One of the big questions facing American education is ‘Can it be done?’ Can schools help all children learn to high levels, even poor children and children of color?” So begins It’s Being Done, a new book by longtime education writer Karin Chenoweth (Harvard Education Press, 2007). The biggest question of all, she might have added: can it be done at the high school level?

The answer to that big question, at this point, can only be a very highly qualified “yes.” Few – in fact, hardly any – traditional urban high schools today are bringing most of their high-poverty students to true college-readiness. But an emerging group of high schools – many working within non-traditional operating contexts – are demonstrating that this goal is achievable. These schools represent the proof-point. We had better understand what they look like and how they operate, if we hope to build better pathways for other schools to duplicate their success.

To provide this closer, more granular, view of what successful urban high schools could look like, this section focuses on five outstanding HPHP schools in Massachusetts. This analysis draws on Mass Insight’s extensive knowledge base, constructed over six years of effective practice research on schools in the state that outperform their demographic peers. These exemplary “Vanguard” schools have been visited and analyzed by teams of educators who distilled their strategies into nearly a hundred blueprints of how higher standards work looks on the ground. (The blueprints are available online at www.buildingblocks.org.)

The decision to focus on Massachusetts HPHP schools was also guided by the fact that the state is recognized nationally for its advanced, effective approach to standards-based reform, including its oversight of out-of-system charter schools.

We had better understand what these schools look like and how they operate, if we hope to build better pathways for other schools to duplicate their success.

Out of close to fifty Vanguard schools and districts Mass Insight has studied over the past several years, the five schools that clearly fit the HPHP high school profile – University Park Campus School in Worcester, Lowell Middlesex Charter School in Lowell, and Codman Academy, the MATCH School and Boston Collegiate Charter School (previously South Boston Harbor Charter School) in Boston – all have outstanding records for promoting student achievement and college matriculation despite the significant demographic and environmental challenges faced by their students. (See school profile and performance boxes.)
This handful of high schools also stands out (joined by Roxbury Prep, a charter middle school) as very different from all the other Vanguard models we have looked at over the years in the way they operate. First, their approaches and strategies are distinct from all the others – either they simply don’t start from the same constructs and philosophy as others with regard to their students, or, to the extent they do, the elements most vital to the implementation of their ideas fall largely in the “intangible” arenas outside of programs and methods. Secondly, these schools have a different kind of condition set; that is, they work within parameters that provide incentives and rewards largely foreign to prototypical public schools.

Four of the five schools are charter schools, one of which (Lowell Middlesex) exists specifically to serve high school dropouts. The fifth, University Park Campus School (UPCS), is a Worcester public school managed in partnership with Clark University, which shares the crime-ridden Main South neighborhood of the city with it. In presenting these schools we are not proclaiming that charters are the only answer to high performance in urban areas, nor that charters are necessarily high-performing – although charter schools in Massachusetts are outperforming public schools overall, thanks many feel to effective regulation.

These schools have a different kind of condition set; that is, they work within parameters that provide incentives and rewards largely foreign to prototypical public schools.

We could include, for example, several regular elementary schools and K-8 Vanguard schools that are achieving significantly better outcomes than their demographic peers. The Building Blocks website includes other, traditional high schools that are achieving truly exemplary results despite significant poverty and
other major challenges. They turn out to be charters or (like UPCS) behave in charter-like ways. Their performance carries an asterisk, to be sure, because they serve students who have opted in (though always through a random lottery process). The ways they serve those students should carry no asterisk, however, for all who seek ways to bring highly challenged student populations to high achievement.

The Learning Triangle
While their philosophies and approaches vary, we found HPHP schools adept at producing and managing a dynamic system that depends on three elements, reflected in the Learning Triangle shown here (and described in detail in Part 2 of the main report): acknowledging and fostering students’ Readiness to Learn, elevating and focusing staff’s Readiness to Teach, and exercising much more Readiness to Act on dramatically different models and approaches than is typically found in public schools. Like the way the combustion cycle works when a campfire grows out of the interplay of wood, air, heat, so do these three “Readiness” elements dynamically combine and interact with each other in HPHP schools to produce a chemical reaction – learning. A number of HPHP schools’ “readiness” strategies are explored more fully below.

Readiness to Learn
How do schools re-orient their focus from what’s being taught to what’s being learned – and to developing the kind of learning community and approaches that are best suited to the particular needs of the students they serve? This is the dimension in which these HPHP schools differ perhaps most tangibly from all the other Vanguard models. While virtually all of the exemplar Vanguard schools and districts pay attention to relationships, to parent involvement, to creating a positive culture and environment in their schools, the lengths to which the HPHP schools go to address these concerns for their particular student populations set them well apart.

Foster Close Student-Teacher Relationships
“...it's the relationship first, always. Then the program, then the facility and everything else. But relationships are what make it all work, so that's what we spend most of our time on.”
– Head of School, Codman Academy

“It's all about personalization – how many adults in the building touch each child.”
– Principal, University Park Campus School

First and foremost, these HPHP schools focus on numerous and intensive adult-student relationships. School structures are created in such a way as to maximize contact, continuity and support. Several of these schools, for instance, have very intensive advisory systems. At the Lowell Middlesex Academy Charter School (LMACS), student groups of 15-18 meet twice daily for 30 minutes mid-day and 14 minutes at day’s end (with a weekly schedule targeting inspirational readings, ethical topics, work experiences and celebrations of successes on specified days). At Codman Academy, single-sex, multi-grade “crews” of ten students and a faculty member meet twice daily for 45 minutes. The crews stay consistent year to year and are jointly responsible for specific chores, as well as incorporating academic advising. MATCH and UPC involve all administrators, educators and tutors in a team approach to student support, while LMACS also appoints a student advocate – a single adult champion to monitor progress, contact parents and otherwise fulfill his or her 14 points of responsibility. Most of the schools cite the importance of small school size and small class size as important to relationships, while UPCS was founded as an “early-start” grade 7-12 school explicitly for the continuity in adult-student relationships the middle/high school model enables. It also employs a two-year looping strategy in order to capitalize on relationships once they are developed.
Promote the “School as Community” Construct

“We’re competing against a lot of negative pressures these kids have in their lives – crime, drugs, gangs. So in a way, we’re trying to make Codman be the gang.”

– Head of School, Codman

The approaches these schools take involve not only weaving a web of relationships to and from each student but also creating strong community constructs for the school as a whole – stronger than traditional public schools, and many private ones as well. Codman exemplifies this approach, with its fostering of “the Codman way.” The school has developed all-encompassing rituals and traditions, even its own vocabulary (with “crews” instead of advisories, “community circle” instead of all-school meeting, etc.) The mandatory Codman Saturday School program held ten Saturdays per semester offers group enrichment, which is seen as valuable in its own right, but is also intended to expose students to the Codman culture six days most weeks. “When you are here until 5 pm every weekday and half the day on Saturday, it makes it very difficult to hold on to your old friends and your old life,” explains the principal. “This becomes like a boarding school. We want kids to bond with each other, to keep each other on the right track.”

Other Vanguard HPHP schools like UPCS and SBC have their own versions of these constructs. While less extensive, their constructs are still novel enough for these districts, like Codman, to feel the need for week-long acculturation programs prior to the start of the year for entering students.

Make Expectations Explicit – and Enlist Students to Transmit Them

“Fifth graders for the first few weeks are in shell-shock,” because the behaviors that earn demerits were never as closely monitored in their previous schools.

– Principal, Boston Collegiate

The advance acculturation programs also begin the process the HPHP schools use to make explicit their expectations for behavior and academic achievement. LMACS has its “non-negotiable rules and policies.” Boston Collegiate has a full merit and demerit system, and a weekly individual demerit sheet that travels, along with a class behavior rubric, from teacher to teacher throughout the day.

Codman focuses more on academic expectations, which they acknowledge come as a “culture shock” to most entering students. Incoming freshman receive a booklet of advice letters prepared the previous June by students just completing their first year, providing an unvarnished view of what is to come. They also attend a summertime dinner and listen to these now-experienced students talk about the school and its culture of considerably higher expectations. By their first day of class, they have already had significant contact with the school and have heard in meaningful ways what to expect. (See family involvement section below.)

