identify the factors that led to the observed improvements in students' on-track performance. The report notes that further research and analysis will try to determine the extent to which SSC impacts on high school graduation translate into positive effects on future educational outcomes. Gordon Berlin, president of MDRC, concluded that while the study provides important findings that can inform education policy and practice, much more must be done to understand how to advance students' college readiness.

Organizing High Schools for Professional Learning

Another New York City initiative targeted the next segment of the system's high schools—those that were not the lowest performing and producing the largest number of dropouts, but where substantial improvement still was necessary. Launched in partnership with Baruch College and New Visions for New Schools, the scaffolded apprenticeship model (SAM) is a model for adult learning that integrates leader development through a university-based credentialing program with the implementation of collaborative, evidence-based practice in high-poverty urban schools. Leaders work with teachers—the "apprentices"—in progressively shaping or "scaffolding" their collective practice to improve the achievement of struggling learners.[38]

Building the capacity of principals to apply "learning leadership practices" was central to SAM. These practices targeted teachers' professional learning, knowledge building, the quality and depth of assigned student work, and the way in which secondary teachers make decisions about instructional practices and individual learning needs in relation to curricular expectations. To that end, high schools were organized to provide teachers with inquiry-based learning opportunities to expand their own understanding of advanced concepts along with the strategies to engage students and support their learning.

Ongoing evaluations of SAM have contributed to the growing knowledge base on what is needed to create the conditions within high schools to accelerate improvements in student learning.[39] A Stanford University report on SAM implementation over a four-year period in fourteen small and large high schools offers strong evidence for the program model. The outcomes show that SAM schools far exceed the typical school in bringing students who enter at risk of not graduating back on track.[40]

On average, the number of students who are off track to graduation declined from 42 percent among ninth graders to 13 percent among eleventh graders. The percent of on-track students jumped from 37 percent to 68 percent between ninth and eleventh grade. Using survey data to assess changes in leadership and school culture, the researchers reported that the greatest impact on on-track graduation rates depended on mutually reinforcing system elements. The evidence supports SAM's theory of action that links developing a pipeline of school administrators equipped to lead school teams in inquiry-based reforms with moving the school toward a culture of continuous improvement in student achievement.

The program produced high rates of certification—about 96 percent of participating staff obtained administrative credentials—and thereby increased the supply of school leaders available to guide significant change in other high schools. Moreover, SAM offered a competing paradigm for instructional leadership that moved away from principals holding teachers accountable for content delivery to principals holding teachers responsible for identifying student learning needs, developing highly effective strategies to address them, and improving student achievement. The evaluation showed that principals' support of teacher-led inquiry teams—the primary means for improving adult learning in relation to targeted students' needs—was significant. Successful leaders provided time for teamwork, supported the team's access to and use of data on individual student performance, endorsed teachers' inquiry work, and authorized the team's leadership with colleagues. Strong relationships were found between principals' leadership for data-based improvement, increases in the culture of ongoing classroom assessment, and improvement in the proportion of students on track to graduate.[41]

The SAM curriculum, coupled with expert external facilitation, was designed to address the real problems of improving achievement for students who were outside the school's "sphere of success." The coaching and curricula used in SAM implementation established standards for inquiry team functioning and leadership practices. Accordingly, teams aligned their actions with improvement in student outcomes and used data to identify patterns and inform decisionmaking. As a result, teams identified a range of school system conditions that inhibited targeted students' skill development including curriculum gaps, teacher assignment patterns that disadvantaged struggling students, and deficiencies in the utility and timing of student assessment information. By designing structures and policies to address such problems, the teams gradually involved colleagues in using inquiry to identify and respond to skill gaps. The Stanford University report points out that success depended on the important task of navigating colleague resistance and facilitating teacher learning by challenging assumptions and surfacing practices that limit student success.

The process effectively disrupted teachers' assumptions and concepts of quality education. Teachers were challenged to think through why students struggle to succeed and how they could collaborate to identify specific practices that would advance students' learning. The core principles involved creating a "culture of assessment use," in which teaching staff collectively moved toward using more detailed learning measures to identify and hone in on the learning gaps of a small number of struggling students. Lead teachers helped their colleagues analyze and improve their instructional skills by examining curricula and observing classroom teaching. An important purpose of the inquiry process

was to ascertain whether or not students identified as lacking particular skills had ever had the opportunity to acquire them.

Linking Leadership and Learning

The nature and impact of leadership found in the evaluations of SAM are corroborated by further research that examines the impact of school leadership practices on improved student achievement. A major report from the Wallace Foundation asserts that among school-related influences on student achievement, school leadership is second in importance only to classroom instruction.[42] Conducted over a six-year period, the report includes data from nine states, forty-three school districts, and 180 schools. The researchers collected evidence from teacher and administrator surveys to identify the organizational factors that affect teacher performance and predict student achievement. Measures of student achievement included three years of schoolwide results on state tests of language and mathematics at several grade levels.

The findings show that leadership must be "collective," meaning a collaborative effort among educators, parents, students, principals, and community members. The combined influence of these stakeholders has a greater impact on student learning than any one leader. In high-performing schools, "The rubber hits the road in the classroom; that's where the learning happens," said Kyla Wahlstrom, coauthor of the report and director of the Center for Applied Research and Educational Improvement at the University of Minnesota. "Leadership is important because it sets the conditions and the expectations in the school that there will be excellent instruction and there will be a culture of ongoing learning for the educators and for the students in the school."[43]

The researchers conducted a series of correlational analyses using teacher surveys and student achievement data to determine just what good principals do. No evidence was found for principals impacting student learning directly by discussing instructional issues, observing classroom instruction, or suggesting improvements in classroom behavior or management with teachers individually.[44] The way principals exert influence is at odds with widely accepted perceptions of what principals do as "instructional leaders." Leader effects are largely indirect and are shaped by strengthening professional communities and the collective influence of all participants in adopting practices that enhance student learning.

According to the study, principals exert influence on teachers and teaching practice because of both their role in motivating teachers and the collegial professional climate they create.[45] The teachers and principals surveyed agree that three specific leadership practices contribute to improved teaching and learning: (1) focusing the school on challenging goals and expectations for student achievement; (2) attending to teachers' professional learning; and (3) creating structures for teacher collaboration.

Following presentations by fifteen exemplary high schools at the 2009 conference of the Achievement Gap Initiative at Harvard University (AGI), Ronald Ferguson and his colleagues reported similar findings on how leadership raises achievement and narrows gaps. Leadership strategies common across the high schools included relentlessly focusing on improving the quality of instruction, organizing learning experiences for teachers, clearly defining the criteria for high-quality teaching and student work, and designing plans and incentives for broadly inclusive adult learning.[46]

Randolph High School:
Successful Turnaround of a Low-Performing School

In 2006, more than 50 percent of Randolph High School's students scored in the bottom two quintiles as eighth graders. Three years later, with 80 percent students of color and more than 50 percent low-income students, Randolph achieved unusually high value-added test score gains on the Massachusetts Comprehensive Assessment System (MCAS).[a]

What explains this dramatic change?

Confronted with years of declining performance, the principal, Dr. Bill Conrad, aimed to totally transform Randolph by establishing professional norms and practices for instructional quality and the caliber of student work. He focused on leading a change process that focused on a few key ideas, designed strategies to embed higher-order thinking throughout the curriculum, and organized the staff's professional learning to support the school's mission. The core ideas included teaching students, not subjects; creating schoolwide change, not isolated change; and fostering smaller learning communities that give all teachers and students opportunities for rigorous academic and social learning. As a result, Randolph ranked near the 80th percentile two years later on the MCAS—the gains students made from eighth grade to tenth grade were better than 70 to 80 percent of other schools in the state.

Departing from a test-driven curriculum, the school staff embedded higher-order thinking and written and oral communication skills throughout the curriculum. The administrators and teachers cultivated the expectation that all students should be exposed to a rich variety of literature and required to think and write daily in all subjects. Ninth graders must now take a composition class that is required for graduation, and tenth graders must take the PSAT. The number of Advanced Placement classes was expanded from six to nine. In addition, Randolph embraces full inclusion of students with special needs. About 95 percent of the students with disabilities are educated within mainstream classes cotaught by regular and special education teachers. Special educators focus on a specific content area and work with grade-level teams to provide discipline-specific instruction for struggling learners.