Focus on Psycho-Social Needs

“We just think social/emotional health is vital and that [this work] has to be done. Instead of bus monitors and lunch ladies and paraprofessionals, we have social workers.”

– Head of School, Codman

Educators at these schools generally see their students as motivated to succeed but beset by circumstances that can interfere with their academic achievement. At LMACS, which serves a population of high school drop-outs aged 15-21, all of the full-time faculty have experience and/or formal training in human services to enhance their understanding of their students’ challenges. The school also supplements the main curriculum with “psycho-educational courses” such as life skills, non-violent conflict resolution and parenting. Codman employs a full-time social worker to address the non-academic needs of both the students
and their families, including job training, child care or health services. UPCS also provides services for parents, such as GED and ESL programs.

Require Involvement by Parents and Caregivers

“Getting it right from the beginning is so important... We want to get them talking, telling us the story.”

– Head of School, Codman

Most of these schools require parental involvement – even before students enter. UPCS and Codman both have a mandatory pre-enrollment meeting. Codman, in fact, makes three positive contacts with parents before the opening of school. The most important is an extensive intake interview, typically at least an hour with the family, including time with the student and parent/guardian together, and then each separately. The first question is always “Tell me the story of your child’s name.” Head of School Meg Campbell explains: “Names bring up so much: a family history, their aspirations for their child...” The second question: “What are your goals and dreams for your child?” Students are asked to assess their own learning style, strengths and challenges. Parents are asked to comment on the student’s home and life experiences. When necessary, Codman’s social worker helps the family find resources for identified needs.

All the schools prioritize on-going communication with parents as well, including weekly calls at MATCH and University Park, and home visits from advisors at Boston Collegiate. While all the schools make significant efforts to attract family involvement, Codman reinforces their incentives with negative consequences as well: parents failing to attend required parent-teacher meetings lose the right to subsidized public transportation passes for their child for the following term.

Readiness to Teach

On the surface, HPHP schools’ attention to the readiness to teach side of the learning triangle developed for this report looks more similar to the efforts put forth by their colleagues at less challenged schools. Like any school attempting to improve standards, they need to incorporate curricular focus and data-driven differentiated instruction, and to develop effective interventions for students needing special help. And in order to achieve any of this, they need to foster a collaborative teaching atmosphere.

There is, of course, more than one route to successful teaching and learning, particularly given different audiences. These HPHP schools carefully design their instructional programs to ensure that they address the needs of their students. Thus LMACS provides its older, dropout students with a clear, sequential program that is self-paced and focuses on skill mastery. Similarly, Boston Collegiate uses a highly structured math program with in-depth focus on essential concepts and skills and lots of repetition.

Codman, on the other hand, offers inquiry-based expeditionary learning, based around the big questions that require critical thinking, gathering research and working in groups. Yet the school works very hard to ensure that the students are indeed mastering the required learning standards through their projects, and gains a tremendous advantage in terms of relevance as students pursue their learning by interacting with the real world around them.

But on looking closer, it is also clear that the HPHP schools approach the readiness to teach dimension with more intensity than many other schools. This seems particularly true with regard to a few key domains, including sheer time allotted for teaching, the link between frequent assessment and individualized instruction, and human capacity issues relating to their teaching force.
**Provide More Time in Which to Teach and Learn**

Many of the students at these five high schools arrive up to several years behind grade level in basic skills. Consequently, these HPHP schools spend more time teaching than their standard counterparts. MATCH extends its “regular” day to include two mandatory small-group tutoring periods for all. UPCS’s day runs from 8:00 to 4:00, with additional before and after school sessions from 7:30 to 6:00. Boston Collegiate has similarly long hours, along with a longer year (45 weeks for teachers, plus ten paid professional development days). Codman adds mandatory Saturday classes.

Individual schools also schedule the time the students have in ways they feel are most productive. LMACS tailors its unorthodox schedule of late starts and finishes to its older, less traditional population. Codman schedules in large time blocks to allow for schoolwide, class and individual projects. Students are provided one full day a week for site explorations, and two days a month for interning activities. Several other schools use 60 or 90 minute teaching block as well, in order to accommodate individualized instruction. Virtually all of the leaders of these schools stress that they use the extra time not simply to offer more of the same kind of instruction; they use it to construct dramatically different school-day schedules that suit the goals of their school and the needs of their students.

**Use Frequent Assessment to Individualize Instruction**

“We teach students, not material.” – Teacher, UPCS

While data-driven instruction is a cornerstone of school reform, some of these HPHP schools implement this strategy with a special intensity. Every Friday morning from 8:30 to 9:40 MATCH School students take five weekly assessments on the material they were taught that week. Tutors grade the assessment immediately while students attend the Schoolwide Assembly. Students who pass all five parts are dismissed at 11:30; those who pass four out of five are dismissed at 12:30; all others stay until 2:30. This time is used to provide immediate individualized intervention on topics students had trouble with. The assessments also trigger adjustments to the general instruction for the following week.

UPCS also collects voluminous data on performance, which it uses to inform instruction. (See next page for a flowchart depicting the school’s approach.) As part of this approach, UPCS students use an electronic assessment/feedback system 20 minutes a day to help monitor performance. The program provides individualized progress reports that allow both students and teachers to determine where each student needs help.

LMACS developmental math program includes frequent assessments at the end of individualized tutorials, and progress checks are administered to all students every Thursday to assess their understanding. Boston Collegiate also has structured weekly assessments designed to catch problems for individual students before they compound. Even Codman’s expeditionary learning projects have built-in periodic assessments to keep instruction on track and emphasize student accountability.

**Pay Extreme Attention to Human Capital**

These HPHP schools also do some things differently when it comes to finding and supporting the teachers they connect their students with. Many look for individuals who are particularly suited to working with the challenging populations they serve. LMACS, as previously mentioned, hires only people with social services experience or qualifications. Boston Collegiate, like the others, focuses on the mission of the school “to prepare each student for college” and makes it clear that this means all students, even if that means teachers need to put in longer hours.

Codman recruits teachers who are motivated to build their own curricula around their interests and those of their students. MATCH takes an unusual approach with its MATCH Corps tutors, recruiting young, highly motivated and accomplished recent college graduates.

**Virtually all of the leaders of these schools stress that they use the extra time not simply to offer more of the same kind of instruction; they use it to construct dramatically different school-day schedules.**
# University Park Campus School

## Data Analysis Flow From Data to Intervention

<table>
<thead>
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<th>Data Analysis</th>
<th>Interventions</th>
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<td>Pre-entrance data from elementary schools — grades 6, MCAS, Portfolio — ELA &amp; Math</td>
<td>All data are discussed and analyzed by all staff (regardless of the subject area)</td>
<td>All incoming grade 7 attend August Academy staffed by 7th-grade teachers — CCC data (A) — continues all year, portfolio data (A) continues all year</td>
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<tr>
<td>Classroom performance / 2 week progress reports (A) Teacher evaluation</td>
<td>Development of shared conversation</td>
<td>2 week progress reports to parents (A)</td>
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<tr>
<td>SAGE reports (district) students identified (A)</td>
<td>Data: Standardized test results, portfolio, classroom performance, CCC data, anecdotal evidence</td>
<td>Group changes/additional class time to facilitate remediation</td>
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<td>Raw score MCAS &amp; PTS data for present grade 8 ELA informs MCAS prep</td>
<td><strong>Steps:</strong></td>
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<td>IEP’s and 504 Accommodation Plans (A)</td>
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<td>MCAS data for present grade 9 students informs MCAS prep (A)</td>
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<td>Interim Reports (A), grades, Teacher Talk, classroom performance</td>
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<td>CCC data</td>
<td>Strong Instructional Leader</td>
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</tr>
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<td>Work for Worcester Youth – Summer</td>
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<td>MAT 7</td>
<td><strong>Teacher Intervention:</strong></td>
<td>Clark programs</td>
</tr>
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**Grades 11, 12**

- PSAT scores, grades, classroom performance
- Internship Report (A)
- Community Service Reports (A)
- Clark University grades & professor comments (A)
- Careful analysis of open-ended questions in Math
- MCAS and SAT 9
- Work for Worcester Youth – Summer