To establish common language and criteria for teaching effectiveness, school leaders committed to using Studying Skillful Teaching, the Research for Better Teaching (RBT) model.[b] Administrators and instructional coaches completed Observing and Analyzing Teaching (OAT), a leadership course on classroom observation and conferencing skills that is part of the RBT model. Instructional coaches help staff learn and apply pedagogy and best practices to content-area learning. Teachers also participate in interdisciplinary, peer walk-throughs on a voluntary basis. For example, a math teacher, an art teacher, and an English teacher might walk into a science teacher's classroom, spend twelve to fifteen minutes in each of two classrooms, and share observations in a fifteen-minute debriefing led by a teacher facilitator. This schoolwide approach to collegial engagement about teaching and learning became embedded in the professional context of the school. Finally, the high school was organized to provide teachers with common planning sessions three to four times per week to examine student work and devise appropriate instructional strategies.

[a] R. F. Ferguson et al., *How High Schools Become Exemplary: Ways That Leadership Raises Achievement and Narrows Gaps by Improving Instruction in 15 Public High Schools,* a report on the 2009 Annual Conference of the Achievement Gap Initiative at Harvard University (Cambridge, MA: Harvard University, June 2010), http://www.agi.harvard.edu (accessed November 20, 2010).
[b] RBT's Studying Skillful Teaching is a course that supports teachers in improving student achievement. For more information, see http://www.rbteach.com.

The study also finds that higher-performing schools employ "fatter" decisionmaking structures, meaning that almost all people involved with the school have greater influence on school decisions compared to their counterparts in lower-performing schools. Specifically, higher-performing schools confer more influence on teacher teams, parents, and students. Although principals are the central leaders in schools, they do not lose influence as others gain it. The study cautions that a narrow focus on professional development opportunities produced little impact on achievement and urge clear signaling from districts that principals are expected to play a key role in creating organizational structures that foster the collective adult learning of new practices.

Using teacher survey data, the researchers found that achievement scores in mathematics are significantly associated with focused instruction, professional community, and teachers' trust in the principal. These findings mirror the path analyses conducted as part of SAM's evaluation that identified the key linkages between supportive school leadership, the functioning of inquiry teams, changes in teaching practices, and improved student achievement.

The District Role in Supporting Effective School Leaders

A major finding of the Wallace Foundation report highlights the role of school district policies and practices in shaping principals' instructional leadership behaviors. The researchers conducted analyses of survey items to determine the degree to which the districts' focus on instruction predicted principal instructional leadership. They found that district policies explain a substantial portion—about 36 percent—of the differences in principals' instructional leadership. According to the report, "district policies and practices focused on instruction are sufficiently powerful that they can be *felt* by teachers as an animating force behind strong, focused leadership by principals."[47] These behaviors that work through the collective influence of the school's professional community have an important impact on teachers' classroom practices, which, in turn, affects student learning.

High-performing districts set core expectations for professional practice, build school capacity, foster the conditions for continuous improvement, and provide flexible and differentiated support for principals based on how well they implement effective instructional practice.[48] Moreover, the report stresses that developing new initiatives to support secondary school principals must become a policy priority of states and districts. Key elements of the practices adopted by high-performing districts include coordinating different central office units in their interaction with teachers and principals; facilitating networking and team approaches to assessing and responding to school-specific needs; providing external coaching and facilitation; improving human resource procedures for hiring, placement, and evaluation; and targeting students and schools struggling to meet standards and support strong implementation of differentiated instruction.

The Wallace report calls for districts to develop systemic approaches to support middle and high school principals in motivating teachers and fostering the kind of instructional leadership that is workable in their larger and more complex settings. "Simply increasing the pressure on principals is unlikely to bring about real improvements in principal-teacher collaboration and achievement in secondary schools."[49] The data suggest that efforts must be made to develop instructional leadership capacities through middle-level leaders and instructional teams. The report cautions that one-size-fits-all leadership programs are insufficient, particularly in the lowest-performing schools, and must provide extensive, strategic supports to meet the needs of large, high-poverty high schools.

Yet the study finds that district leaders faced with struggling schools were less, rather than more, likely to initiate leadership development programs or provide strategic support for principals. They focused instead on recruiting a different sort of administrator and expressed the belief that "principals were essentially born, not made."[50] Districts should be clearly positioned as central players in creating a system of good schools and encouraged to coordinate central office functions and resources to support the needs of schools and their leaders. To expand districts' capacity to improve high schools, they should be encouraged to mobilize resources and expertise through intermediaries or community organizations.

Federal Recommendations

The pending reauthorization of the Elementary and Secondary Education Act (ESEA) offers an opportunity to focus attention on the lowest-performing high schools for the large numbers of students who are underserved within the current educational systems. To meet the nation's educational goals for ensuring that all graduates are prepared for college and careers, states and districts must craft much more coherent systems for developing human capital and creating the conditions to transform high schools, particularly those serving the most challenged populations.

Strong school leadership is essential to organizing high schools to advance the learning of teachers and students. In order to attain scalable and sustainable improvements in high schools, reform policies must take into account the need for capacity building for high schools. To that end, solutions cannot be brief or superficial, but must address widespread inconsistencies in the quality of education provided to secondary students. To meet the dual challenges of increasing high school graduation requirements and ensuring healthy graduation rates, federal and state policies must address transforming high schools into learner-centered organizations. Federal policies can address the fundamental misalignment of standards, assessments, and accountability systems to ensure that high schools graduate students who are college and career ready; provide substantial investments in the human capital element essential to delivering on the promise of next-generation standards and assessments; and promote differentiated and data-driven improvements in high schools.

ESEA could be reauthorized with a new systemic approach to school improvement that reflects these priorities in order to redirect attention and resources now invested in strategies that have not proved effective in improving low-performing high schools. The previous federal administration set a well-received precedent in moving toward a differentiated accountability and improvement model. Nine states received approval to participate in a pilot program that allows states to vary the intensity and type of interventions to match the academic reasons that lead to a school's identification as "low performing." In order to develop and support effective school improvement leaders, federal and state policy policies should do the following:

1. **Embrace high expectations and goals for all students by establishing college and career readiness as the core mission of the K–12 education system.**

    The reauthorization of ESEA and the continuation of the Race to the Top competitive grants should support the state-led adoption and comprehensive implementation of common standards and aligned assessments toward advancing college and career readiness. State policies to strengthen educator development must be anchored in an integrated system of rigorous standards, comprehensive assessments, and instruction. Tests for accountability purposes should measure the breadth of standards for college and career readiness and include curriculum-based assessments that provide frequent feedback on secondary students' demonstrated knowledge and skills.

2. **Support the development of school leader preparation programs that develop the essential skills and competencies necessary for leading effective high school improvement.**

    The federal government can encourage better state-district policy coordination in designing performance-based human capital systems for developing high school leaders. School-building leadership ranks as one of the most important factors in recruiting and retaining accomplished teachers and advancing student learning in high-need high schools. Title II of ESEA and Title II of

the Higher Education Act should encourage states and districts working with practitioners to create standards of practice that define effective leadership and develop performance-based systems to address career-long professional growth and advancement.

National Board Certification for Principals

In 2009, the National Board for Professional Teaching Standards® (NBPTS) launched the initiative to develop National Board Certification for Principals. Responding to the urgent need to better prepare principals to lead instructional improvement and school performance, NBPTS will create evidence-based assessments for principals and lay the groundwork for certifying assistant principals, teachers, and other school-based educators who positively affect the culture of learning in schools. NBPTS worked with 7,500 educators nationwide to create the Core Propositions for Accomplished Educational Leaders. Adopted in 2009, the Core Propositions serve as the bedrock upon which the certifications for educational leaders are built.

Skills

1. Accomplished educational leaders continuously cultivate their understanding of leadership and the change process to meet high levels of performance. **(Leadership)**

2. Accomplished educational leaders have a clear vision and inspire and engage stakeholders in developing and realizing the mission. **(Vision)**

3. Accomplished educational leaders manage and leverage systems and processes to achieve desired results. **(Management)**

Applications

4. Accomplished educational leaders act with a sense of urgency to foster a cohesive culture of learning. **(Culture)**

5. Accomplished educational leaders are committed to student and adult learners and to their development. **(Learners and Learning)**

6. Accomplished educational leaders drive, facilitate, and monitor the teaching and learning process. **(Instruction)**

Dispositions

7. Accomplished educational leaders model professional, ethical behavior and expect it from others. **(Ethics)**

8. Accomplished educational leaders ensure equitable learning opportunities and high expectations for all. **(Equity)**

9. Accomplished educational leaders advocate on behalf of their schools, communities, and profession. **(Advocacy)**

Based on the Core Propositions, stakeholders developed the National Board Standards for Accomplished Principals, officially adopted by the NBPTS Board of Directors in February 2010. Since then, NBPTS has created an assessment for accomplished principals and is in the process of conducting an eighteen-month national field test of 660 principals from nineteen states. In 2011, NBPTS is scheduled to conduct a pilot test before opening certification to the public in 2012.