**Teacher Intervention:**

- Teachers
  - Seek out knowledge about test
  - Serve on State Curriculum Standard Setting Committees
  - Serve as MCAS scorers
  - Serve on state-level curriculum area and test development
  - Train in Test WIZ technology
  - Train in portable technology
  - Explore DOE and Princeton Review web sites
  - AP Conferences
  - Presentations

**Interventions**

**Grades 7, 8, 9, 10**

- SAT prep time: “Student talk around portfolio,” rubric-based classroom work
- Student-designed path for improvement (A), Tribunals
- AP program – looping grades 9-12 (A) developing
- Faculty visits to internship and Community Service sites
- Students encourage each other to take Clark classes
- Wednesday Schedule – small group instruction
- Clark Classes

**Grades 11, 12**

This flowchart shows the extensive process that University Park Campus School in Worcester, MA developed to individualize its analysis of student performance and follow-up teaching approaches. UPCS’s strategies to serve its high-poverty student population were studied by Mass Insight as part of its Building Blocks effective-practice research initiative in 2002-3. See www.buildingblocks.org or www.massinsight.org for more.
In return for the mission-focus, the challenges and long hours, however, teachers at these schools say they are offered a climate of professionalism and the chance to focus on teaching that they might not find elsewhere. All these schools schedule significant collaborative planning time, mentoring opportunities and elements of creative control. Where their conditions allow, schools also offer merit pay and other incentives (see below).

**Readiness to Act**

Despite the increasing attention devoted to student-centered learning, in the standard model of public education, bureaucratic imperatives frequently impede action that is truly best for students. At the same time, some of the incentives that shape adult behavior in the traditional system have become removed from the students’ interest. In schools that work, conditions allow decisions to focus on student needs and incentives become re-integrated with the “children first” mission. If not for the presence of a different condition set, many of the most crucial ways in which these schools support their students’ readiness to learn and their educators’ readiness to teach simply would not be possible.

This readiness to act dimension of HPHP schools can be seen in two main arenas:

- **Authority over the critical resources: people, time, and money.** The question is: Who has the freedom and authority to make fundamental decisions relating to the use of funds, the allocation of time, and the hiring, firing and deployment of staff? The more clearly that this authority lies in the hands of school or district leadership, the more likely it is that the vision of a school’s plan can be fulfilled.

- **Professional human resources approaches and norms.** Public-sector teaching has not kept pace with other sectors in the development of twenty-first century HR norms and approaches. HPHP Vanguard schools, on the other hand, have taken some new and different paths to recruiting, work conditions, professional development, pay and other professional incentives.

Both types of change often require either close involvement and negotiation with unions or a “work around” of union regulations, which is why these types of approaches have tended to emerge within charter and charter-like schools. (The news from these experiments seems to be having some of the intended “laboratory” effect. More recently, some districts across the nation have been able to work with their unions to negotiate conditions and financial incentives that re-orient the way schools work. For an example, see the review of New York City’s *Children First* report, released early in 2007, and other district experiments in the second section of this supplemental report.) The readiness to act dimension of the Vanguard HPHP schools shows up in the following examples.
Authority to Increase and Use Time to Support the Mission

When Principal Rodrigues first began the process of creating a new school, she did a series of “what if” scenarios: What if teachers had more time to plan and collaborate? What if students had more time to learn? What if everyone believed that students could achieve more? And so on. One of the most significant results of this brainstorming was the creation of a radically different schedule – one that would make the most of students’ and teachers’ limited hours, so that both could accomplish more.

– Excerpt from www.buildingblocks.org (UCPS strategy)

As evidenced in the learning and teaching strategies summarized above in the readiness to teach section, many of these HPHP schools’ more intensive approaches require longer school days and longer school years. This is necessary both to increase the amount of time available for student learning, and to increase the amount of time available for teacher collaboration and development.

In the charter schools, longer hours are incorporated into the teacher contracts from the start. At UPCS, it all started with some out-of-the-box thinking based on designing a school around what students (and staff) needed, as described in the box at the top of this section. When the school was launched, the official school day ran from 8 am to 4 pm, and before- and after-school programs kept the school open from 7:30 am to as late as 6 pm. Like all aspects of the school’s programming, the longer day was approved by both the school committee and the local teachers union. The school did, of course, have to pay for these hours; teachers received 19% additional compensation because of the extended day. (Note: Due to budget cuts in more recent years, UPCS had to cut back on its longer day. The principal will continue to offer before- and after-school programming, but regular school hours were considerably trimmed.)

These high-performing, high-poverty schools also use unorthodox scheduling to achieve a number of their other teaching and learning goals. Some, like UPCS, use longer blocks to give teachers more time to delve deeply into topics and develop project-based units. (It also means less time is lost shuffling from one class to another). Others, like MATCH, rearrange teaching to carve out time for weekly assessments. Codman accommodates the on-site explorations throughout the city that are so central to its learning approach. None of these would be possible without the freedom and authority to tailor scheduling and the use of time to students’ needs.

Authority to Choose Staff Best-Suited to the Mission, and Freedom to Offer Them Incentives

“There is no question that the success of [Boston Collegiate] … would not be possible without the hard work and dedication of the school’s educators…. But in return they enjoy a very professional environment – one that sets clear expectations and rewards performance.” Excerpt from www.buildingblocks.org (South Boston Harbor Academy [now Boston Collegiate] strategy.)

Charter schools are free from the types of union restrictions on hiring, firing and allocation of staff that cause the most difficulty for instructional leaders attempting to bring about a radical culture change within a school: seniority, “bumping” and “force placing.” The absence of such practices and the use of open recruiting or open posting of teaching positions can
go a long way to helping bring in teachers who are focused on student achievement.

Again, UPCS, as the only district HPHP school in our group, had to pursue similar ends through the system. In this case, the union proved to be a largely willing partner in the development of the new school. A clause in the union contract states that changes to the contract could be made with a two-thirds faculty vote. This allowed the principal to choose staff based on more than just seniority in the Worcester Public Schools. Ultimately, the union approved the new school largely because 1) the steering committee was careful to involve the union in ongoing dialogue, and 2) all parties agreed that the school would be carefully monitored.

Where possible, several of these HPHP schools also let pay reflect merit. Boston Collegiate, for example, has the ability to vary pay according to the merit of each individual. The starting salary of a Boston Collegiate teacher is typically higher than that of a BPS teacher, but salaries also plateau sooner. In strong budget years, teachers might receive anywhere from a four to a ten percent pay rise. However, in tight budget years, raises are less substantial.

**Readiness to Increase Resources to Implement a More Intensive Approach**

“MATCH School has moved to an atypical “resource-raising” approach…[It] invests in building relationships with potential private sector partners and funders…. Promotion of its successes initiates a “virtuous cycle” that leads to further interest and funding.” Excerpt from www.building-blocks.org (MATCH strategy)

As we have seen, turning around learning for students with significant poverty and related challenges requires something more, and something substantially different from what may work adequately well with less challenged students. Not surprisingly, it can also require significantly more resources. Under standard public school district allocations, such funds are often not available. Schools with the freedom and authority to pursue funds from other sources have often been the ones that have been able to work out ways to make their child-centered vision a reality. Several of our Vanguard HPHP schools have been particularly resourceful in finding additional funding or other in-kind resources to enable the intensive approaches they take with their students.

Rather than living within typical resource allocation limits, for example, MATCH School has moved to an atypical “resource-raising” approach — expanding adult support and raising additional financial resources through both working and funding partnerships with the public and private sectors. They expanded adult support resources by developing their MATCH Corps of recent college graduates to fulfill the need for intensive tutoring that they could neither fund the teaching staff for, nor leave to volunteers. They entered into partnerships with local universities and nearby high schools. They also looked to a range of public financing options (such as leveraging Federal Tax Credits to secure funding for a new construction) as well as to drawing additional funds from private sector companies and private philanthropies.

UPCS has been able to leverage its partnership with Clark University to increase its resource pool. Codman also collaborates with a wide variety of organizations and individuals to bring inquiry-based learning to life for its students. From small-scale partnerships (the Boston Globe delivers free newspapers to each freshman’s home every weekday), to larger, multi-year collaborations (the Huntington Theater hosts ninth and tenth Codman students every Friday from October to June), the school puts untiring effort into identifying the resources necessary to make the school experience active, engaging, and relevant to students’ lives.