For more information, see www.nbpts.org/principals.

Reprinted with permission from the National Board for Professional Teaching Standards, www.nbpts.org. All rights reserved.

Additionally, states and districts can shape consistent high-quality practice by using performance measures that provide multiple sources of data for formative and auditing purposes and serve a number of policy purposes to strengthen the quality of leadership preparation and credentialing programs, induction systems, professional learning and licensure, and compensation and advancement. Policy leaders can create incentives and conditions to enable schools with the most needs to attract high-quality principals and teachers.

The School Principal Recruitment and Training Act is proposed legislation worthy of congressional consideration. This proposal would provide comprehensive professional development to current and aspiring principals, including a year-long preservice residency and two additional years of follow-up support upon starting work as a school leader. Training and course work would include such topics as instructional leadership, organizational management, use of data, use of leadership teams to implement school reform plans, and aligning curriculum, instruction, and assessment.

Another piece of legislation worth congressional consideration is the Teacher and Principal Improvement Act. This proposal would amend Title II of ESEA to provide formula grants to states and school districts to help build comprehensive evaluation and professional development systems. This legislation would require school districts to develop high-quality teacher induction and mentoring programs as well as provide ongoing, effective professional development for teachers, principals, and other school leaders at the lowest-achieving schools within a school district. Under this legislation, professional development programs would need to be routinely evaluated by independent organizations to ensure that the programs were effective and of high quality. School districts would also need to work with teacher and principal organizations to develop evaluation systems to measure the effectiveness of teachers and leaders and provide these professionals with feedback and opportunities for improvement.

3. **Replace the fairly ineffective federal improvement system for high schools within the No Child Left Behind Act with requirements and support for the implementation of coherent and comprehensive state and district systems of high school improvement.**

    Such reform systems would

    a. **Create a culture of data-based decisionmaking that supports leaders in their efforts to lead instructional improvement.** It would encourage (1) the differentiation of improvement approaches based on individual school challenges and needs; (2) the use of a range of early-warning and on-track measures to assess individual student progress toward graduation and college and career readiness and inform interventions to get off-track students back on track; and (3) the use of detailed formative and diagnostic assessments to provide meaningful information on how to improve student learning and achievement.

    b. **Position school districts as central players in creating a system of good schools.** As such, districts must coordinate central office functions and resources to align with the priorities of learning improvement and providing for the instructional needs of schools and their leaders.

    c. **Provide support to school leaders through intermediaries—nonprofit organizations that serve as central sources of experience and technical support.** Districts can expand and maximize the role of external organizations and community partnerships as a vehicle for

infusing expertise, technical assistance, and resources essential to organizing high schools and developing a cohesive culture of high-quality learning.

d. **Support staff selection and professional growth systems that foster collegial collaboration in pursuit of high-impact, evidence-based practices consistent with state and district learning goals.** High-performing districts should communicate core expectations for professional practice, invest in adult learning, and create the organizational conditions conducive to meaningful staff collaboration and development.

To assist states and school districts in accomplishing these transformative goals, various federal legislative proposals include elements of the aforementioned high school improvement systems. The Graduation Promise Act, which would support state-led and data-driven systems of high school reform, has been introduced in both houses of Congress and is pending reintroduction in the 112th Congress at the time of this writing. States would develop indicators to be used by school districts in order to identify low-performing high schools and differentiate among the reforms needed by each school. School-specific improvement plans would be developed based on a robust diagnostic analysis of the problems facing such schools, along with an assessment of the assets within the schools and communities. Reform for the lowest-performing schools would be comprehensive in nature, focusing on curriculum and instruction, professional development, personalization of the school experience, strategic use of time, and other strategies identified by research to be important in turning around low-performing high schools. Critical to the reform system proposed by the Graduation Promise Act are meaningful roles for states and districts, resources to strengthen their ability to support local school turnaround efforts, and an emphasis on districtwide strategies, rather than a school-by-school approach.