Several of our Vanguard HPHP schools have been particularly resourceful in finding additional funding or other in-kind resources to enable the intensive approaches they take with their students.
Poverty’s “Perfect Storm” Impact on Learning and the Implications for School Design

Three colliding factors = a hurricane of challenge

Schools in the bottom five percent of achievement – the focus of The Turnaround Challenge report – predominantly serve high-poverty student enrollments. While the research linking poverty to low achievement could not be clearer, it also offers insight into potential counter-measures. If we can identify the specific challenges that poverty tends to throw against the pursuit of higher achievement, we can (as high-performing, high-poverty schools are demonstrating) create strategies specifically designed to meet those challenges.

That is the focus of this section of the Supplemental Report. Its resources are organized in several parts:

1. An expanded description of the many poverty impacts that comprise the “perfect storm” introduced in Part 2.3 of the main report;
2. A roster of several key studies and reports on poverty and low achievement (see box); and
3. Snapshots of alarming demographic trends of poverty in the United States and their growing impact on schools (throughout).

Poverty’s “Perfect Storm” Impact on Learning: An Expanded Analysis

The effects of poverty on student performance are deep, wide-ranging, and complex. Poverty-related risks are direct and indirect, occur at the individual, family, neighborhood and community levels, and affect cognitive development and academic performance. They jeopardize both intellectual readiness to learn and social readiness to participate in classroom life. Moreover, one effect of poverty can compound others, increasing the likelihood that high-poverty students in high-poverty schools in high-poverty neighborhoods will find it difficult to perform to the standards of their better-off counterparts. And the fact that poverty-related risks start from before birth means that even if school systems can find ways to help high-poverty students develop at the same rate as their more privileged counterparts, these students will remain behind their peers due to a disadvantaged starting point.

Poverty is not an excuse for acceptance of low student achievement. The point of this dimension of The Turnaround Challenge is that learning more about poverty’s serious and complex influences helps us understand how to address them. Indeed, recent studies in fields ranging from brain-based learning to sociology and psychology confirm that enhanced understanding of the workings of poverty’s perfect storm can be used to design well-informed and carefully constructed interventions that improve the chances of closing the gaps created by poverty. Early studies show encouraging instances of appropriate interventions resulting in cognitive catch-up, and detail how changes in economics and environment can make up for early environmental deprivation – sometimes within the space of a few short years.

While the results of a few interventions are mentioned within this section, we concentrate here on understanding poverty’s perfect storm, leaving analysis of various reform strategies to other sections of this report. However: this analysis will help explain why existing mild interventions in chronically underperforming high-poverty schools have not produced much improvement in student performance. Addressing the needs of
high-poverty students in high-poverty settings is bound to be a very demanding task, one that is very different from increasing performance within other types of schools and communities. Again: what this section doesn’t provide is an excuse not to tackle the task at all, or to continue to pursue the same types of reforms that have failed to substantially improve chronically under-performing high-poverty schools. Instead, it provides a set of parameters that buttress the points made in the main Turnaround Challenge report and earlier in this Supplemental Report: that failing, high-poverty schools need much more than incremental change. They need a fundamental rethinking of all of the ways they serve their high-need students.

New Research Is Pinpointing Poverty’s Most Critical Impacts

The current decade has seen an explosion of research on poverty’s role in our schools and the lives of young people. On the one hand, No Child Left Behind has generated a mountain of valuable statistical data on the patterns of poverty and low achievement. Concurrently, cognitive and social scientists are constructing a deeper and more profound understanding of poverty’s devastating effect on childhood and personal development, and in some cases, what can be done about it.

Several resources are particularly useful in providing a cogent overview of current factors and suggesting research and resources for further study. More complete reference information can be found in the reference section of the main report, or the resources section at the end of this Supplement.


This article looks at the political history and research on efforts to close the achievement gap between poor/minority students and wealthier/white students. The author concludes that we have the means and strategies to close the gap, but questions whether we have the collective public will to do so.

Karen Pellino: *The Effects of Poverty on Teaching and Learning* (2001)

A reading specialist in a high-poverty New York school, Pellino captures the effects of poverty in real classrooms, with real teachers struggling to assist real children. An outstanding introduction for practitioners and policymakers alike.


This team of neuroscientists summarizes recent research on the relation between poverty and children’s cognitive development. Their reference list is a valuable conduit to other research in this field.


This highly-respected education researcher connects the dots from many fields of research to provide a stunning and sobering profile of poverty in our schools. While we greatly admire his analysis, we depart from one of his conclusions that “poverty places severe limits on what can be accomplished through school reform efforts;” instead, we believe that school reform must be expanded to encompass mitigations of poverty’s effects – hence the HPHP Readiness Model presented in the main report.


Anyon argues that the problems of urban education are nested in underlying social policies and inequities, and that our success in solving the achievement gap lies in redefining education policy by making schools the hub of a new, broad “policy alignment” that recognizes and attacks poverty and poor schooling as two facets of the same problem.


Rothstein seeks to explain how social class differences are likely to affect the academic performance of children. Of particular interest is his unvarnished assessment of some of the better publicized reform initiatives.


A close, data-driven look at cultural impacts on achievement, with a focus on schools that are successfully mitigating those impacts.


The authors discuss a crucial area of research: the resiliency demonstrated by students who succeed despite very adverse conditions.
INDIVIDUAL AND FAMILY RISK FACTORS

Storm #1: How Poverty Undercuts Children’s Readiness to Learn

One thing is clear: the academic achievement levels of poor urban students are markedly lower than those of their counterparts in suburban and rural schools. This is not at all to suggest that poor urban students are inherently less intelligent. Rather, a wide body of research shows that persistent and extreme poverty, and related social, environmental, and psychological factors (some parallel and some secondary), affect both the cognitive development and school achievement of individual children.

(Anyon, 2005)

The picture is complex even at the individual and family level, and it is perhaps important to capture a cross-section of the main risk factors to understand that the whole is greater than the sum of its parts. Children of poverty are not nearly as prepared as the non-poor to enter the classroom. Before kindergarten, they already test lower on assessments of cognitive skills. They come from families that face grave economic scenarios, and endure both physical and psychological factors that limit their ability to thrive. Health and safety risks can often overshadow the need for higher order thinking skills, and parent and familial modeling often fail to encourage children to focus on school. In addition, high-poverty students often suffer from poor self-image, or are influenced by stereotypical behaviors that thwart goal-setting and their desire to succeed. One factor compounds another; as students who are not at risk continue to develop and progress on a higher trajectory, poor students fall even further behind.

The more we discover about poverty’s perfect storm, the more opportunity we have to design focused, effective interventions that can break longstanding trajectories of risk.

Taken together, these individual and family risk factors go a long way to explain the persistence of current underperformance. But the more we discover about poverty’s perfect storm, the more opportunity we have to design focused, effective interventions that can break longstanding trajectories of risk. Recent research on a number of the risk factors confirms that some risk can be mitigated. While recognizing that many of the factors are interrelated, we will identify several of the most important strands in the following sections.

Developmental Readiness and School Readiness

The impacts of divisions between rich and the poor, urban and suburban, at-risk or not, begin at birth and are reinforced daily by a child’s surroundings. While both the causes and manifestations of these disadvantages are difficult to disentangle, many researchers make a distinction between a child’s readiness to learn, or “developmental readiness,” and his or her readiness to enter the classroom, or “school readiness.”

General risk factors include:

- **For children:** limited reading proficiency, abuse or trauma experiences, disability or illness, or exhibition of behavioral problems (Anderson).

- **For families:** poverty, low parental education level, increased numbers of children per household, lack of home ownership, single parent households, welfare dependence, substance abuse and/or physical abuse, mental or physical illness, or other family dysfunction.

- **For communities:** neighborhood poverty, crime rates, unemployment rates, and the number of teen parents.

Whatever the specific metrics used for risk at each level, it is clear that a large percentage of students in chronically under-performing schools will be "at-risk" at two or at all three levels.

What Does “At-Risk” Really Mean?

The term “at-risk” is widely used to describe children, families and communities based on a variety of indicators, yet our survey of the research indicates that there is no consistent definition used by providers, funders, policy makers, or media.

Generally speaking, though, primary measures for risk include:

- **For children:** limited reading proficiency, abuse or trauma experiences, disability or illness, or exhibition of behavioral problems (Anderson).

- **For families:** poverty, low parental education level, increased numbers of children per household, lack of home ownership, single parent households, welfare dependence, substance abuse and/or physical abuse, mental or physical illness, or other family dysfunction.

- **For communities:** neighborhood poverty, crime rates, unemployment rates, and the number of teen parents.

Whatever the specific metrics used for risk at each level, it is clear that a large percentage of students in chronically under-performing schools will be "at-risk" at two or at all three levels.
Developmental readiness indicates the cognitive development level at which a child is ready to undertake learning specific tasks. School readiness refers to readiness to enter the classroom and access the instruction taking place. It incorporates the level of physical, emotional, and social development necessary for a child to succeed in the classroom. There is general acceptance of the broad categories that contribute to “school readiness,” but to date, there is little agreement among researchers and educators as to precisely which characteristics constitute school readiness – or how to measure them. Few tools exist to measure this type of readiness for individual children. (Anderson, 2006) That presents a challenge to schools serving high-poverty schools with high percentages of children who may not be school-ready when their age implies they should be.

Health Risks and Brain Development

Inadequate nutrition and insufficient access to a proper diet are among many of the health risks associated with children living in poverty. Children who do not ingest either the volume of food or the nutrients necessary each day are at risk for slowed brain development and chronic stress on the body. (Given, 1998) Other health risks include lack of safety, inadequate medical care, teen pregnancy, and increased infant mortality, to name a few. Other health factors, such as low incidence of breast-feeding and high rates of childhood disease, premature births, and low birth weights, all affect the a child’s growth and cognitive and physical development.

There are also health risks that cause additional problems because they go undiagnosed from an early age. Recurring otitis media, for example, is linked to hearing impairments, slowed language development and reading problems in school. The disease is not a product of poverty, but the number of cases that go undiagnosed and the number of children who do not receive treatment is affected by poverty and the lack of access to health care. (Berliner, 2006) Similarly, while lead poisoning is on the decline, some 450,000 children between the ages of one and five, mostly poor and mostly of color, still have enough lead in their blood to cause cognitive damage. (CDC, 2004)

Family Economic Hardship

Over 30 percent of urban students live in poverty, with 42 percent eligible for free and reduced lunch, compared with 18 percent of suburban and 31 percent of rural students who are similarly eligible. (Anyon, 2005) The figures for students in chronically failing schools targeted for turnaround are even higher. The implications of this type of economic hardship for students’ families are far-reaching. Parents often move from one location to another in search of work, which contributes to a high level of mobility among poor, urban students. Parents can rent weekly, even daily in some places, while job hunting or dealing with other personal, social, or family issues. Frequent moves have strong academic and social consequences for students, who transfer from one school to another, often unaccompanied by records or concrete information that can be passed on to the student’s next teacher. (Pellino, 2001)

Lack of resources also contributes to poor families’ inability to access high quality day care and pre-school. Children from high-poverty families enter school without the advantages of enriched pre-K learning environments.

Research suggests, however, that even small increases in the incomes of poor families can improve student performance. (Anyon, 2005) These increases enhance cognitive development, and may also improve the likelihood of future success in the workforce. One study, for example, found that income supplements as small as $4,000/year improved school achievement for elementary students by 10 to 15 percent compared with students in the control groups.
Another study by Dearing, McCartney, and Taylor (2001) followed poor and non-poor families and tracked their income-to-needs ratios. The study found that poor families who were able to move up in socio-economic status had children whose test scores and academic performance resembled that of non-poor students. In other words, they were able to overcome their cognitive deficiencies from earlier in life. (Berliner, 2006) The researchers also found that psychiatric symptoms associated with poor children were nearly eradicated by the fourth year after moving out of poverty. The general conclusion is that reducing poverty helps children succeed in school and beyond.

Other studies have also found that increases in family income result in better school attendance and achievement (Salkind & Haskins, 1982), and that additional income from work assistance programs results in improved achievement and behavior (Huston et al, 2001). All of this seems to indicate that changes in income can have a positive impact on student achievement, cognitive ability, and related at-risk factors.

**Parenting Style**

Parenting and family atmosphere play a significant role in child development. Children from more well-off homes usually have families who encourage child development through activities such as visiting museums and other cultural outings, taking music lessons, and participating in group athletics, to name a few.

That much is obvious. But the difference in the home environment is most noticeable at two points – in the years before school starts and during the summer months for school-age students. Berliner notes that “Children of the poor consistently

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### How Poverty Undercuts Readiness to Learn continued

**Poverty Facts Shaping Education Today**

**Fact #1: We have more child poverty than anywhere in the developed world**

Nearly 13 million US children live in poverty (NCCP 2006) – more than 1 in 5 overall, more than 1 in 4 Hispanic Americans, and more than 1 in 3 African Americans. Extreme poverty and long-term poverty are both substantially higher than in other developed countries (Berliner).

Our lack of educational competitiveness in the world is the direct product of how poorly we educate poor and minority students: the scores of white students would rank 2nd in reading, 4th in science, and 7th in math, while minority students would rank last in all three categories.

The number of children living in poverty increased by more than 11% between 2000 and 2005 (NCCP 2006).

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent of children in poverty</th>
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<tr>
<td>United States</td>
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<tr>
<td>Australia</td>
<td>14%</td>
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<tr>
<td>Canada</td>
<td>14%</td>
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show greater learning losses over summer than do children of the middle class (Cooper, Nye, Charlton, Lindsay & Greathouse, 1996). Middle-class children apparently get a much more nutritious cultural and academic diet during the summer than the poor. This results in middle-class children gaining in reading achievement over the summer, while lower-class children lose ground.” (Berliner, 2006)

Participation in these activities is less common among lower income families, partly due to economic and logistical constraints, but also possibly due to different expectations formed by the parents’ own educational experiences. Sixty-two percent of children from low income families have parents who have never attended college, and some 82 percent of children whose parents have less than a high school diploma live in low-income families. Yet when parents have at least some college, the figures decrease significantly – only 24 percent of children with parents who have attained some college education live in low-income families. (NCCP, 2006)

Living in poverty, and the emotional and psychological strain that go along with it, have also been shown to affect parenting style in ways that can directly impact cognitive growth and student achievement. (Pellino, 2001) In particular, processes of language development and use, and parental attitudes toward life and success – both strongly related to student performance – have been shown to vary significantly by economic status.

Recent research indicates a strong correlation between economic status and language use and acquisition, which appear to contribute to disparities in cognitive development. One longitudinal study tracked 42 families with newborns and researched each child’s language development along with each parent’s communication style. Results indicated that children with parents who were professionals were exposed to greater vocabulary and knew over 1,100 words. The other end of the spectrum included children whose parents were on welfare. These children retained an average of 525 words. The IQ scores between the professional group and the welfare group were also strikingly disparate: the average IQ for the children of professionals was 117; for the welfare group, it was only 79. (Tough, 2006) In explaining the cause of these differences, researchers noted that the parents from the professional group spoke about three times more words or utterances per hour than those from the welfare group.

In addition, the same study also concluded that a far higher percentage of the parental utterances heard by children of professionals were words of encouragement, while the welfare parent group relied heavily on discouragements and prohibitions. In general, parents in more affluent homes appear to have been more sensitive to children’s viewpoints, more encouraging, less intrusive, and less detached. These parenting behaviors help increase both IQ and school readiness. (Tough, 2006) Parents of working class and poor families generally appear to apply parenting strategies that are less structured, and reinforce more of a leader and follower mentality, in comparison to the more collaborative home environments in the middle class families. While there are apparent strengths in both approaches (the working class and poor children were allowed more free time, and seemed to be more autonomous and less bored or stressed), research shows that the middle-class children

One assessment determined that the cognitive scores of children entering kindergarten from the highest socio-economic group are 60 percent greater than those from the lowest.
acquired and retained more of the life skills that were likely to help propel them toward success in school and the workplace. (Lareau, 2003)

Studies focusing on children as they first enter school confirm that by the time children are of school age, there is a strong correlation between cognitive ability and socio-economic status. One national assessment, conducted in 2002 by the U.S. Department of Education, determined that the cognitive scores of children entering kindergarten from the highest socio-economic group are 60 percent greater than those from the lowest. (Anyon, 2005) Such research has helped to fuel substantial interest and investment in early childhood education and an emerging focus on the critical “zero-to-three” years of brain development. It has not, however, produced strong consensus regarding the best ways for schools to work with students arriving, completely unprepared for formal schooling at age five or six.