The current political and fiscal climate will pose challenges for a sweeping reauthorization of ESEA, the creation of new programs, and the expansion of existing ones. Therefore, policymakers and advocates alike must consider how current policies and programs can be strengthened through alternate legislation and regulation in order to facilitate the development of performance-based human capital systems. School Improvement Grants (SIG) may present such an opportunity.

As authorized under current law, SIG has received regular appropriations since 2007, and received a large infusion of funding through the American Recovery and Reinvestment Act. Regulations issued by the U.S. Department of Education (ED) on SIG implementation demonstrate the administration's view that school leaders are key change agents in school improvement. ED requires SIG to be used for the implementation of one of four reform models: (1) turnaround; (2) transformation; (3) restart; or (4) school closure. The turnaround and transformation models—the models that the vast majority of schools receiving SIG funds have elected to implement—require the replacement of the current school principal and the appointment of a new school leader to carry out the reforms. However, the theory of action behind SIG fails to recognize both the limited number of school leaders adequately prepared and skilled to carry out such an endeavor as well as the need for substantial district support of the principal in this work.

High-quality, embedded professional learning should be an integral component of SIG where districts provide ongoing training and coaching for principals to lead organizational change and instructional improvement. SIG regulations could be amended to emphasize the systemic development of accomplished school leaders and the central role of districts in creating conducive conditions for high school transformation.

Conclusion

In order to fundamentally transform education, attention must be given to articulating explicitly the nature of leadership and teaching needed to create the conditions for powerful learning environments. This brief describes promising research and practice that illuminates the central role school leaders play in shaping organizational conditions to promote powerful high school learning. Policy leaders will need to develop coherent theories of action to connect leadership practice to improving the knowledge and skill of teachers, the level of work in classrooms, and the level of active learning by students. Working with practitioners, policymakers need to build an integrated system for the development of human capital—a system grounded in a visible, shared conception of teaching and learning that ensures that high school students are prepared for college and careers. To achieve this important national educational goal, policy leaders must ensure that the roles and responsibilities of actors at the federal, state, and district levels actively contribute to building the expert performance of leaders and teachers in improving student learning and achievement.

Endnotes

[1] U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, *State and Local Implementation of the* No Child Left Behind Act, *Volume IX—Accountability Under* NCLB*: Final Report* (Washington, DC: Author, 2010).

[2] T. Tucci, "Prioritizing the Nation's Lowest-Performing High Schools" (Washington, DC: Alliance for Excellent Education, 2010); Alliance for Excellent Education analysis of data provided by the Everyone Graduates Center at Johns Hopkins University, 2010.

[3] Ibid.

[4] Alliance for Excellent Education, "High School Dropouts in America" (Washington, DC: Alliance for Excellent Education, 2010).

[5] McKinsey and Company, Social Sector Office, *The Economic Impact of the Achievement Gap in America's Schools* (New York: McKinsey and Company, 2009).

[6] R. Elmore, *Knowing the Right Thing to Do: School Improvement and Performance-Based Accountability* (Washington, DC: National Governors Association Center for Best Practices, 2004).

[7] Center on Education Policy, *State High School Tests: Exit Exams and Other Assessments* (Washington, DC: Author, December 2010); T. Toch, "Standards Issue," special report, *Washington Monthly* (July/August 2010), http://www.washingtonmonthly.com/features/2010/1007.toch2.html (accessed September 18, 2010).

[8] D. Reeves, *Transforming Professional Development into Student Results* (Alexandria, VA: ASCD, 2010); B. Gross, T. K. Booker, and D. Goldhaber, "Boosting Student Achievement: The Effect of Comprehensive School Reform on Student Achievement," *Educational Evaluation and Policy Analysis* 31 (June 2009): 111–26.

[9] Reeves, *Transforming Professional Development*.

[10] B. Rowan et al., *School Improvement by Design: Lessons from a Study of Comprehensive School Reform Programs* (Madison, WI: Consortium for Policy Research in Education, August 2009), www.cpre.org/images/stories/cpre_pdfs/sii%20final%20report_web%20file.pdf (accessed September 30, 2010).

[11] Ibid.