**Student Motivation**

There are a number of ways in which both poverty itself and its resultant parenting styles can help undermine student motivation to learn. These range from the reality of job scarcity that awaits poor urban youth, to the corrective and discouraging tones more often employed by their parents. Research has shown that in many cases, poor students come to the classroom already programmed with a poor self-image. (Ciaccio, 2000)

Problems with self-image can of course be aggravated by stereotyping. Anyon (2005) reports that many students of color are influenced by stereotypes of African American and Latino students as incapable of academic excellence, disinterested in school, and responsible for their own lack of achievement. This stereotyped expectation thwarts motivation and prevents students from fully engaging in school for fear of both failure and fulfilling the stereotype.

Additionally, according to Caine (2000), many poor children suffer from a phenomenon called “downshifting.” This occurs when one’s biological response is to focus on survival needs. According to Maslow’s hierarchy of needs, if individuals’ safety and security needs – such as food and a safe place to live – are not met, then they cannot focus on anything other than attain-
ing what is necessary for survival. For a child of poverty, when their brains downshift (because, for example, the path they travel to school is dangerous), they are literally only able to focus on survival. Downshifting can contribute to a sense of helplessness, low self-esteem, fatigue, unresolved emotional issues, volatility, and defiance.

A related issue involves difficulties with the teacher as an authority figure. Raised in home environments more likely to reinforce direct and punitive authority, students from low-income families are more likely to maintain resistance toward teachers and their authority. This can lead to an inability to handle even benign, constructive criticism or to view the classroom as welcoming and engaging in any way. (Pellino, 2001)

What’s required is a reorienting of the education model that takes squarely into account the learning and behavioral deficits that poverty inflicts on so many of students they serve.

As a result, as documented by Mather (2002), poor children demonstrate more frequently than affluent children the following characteristics in school: dislike of authority, disorganization, physical aggression, open displays of emotion, and the view that discipline is more about penance and forgiveness than change, to name a few. Other academic and behavioral problems include delays in language development, violence, social withdrawal, substance abuse, and depression. (Pellino, 2001). Our examination of high-performing, high-poverty schools highlights these schools’ relentless focus on students’ readiness to learn. In some ways, that phrase (and that analysis, found in Part 2 of the main report) can serve as a summary of poverty’s impact on individual children and, consequently, on the strategies successful schools use to educate these students effectively. Though there are always exceptions, in general poverty dramatically undercuts students’ readiness to learn. High standards, demanding curricula, and appropriate performance tracking are all important elements in serving children of poverty, but they are not sufficient. As the HPHP schools demonstrate, what’s required is a reorienting of the education model that takes squarely into account the learning and behavioral deficits that poverty inflicts on so many of students they serve.
COMMUNITY AND ENVIRONMENTAL EFFECTS

Storm #2: How High-Poverty Environments Complicate Schools’ Mission

As if the challenges of individual and family effects weren’t enough, children of poverty face additional layers of risk. “Compositional” effects, such as the community into which one is born, or the neighborhood in which one dwells, also have a deeply significant impact on a child’s educational experience and performance in the classroom. Being born into a wealthy suburban community or inner-city ghetto correlates strongly with whether a student is likely to graduate from high school and attend and graduate from college. This is the second of poverty’s perfect-storm triad of impacts: the neighborhood and school environment in which children of poverty grow up.

The Influence of the Neighborhood

There is much research to indicate that living in poor neighborhoods increases the odds of gang involvement, behavioral problems, dropping out of school, and teenage pregnancy. (Lipp, 1996) While students spend an average of 1,000 hours per year in school, they spend nearly 5,000 hours per year out and about in their communities and with their family. This suggests that children are gaining the bulk of their influential experiences in their surrounding neighborhoods. (Berliner, 2006) Neighborhoods help establish the standards and norms under which children operate with regard to achievement and expectations, as well as basic behavioral norms.

Researchers have investigated school achievement levels for children with similar academic and familial backgrounds, but who live in neighborhoods with different levels of deprivation. The outcomes confirm that educational attainment does differ based on zip code. In fact, one’s zip code or neighborhood is just as likely, current figures show, to determine student success as familial influence. (Berliner, 2006) The achievement records of the high-performing, high-poverty schools demonstrate that zip code need not sync with student success – but right now, that is the norm.

The importance of community and school context is underlined in a number of studies focusing on the performance of poor, inner city students who attend schools in middle class suburbs. Studies in Boston, St. Louis, and Chicago, for example, all found that the students had higher achievement levels, greater college attendance rates, and generally had more success than their counterparts who remained in poor, inner city schools. All this is suggestive of the power of both neighborhood and school to influence the direction and success of students’ lives, even when they carry with them the cognitive lags and ingrained disadvantages of having grown up in poverty. (Berliner, year) And it parallels the experience of the high-poverty-high performance schools cited in the next section of this report that achieve significant success by providing “suburban”
High-poverty urban students are more likely to change schools more frequently, less likely to participate in school-sponsored extracurricular activities and athletics, less likely to come from a two-parent home, and less likely to have a parent who is employed full time.
The first two storms in the triad that makes up this perfect-storm analogy – persistent family poverty, and the environmental impacts of living in high-poverty neighborhoods and attending high-poverty schools – represent a failure of social systems and public policy. The third represents a persistent failure of resource allocation by the nation’s public education system.

Financial Inequality
Predictably, states with the largest populations of poor children generally spend less per pupil. (High poverty rates mean a lower tax base.) For example, a wealthy state like Connecticut averages $9,588 per pupil, while Mississippi spends only $5,391. Because Title I funds are allocated based upon state formulas, states that spend less per pupil also receive less federal money per student. Massachusetts, for example, receives $2,048 per poor child from the federal government, while Arkansas receives only $964 in additional funds to help educate poor children in that state. (Tough, 2006)

Teacher Inequality
Teacher inequality arises from a number of factors. Two have particular impact on high-poverty, mostly urban students: teacher experience and quality, and teacher turnover.

- **Teacher quality**: A large percentage of teachers in poorer school systems have neither majored nor minored in the subject they teach. (Whitmore, 1997) Education Trust research conducted in Chicago, Wisconsin, and Ohio also suggests disparity between qualified teachers and the districts in which they teach. In Chicago, twice as many teachers in high-poverty versus low-poverty schools have failed the basic skills test; in Wisconsin there are two times as many novice teachers in low-performing schools as in other schools; and one in eight Ohio teachers in high-minority elementary schools is not highly qualified, compared with one in fifty in low-minority schools. (Education Trust, 2006)

Studies also indicate that teacher quality is subject to racial inequities. In Illinois, for example, only 11 percent of teachers in majority white schools rank in the lowest quartile on teacher quality assessments. Yet where minorities make up the bulk of the student population, 88 percent of teachers rank in the lowest quartile. (Tough, 2006) For further discussion of teacher inequality for poor and minority students, and proposals to bring the best teachers to underserved districts and schools, see The Education Trust’s complete report. (Education Trust, 2006)
• **Teacher turnover:** The teacher turnover issue or, as Ingersoll terms it, the “revolving door,” contributes greatly to teacher staffing difficulties throughout the United States. Annual teacher turnover rates fluctuate from 13 to 16 percent. However, this figure jumps to 22 percent for high-poverty schools. (Ingersoll, 2004) Since teachers comprise over 4 percent of the civilian workforce in the U.S., that means large numbers of people are moving in and out of the teaching profession. During the course of a year, in fact, over one million people transition in and out of the classroom. These findings – higher mobility rates and larger numbers than other professions – suggest that teacher turnover is largely attributable to the structure and organization of the profession itself. Teachers cite numerous non-financial reasons for leaving their schools, including lack of administrative support, inability to impact the system, disciplinary issues, and intrusions on teaching time. (Ingersoll, 2004)

Whatever the cause, teacher turnover disrupts school functioning and curricular sequencing and can impact student performance. While the loss of learning to teacher turnover has not been widely studied, a 2000 Texas Center for Educational Research study concluded the annual financial costs are in the hundreds of millions of dollars. (TCER, 2000)

*In high-poverty schools, turnover and teacher quality challenges converge, as schools with mostly poor students retain only 1 percent of the most qualified and highest ranking teachers.* (Tough, 2006)

Disadvantaged schools likewise experience barriers to the hiring of new teachers, particularly high-quality new teachers. All of this suggests that the schools that most need the best teachers tend to employ the worst, and that teacher turnover and retention rates are particularly serious concerns for high-poverty schools.

### Addressing the Perfect Storm

This survey of recent research on poverty’s perfect storm of negative influences on students’ school experience and academic performance provides just a taste of what we are beginning to know. The cumulative effect of these influences is significant. It cannot be solved with higher-expectations rhetoric – *students will reach higher standards if we just expect it of them.* Nor can it be addressed with well-intentioned, but incomplete, reform strategies focused solely on the “readiness to teach” dimension of the Readiness Model we developed for this report: standards-linked curricula, staff development, data analysis. That much we know from the minimal impacts of these school improvement strategies on the most dysfunctional schools, and from the characteristics of high-performing, high-poverty schools. The HPHP schools are not using the impacts of high poverty on their student enrollments as an excuse; they are using these impacts as design parameters to understand how best to serve their students.

We have included this analysis to help explain why existing, incremental efforts to close poverty’s achievement gap have been largely unsuccessful – and to underline the importance of learning from new approaches and systems that are more successfully addressing the needs of high-poverty students. In order to address both the failing-schools gap and the poverty achievement gap, educators will have to create systems, services, incentives, partnerships, and environments that go beyond what is offered in traditional American public school models. Educators will likely have to work closely with a range of partners, including school service providers, neighborhood and community partners, and other social service providers, to be successful. All of this is happening, already, in isolated cases scattered across the country. The challenge for all of us will be to extend that success to every school and to all children, no matter what disadvantages they face.

*One in eight Ohio teachers in high-minority elementary schools is not highly qualified, compared with one in fifty in low-minority schools.*
Resource Directory for Turnaround Planning and Implementation

Note: The turnaround resources listed and annotated here are a sampling of the many available to researchers, practitioners, and policymakers. Many that we have included here are not exclusively focused on turnaround, but touch on related topics we believe would be helpful to designers of turnaround strategy. Many more useful resources can be found in the reference section of The Turnaround Challenge main report. This resource listing will be continually updated and expanded with live links at www.massinsight.org.

Basics of Accountability and School Reform Efforts


The Correlates provide a framework for reform based on seven guiding principles. These principles, derived from empirical investigations and case studies of school successes in California, describe the culture and learning climate of schools where students are achieving.


This report provides a systematic method to evaluate education service providers. Organizations are judged on five main categories: 1) positive effects on student achievement; 2) positive effects on additional outcomes; 3) positive effects on parent, family, and community involvement; 4) a link between research and the model's design; 5) services and support to schools to enable successful implementation.


This landmark early article reviews research that had been done to date on how urban schools can teach poor children successfully.


Elmore attempts to answer why good ideas about teaching and learning have so little impact on educational practice. He argues that incentives fundamental to the school environment for teachers and administrators are key to both the problem and a potential solution. Many of his later works build on the concepts presented here.


This widely-read paper focuses on “improving schools” that have hit a plateau and need assistance to become truly high performance institutions. Elmore argues the basic problem is not getting people to do the right thing but getting people to know the right thing to do. This information, he argues, can set the foundation of any instructional improvement plan.


This collection of previously published articles (reviewed individually) provides an in-depth analysis of standards-based reform, accountability, and instructional improvement.

This report examines efforts to improve high schools through the redesign of high schools into small learning communities. It finds that redesigned high schools made less progress than new schools designed from scratch and notes that a larger districtwide set of conditions must be in place to help low-performing high schools improve.


This technical monograph provides a thorough review of the major literature of school reform. It also addresses whether or not the school or teachers can make up for the differences children bring to school as a result of the unequal distribution of wealth and social capital. The report includes an excellent bibliography.


While critics and some reformers point to unions as impediments to reform, this report presents the largest teachers’ union’s approach to improving low-performing schools. It provides practical advice, plus tools to help operationalize improvement efforts.

**Turnaround Definitions and the Impact of No Child Left Behind**


This part of the *What Works When* series for school restructuring provides a balanced and carefully supported view of the charter school option under NCLB provisions. The report distinguishes between start-up charters and the two types of conversion charters (voluntary and “starting fresh,” when a school is converted by the state or district involuntarily due to low performance).


This brief report provides a concise summary of NCLB’s restructuring requirements. The report reviews the experience of 13 states in implementing restructuring and illustrates the considerable leeway NCLB provides states regarding restructuring plans.


This article directly questions whether or not the conditions necessary for scaling up will ever exist if education does not change. It is not a manifesto, but a balanced review of a decade worth of CSR data, highlighting important lessons learned from the experience. The bibliography is full of good citations on CSR studies.

This part of the *What Works When* series for school restructuring provides a strong foundation to understand this often-discussed but minimally-studied educational strategy. The report provides a survey of the research on educational management providers, and notes the successes and challenges these efforts have shown.


This part of the *What Works When* series for school restructuring discusses options for replacing school leaders and staff and addresses the qualities of an effective turnaround leader.


This part of the *What Works When* series for school restructuring provides an overview of the options available for state takeover of individual schools. The report reviews past takeovers and suggests success factors and potential challenges. It notes that very few states have taken over individual schools despite having the legislative authority to do so.


This article looks at the political history and research on efforts to close the achievement gap between poor/minority students and wealthier/white students. The author concludes that we have the means to close the gap, but that will require new strategies and public will.

**Leadership for Turnaround**


This study makes a compelling case that school leadership is second only to classroom instruction in influencing student learning. The report describes the elements of good leadership; presents research on characteristics of programs that will develop these leadership skills; and suggests numerous pathways to leadership development.


Fullan cautions that turnaround leadership can easily sacrifice long-term gain for short-term superficial gain. Fullan believes capacity building must be at the key to any long-term effort of turnaround or improvement.


This report examines the role urban principals play in turning around low-performing schools. It addresses key issues of urban principaship, including the lack of clear evidence on how to effectively turn around low-performing schools;
the size and inexperience of urban districts’ leadership teams; and differences between principals’ and districts’ expectations for principal leadership and school change.


This meta-analysis of research over the past 30 years addressing the effects of leadership on student achievement concludes there is a relationship between leadership and student achievement with an average effect size of .25. The study also finds 21 specific leadership responsibilities significantly correlated with student achievement.

**Turnaround Policymaking: What’s Required to Produce Fundamental Change**


This report provides compelling arguments for a district role in improving low-performing schools. The report defines characteristics of effective school districts, presents five major barriers to success, and makes recommendations for statewide initiatives and targeted initiatives for under performing districts.


Focused on high schools, this report outlines 1) high school responses to external accountability; 2) How accountability influences high school decision making; 3) Efforts designed to improve instruction; 4) District responses to accountability.


This series of articles and data reports provide a strong overview of state efforts to help districts and schools improve learning. The articles describe different types and levels of support provided, and highlight effective practices in Kentucky, New Mexico, and Pennsylvania.


This report provides a step-by-step framework for policymakers to understand district and school interventions. The report includes an easy-to-follow set of questions for policy makers covering: 1) performance criteria; 2) strategic criteria; 3) diagnostic intervention; 4) corrective intervention; 5) target; and 6) exit criteria.


This report cites two major levers associated with creating and replicating successful schools: 1) The degree of managerial responsibility, support and control the organization chooses to exercise; and 2) the specificity of school design. The report provides an effective graphic placing the various school developers on a matrix of design specificity and management responsibility, support, and control.