[12] J. Betts, A. Zau, and C. Koedel, *Lessons in Reading Reform: Finding What Works* (San Francisco, CA: Public Policy Institute of California, August 2010), http://www.ppic.org (accessed September 14, 2010).

[13] Ibid.

[14] E. Allensworth et al., *College Preparatory Curriculum for All: Consequences of Ninth-Grade Course Taking in Algebra and English on Academic Outcomes in Chicago* (Chicago, IL: Consortium on Chicago School Research at the University of Chicago; Ann Arbor, MI: University of Michigan, December 2008).

[15] Ibid.

[16] A. Wells and J. Oakes, "Potential Pitfalls of Systemic Reform: Early Lessons from Research on Detracking," special issue, *Sociology of Education* 69 (1996): 135–43; B. Rubin, "Detracking in Context: How Local Constructions of Ability Complicate Equity," *Teachers College Record* 110, no. 3 (2008): 646–99.

[17] L. Quay, *Higher Standards for All: Implications of the Common Core for Equity in Education* (Berkeley, CA: Berkeley Center for Research and Administration, April 2010).

[18] E. Allensworth and J. Easton, *What Matters for Staying On-Track and Graduating in Chicago Public High Schools: A Close Look at Course Grades, Failures and Attendance in the Freshman Year* (Chicago, IL: Consortium on Chicago School Research, 2007).

[19] Ibid.

[20] McKinsey and Company, *How the World's Best-Performing Schools Systems Come Out on Top* (London: Author, 2007), http://snipurl.com/9j80o (accessed November 15, 2010); National Staff Development Council, "Transforming Schools: Practices That Work," *NSDC Policy Points* 1, no. 1 (January 2009).

[21] R. F. Ferguson, "Paying for Public Education: New Evidence on How and Why Money Matters," *Harvard Journal on Legislation* 29, no. 2 (1991): 465–98.

[22] National Governors Association, Council of Chief State School Officers, and Achieve, Incorporated, *Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education* (Washington, DC: International Benchmarking Advisory Group, December 2008); McKinsey and Company, Social Sector Office, *The Economic Impact of the Achievement Gap in America's Schools* (New York: Author, 2009).

[23] Allensworth et al., *College Preparatory Curriculum for All.*

[24] Reeves, *Transforming Professional Development*; R. J. Marzano, *The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction* (Alexandria, VA: Association for Supervision and Curriculum Development, 2007); R. J. Marzano and T. W. Waters, *District Leadership That Works: Striking the Right Balance* (Bloomington, IN: Solution Tree, 2009); K. Chewnoweth, *It's Being Done* (Boston, MA: Harvard Education Press, 2007); D. B. Reeves, *Accountability in Action: A Blueprint for Learning Organizations*, 2nd ed. (Englewood, CO: Advanced Learning Press, 2004).

[25] J. E. Talbert, A. Wood, and W. Lin, "Evidence-Based System Reform: Outcomes, Challenges, Promising Practices," in *Evaluation of BASRC Phase II* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2007).

[26] M. W. McLaughlin and J. E. Talbert, "Building Professional Learning Communities in High Schools: Challenges and Promising Practices," in *Professional Learning Communities: Divergence, Depth and Dilemmas* (Berkshire, UK: Open University Press, 2007); M. W. McLaughlin and J. E. Talbert, *Professional Communities and the Work of High School Teaching* (Chicago, IL: University of Chicago Press, 2001); J. E. Talbert, "Professionalism and Politics in High School Teaching Reform," *Journal of Educational Change* 3, no. 3–4 (2002): 339–63.

[27] L. Darling-Hammond et al., *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs* (Stanford, CA: Stanford University, Stanford Educational Leadership Institute, 2007), www.wallacefoundation.org (accessed November 2, 2010).

[28] B. Fry, K. O'Neill, and G. Bottoms, *Schools Can't Wait: Accelerating the Redesign of University Principal Preparation Programs* (Southern Regional Education Board, 2006), http://www.wallacefoundation.org/SiteCollectionDocuments/WF/Knowledge%20Center/Attachments/PDF/SchoolsCantWait.pdf (accessed November 2010); Darling-Hammond et al., *Preparing School Leaders for a Changing World*; A. Levine, *Educating School Leaders* (Washington, DC: Education Schools Project, 2005).