This report provides a solid background to understanding the growing trend of mayoral control over the public school system. This report presents a range from low involvement to high involvement and provides analysis of cities across the country that fall along this range.


This guide for governors lists five guiding principles: 1) Not all low-performing schools are the same; 2) Capacity-building must be part of the solution; 3) Districts are essential collaborators; 4) Be prepared for the long haul; and, 5) Assistance to low-performing schools should be part of a larger strategy.


This paper examines issues states confront when devising programs of academic intervention for low-performing schools. It emphasizes the need for clarity, fairness, coherence, understandability, capacity building, and legal defensibility.


This report carefully reviews the results of first-generation accountability systems and draws important lessons and conclusions from these states’ experiences. Viable solutions are offered along with the clear message that turning around low performing schools requires large-scale commitment and investment by state Departments of Education.

### Scaling Up Turnaround: An Analysis of Current State and District Efforts

**Note:** see Reference Section in the Main Report for many more resources in this category. The following is just a sampling:

**Views into 38 school districts**

Center on Education Policy. (2005). *From the Capital to the Classroom: Year 4 of the No Child Left Behind Act*. Washington DC: Author. Retrieved from the Center on Education Policy: http://www.cepcdc.org/index.cfm?fuseaction=feature.showFeature&FeatureID=298&C:\CFusionMX7\verity\Data\dummy.txt

This comprehensive national study of the impact of NCLB includes extensive research and analysis, a survey of education officials in 50 states, a nationally representative survey of 299 school districts, and in-depth case studies in 38 geographically diverse districts and 42 individual schools. Read the full report, as well as 38 separate case studies.

**Baltimore**


This report examines restructuring initiatives by the Maryland Department of Education and the Baltimore City Public Schools. It provides a thorough description and analysis of how education management contracting was used as a turnaround strategy.
California

This evaluation of California’s accountability system (Public Schools Accountability Act or PSSA) paints a fairly stark picture. Overall, PSAA focused attention on improving student achievement in low performing schools. However, both the lower-achieving and the higher-achieving schools received negligible benefits from these programs.

Philadelphia

This concise policy brief examines the Philadelphia experiment in a mixed provider model of restructuring. Philadelphia can serve as a harbinger of NCLB restructuring, and this report summarizes the efforts and provides preliminary analysis and conclusions.


This report is the definitive study of the beginnings of Philadelphia’s experiment with a diverse provider model. It is too early to tell whether or not the experiment will be successful, but this report offers important insights for those who may wish to learn from the Philadelphia experience.

Kansas City

This report presents lessons learned from the First Things First (FTF) model, focusing largely on the Kansas City, Kansas, school reform effort. Although Kansas City is not necessarily typical of a large, urban, academically-challenged district, the results for secondary schools are fairly impressive.

Massachusetts

The Building Blocks Initiative Educators’ Blueprints are a searchable library of effective organizational strategies to improve schools. These strategies have been pursued with success by schools and districts in Massachusetts that are producing student achievement levels exceeding those of schools and districts serving similar student populations.
The Turnaround Challenge, including this supplement to that report, is part of a larger initiative aimed at helping states, districts, schools, and partners to successfully address the issue of chronically under-performing schools — and to use failing-school turnaround as the entry point for fundamental change more broadly in public education.

The Bill & Melinda Gates Foundation awarded the Mass Insight Education & Research Institute a grant late in 2005 to produce a framework for states and districts seeking a flexible, systemic approach for swift, significant improvement in schools (particularly high schools) that have clearly failed their mission, producing track records of under-achievement that are indefensibly poor. The Turnaround Challenge and corollary resources that can be found at www.massinsight.org are the result of that grant.

A follow-up grant from the Gates Foundation is supporting a Mass Insight-led effort to inform national and state leader discussions and actions around the issue of school turnaround, and to carry out a research and development process, in conjunction with national collaborators, that will help states, districts, and others implement the report’s turnaround framework at three levels:

- **State and District Strategies for Turnaround at Scale:** Developing workplans and templates for the strategic approaches, organizational structures, and policy language states and districts need to undertake effective turnaround in the bottom five percent of under-performing schools — and to invite schools not yet in NCLB’s Restructuring category to perform “pre-emptive turnaround,” using similar strategies.

- **School Cluster/Partner Network:** Defining a new model for integrated school network partnerships — school clusters that amount to “mini-districts” supported by lead external partners and special district turnaround offices — and building a new generation of lead turnaround partners as key implementers.

- **School:** Producing detailed strategy choices, work-plans, and practical tools for school leaders and their partners in implementing turnaround.

This research-and-development effort will also lay initial groundwork for three potential national initiatives to build out these strategies:

- **Pilot Cohort of Turnaround States and Districts:** Working closely with three to five states and as many large urban districts (along with other partners) to implement a full range of turnaround strategies, adapted for each site, emerging from this work.

- **Turnaround Partner Capacity-Building:** Creating intermediary organizations or other national resources that would provide investment and technical assistance to build a viable marketplace of lead turnaround partners. (Mass Insight does not intend to serve a lead turnaround role, but to act as a catalyst for the development of this resource base.)

- **National Center:** Develop a national center to conduct related research, advocate for comprehensive turnaround, produce additional tools and templates, and continue the work of defining and refining school turnaround as discipline.

All of the elements of this follow-up initiative will involve national collaborators, including individuals and organizations with particular expertise in urban education (including practitioners and external providers), turnaround (in education and other sectors as well), state policy, mission-driven investment, communications and advocacy, and research. The initiative builds on and directly supports related work that Mass Insight has performed for the Washington and Illinois state boards of education, the latter in partnership with Holland & Knight and with contractual support from the Gates Foundation. For more information, please visit us on the web at www.massinsight.org.
Mass Insight Education & Research Institute, founded in 1997, is an independent non-profit that organizes public schools, higher education, business, and state government to significantly improve student achievement, with a focus on closing achievement gaps.

Mass Insight’s education reform strategies are defined by two convictions: that change at scale depends on the practical integration of research, policy, and practice; and that only dramatic and comprehensive change in high-poverty schools will produce significant achievement gains. The strategies that Boston-based Mass Insight implemented to help make Massachusetts a reform model now inform the organization’s national work on two high-impact goals:

- using Advanced Placement® as a lever to attain excellence in math and science achievement and to transform school culture, and
- the successful turnaround of consistently under-performing public schools.

We are:

**Synthesizers and providers of research.** Mass Insight is a national resource for practical information on how to effectively implement standards-based education. The Turnaround Challenge represents a new form of educational policy research: highly graphical, presented in varying user-formats (print, presentation, web), and expressly designed to spur action on both the policy and practice fronts. Our Building Blocks Initiative (www.buildingblocks.org) has been cited as a model for effective-practice research by the U.S. Department of Education. The landmark Keep the Promise Initiative studied urban, at-risk high school students in the first three classes subject to Massachusetts’ MCAS graduation requirement and district strategies for serving them.

**Policy facilitators.** We are a leading statewide convener and catalyst for thoughtful, informed state education policymaking. Mass Insight’s Great Schools Campaign and its predecessor, the Campaign for Higher Standards, have played a highly visible role in shaping the priorities of Massachusetts’ second decade of school reform. Mass Insight consults on education policy formation outside Massachusetts as well - most recently helping to design school turnaround programs in Illinois and Washington State.

**Leaders in standards-based services to schools.** We provide practical, research-based technical services, staff and leadership development programs, and consulting services to schools and school districts - particularly to members of the Great Schools Coalition, a 10-year-old partnership of nearly 30 change-oriented Massachusetts districts. Our field services have focused on math and science, and over the next five-to-ten years will revolve principally around using increased access to AP® courses and improved performance on AP tests to catalyze dramatic cultural and instructional change in schools across grades 6-12. The effort will be funded in part through the National Math & Science Initiative, which recently awarded Mass Insight $13 million as the Massachusetts lead on a competitive national RFP.

See www.massinsight.org for more details.
School Turnaround: a dramatic and comprehensive intervention in a low-performing school that produces significant gains in student achievement within two academic years.