[29] F. Hess and A. Kelly, *Learning to Lead? What Gets Taught in Principal Preparation Programs* (Washington, DC: American Enterprise Institute, 2005).

[30] M. McLaughlin and J. Talbert, *Building School-Based Teacher Learning Communities: Professional Strategies to Improve Student Achievement* (New York: Teachers College Press, 2006); J. Archer, "Some Ed.D. Programs Adopting Practical Approaches: Team Efforts Supplant Individual Research by Aspiring School Leader," *Education Week* 25, no. 15 (2005): 8–10.

[31] M. McLaughlin and D. Mitra, *The Cycle of Inquiry as the Engine of School Reform: Lessons from the Bay Area School Reform Collaborative* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2003); McLaughlin and Talbert, *Building School-Based Teacher Learning Communities*.

[32] M. Lachat and S. Smith, "Practices That Support Data Use in Urban High Schools," *Journal of Education for Students Placed at Risk* 10, no. 3 (2005): 333–49.

[33] Research and Policy Support Group, *NYC Graduation Rates: Class of 2009 (2005 Cohort)* (New York: New York City Department of Education, March 2010), http://schools.nyc.gov/Accountability/Reports/Data/Graduation/GRAD_RATES_2009_HIGHLIGHTS.pdf (accessed December 21, 2010).

[34] H. Bloom, S. Thompson, and R. Unterman, *Transforming the High School Experience: How New York City's New Small Schools Are Boosting Student Achievement and Graduation Rates* (New York: MDRC, 2010).

[35] Joel Klein, remarks at "Transforming the High School Experience: Lessons from the New York Small Schools Initiative," Alliance for Excellent Education and MDRC, October 15, 2010.

[36] Michele Cahill, remarks at "Transforming the High School Experience: Lessons from the New York Small Schools Initiative," Alliance for Excellent Education and MDRC, October 15, 2010.

[37] Bloom, Thompson, and Unterman, *Transforming the High School Experience*.

[38] J. Talbert et al., *Leadership Development and School Reform Through the Scaffolded Apprenticeship Model (SAM)* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2009); J. Talbert, N. Scharff, and W. Lin, *Leading School Improvement with Data: A Theory of Action to Extend the Sphere of Student Success* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2008).

[39] Ibid.

[40] The analysis compared schools' on-track status for those New Vision schools that participated in SAM and those with no SAM experience. On-track ratings were based on state ELA tests and "on track" status for his/her graduating cohort as of winter 2008. New Visions' ratings use grade-level criteria for a student's course completion and Regents scores to classify the student as off track for graduation, almost on track for graduation, on track for graduation, and on track for college readiness. Talbert et al., *Leadership Development and School Reform,* p. 11.

[41] Talbert et al., *Leadership Development and School Reform.*

[42] K. Seashore Louis et al., *Investigating the Links to Improved Student Learning: Final Report of Research Findings*, a report to the Wallace Foundation (University of Minnesota, Center for Applied Research and Education Improvement; University of Toronto, Ontario Institute for Studies in Education, 2010).

[43] Wallace Foundation, "Large National Study Strongly Links Educational Leadership to Student Achievement," http://www.wallacefoundation.org/NewsRoom/PressRelease/Pages/large-national-study-strongly-links-educational-leadership-to-studentachievement.aspx (accessed July 20, 2010).

[44] Ibid.; J. Hattie, *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement* (New York: Routledge, Taylor, and Francis Group, 2009).

[45] A. Harris, *Distributed Leadership in Schools: Leading or Misleading?*, a report for the British Educational Leadership (Birmingham, UK: Management and Administration Society, 2002); Seashore Louis et al., *Investigating the Links to Improved Student Learning*.

[46] R. F. Ferguson et al., *How High Schools Become Exemplary: Ways That Leadership Raises Achievement and Narrows Gaps by Improving Instruction in 15 Public High Schools,* a report on the 2009 Annual Conference of the Achievement Gap Initiative at Harvard University (Cambridge, MA: Harvard University, June 2010), http://www.agi.harvard.edu (accessed November 20, 2010).

[47] Seashore Louis et al., *Investigating the Links to Improved Student Learning*, p. 203.

[48] Ibid.

[49] Ibid., p. 52.

[50] Ibid., p. 211.