Refining Remediation

Support Strategies for At-Risk High School Students in Three Urban Districts

A Report from The Keep the Promise Initiative:

A Three-Year Longitudinal Study of High School Academic Remediation in Boston, Springfield and Worcester

Mass Insight Education

Nellie Mae Education Foundation
Opening Doors to Tomorrow

Fall 2005

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Mass Insight EDUCATION

Acknowledgements

THE MASS INSIGHT EDUCATION AND RESEARCH INSTITUTE would like to express its deep appreciation to the many students, educators and other individuals who helped in the preparation of this report.

A special thank you is extended to the leadership of the three participating school districts — Superintendents Thomas Payzant in Boston, Joseph Burke in Springfield, and James Caradonio in Worcester — and to the members of their staffs who are enabling us to conduct this groundbreaking cross-district research project. We thank the UMass Donahue Institute — especially Eric Heller, Lonnie Kaufman, and Matt Hoover — for leading the implementation of the field research in the three participating districts. We also offer warm thanks to the members of the *Keep the Promise* Research Advisory Board (page iv). As with all Mass Insight Education reports, the analysis and final conclusions of *Refining Remediation* are our own.

None of this work would be possible without the contributions of Mass Insight Education's corporate and philanthropic contributors. For the three-year *Keep the Promise* research initiative on at-risk high school student remediation programs, lead funding was provided by **Nellie Mae Education Foundation**, New England's largest philanthropy devoted exclusively to "opening doors" to educational achievement and equity for underserved populations in the six New England states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. Additional support was received from other funders, including **The Boston Foundation**, **Allmerica Foundation, Barr Foundation, John Hancock**, and the **Irene E. and George A. Davis Foundation**. Finally, the **Massachusetts Department of Education** provided additional funding for the project and a broad range of logistical assistance with the data. We acknowledge, with thanks, the commitment of these partners and all of our grantors to improving Massachusetts' public schools — and to expanding our collective understanding of how to improve student achievement.

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Nellie Mae Education Foundation, located in Quincy, Massachusetts, is the largest philanthropy in New England that focuses exclusively on promoting access, quality and effectiveness of education. Established in 1998, the Foundation provides grants and other support to education programs in New England that are designed to improve low-income and underserved students' academic achievement and access to higher education.

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About the *Keep the Promise* Initiative

Overview

Keep the Promise is a three-year longitudinal study of at-risk high school students, involving Massachusetts' three largest urban school districts — Boston, Springfield, and Worcester. The objectives of the research are threefold:

- To track the behavior, experiences, and perceptions of students who are in the classes of 2003, 2004, and 2005 and who need extra academic help to develop the skills required to pass MCAS (the Massachusetts Comprehensive Assessment System) and earn a Massachusetts high school diploma.
- To catalog and begin to evaluate the effectiveness of high school remediation programs with an aim toward identifying promising practices.
- To gauge the quality and effectiveness of related outreach efforts to students and their families.

Key Research Questions of the *Keep the Promise* Initiative

Qualitative and quantitative data collection and analysis are being used to address the research objectives defined above. The key research questions include the following:

- **Student characteristics and behavior:** What is the profile of students who took MCAS 10th grade exams more than once before passing (or who never passed them), and how does it compare to the profile of students who passed? To what extent do students who fail to pass MCAS by their senior year continue to work toward passing MCAS and obtaining their high school diplomas? What steps do they take in pursuit of their objective? How do attitudes and behaviors of at-risk students change, if at all, as the MCAS requirement becomes increasingly embedded in the school landscape?
- **Remediation program design and effectiveness:** What program characteristics appear to deliver the best results? Are certain types of programs more appropriate for some student populations than others?
- **Message and Communication**: What messages do students receive (e.g., from parents, teachers, school administrators, and peers) regarding the MCAS? How does this change, if at all, over time? What impact do these messages have on students in terms of academic performance; attitudes towards school, towards the MCAS, towards academic support programs; behavior; and postsecondary plans? How effectively and consistently are messages conveyed to students? By whom are they conveyed? How well aligned are students' perceptions of the MCAS with those of the adults in their lives (e.g., parents/guardians and teachers)? Do students' grades reflect their MCAS scores? If not, what do students perceive as the mismatch?

The views, opinions and conclusions in this report are those of Mass Insight Education and Research Institute and are not necessarily those of the Nellie Mae Education Foundation or other project partners.

Reports Produced by *Keep the Promise*

This report is the fifth in a series that will be issued over the course of the project, and represents the last report coming out of Year Two *KTP* research activity. The following is a brief description of the content for each of *KTP* reports released to date:

- ***Beyond Tests and Good Intentions: What the Academic "ER" Looks Like in Boston, Springfield, and Worcester*** (October 2003). This report provides an overview of the remediation services available to students in each of the three study districts during the 2002-2003 academic year and is intended to serve a descriptive, not evaluative, function. Services are considered in three main groups —in-school remediation activities, before/after school services, and summer programs.
- ***Seizing the Day: Massachusetts' At-Risk High School Students Speak Out on Their Experiences at the Front Lines of Education Reform*** (October 2003). This report summarizes baseline information gathered through interviews and surveys conducted with students in 11th and 12th grades in the spring of 2003 — the first two classes to face Massachusetts' new MCAS graduation requirement. The focus of these data collection activities is to gather students' perceptions, attitudes, and experiences in regard to the MCAS and related academic remediation programs. The qualitative data collected through the interviews serves as a contextual complement to the written survey.
- ***What We Know Now: Early Findings and Important Questions About Urban High School Remediation in Massachusetts*** (November 2003). The final report for the first program year provides an analysis of available student record data for the Classes of 2003 and 2004 with the aim of developing a better understanding of the characteristics of students who fail the MCAS exam. Most importantly, these new data provide a more complete picture of the target population and raises key questions for educators to consider when planning programs for FY04.
- ***Stepping Backwards: The Fraying of Massachusetts' Commitment to Students at the Front Lines of School Reform*** (April 2004). This policy report analyzes the impact of the 80% cut in the state's funding for MCAS remediation programs that took place in the FY03 budget. Cut from its previous level of $50 million, the state's $10 million investment was focused on students in high school who had failed either the math or ELA MCAS in tenth grade. The report found widespread elimination of support programs at grade levels below the eleventh grade and budget-induced reductions in the quality levels of remaining programs.
- ***Refining Remediation: Support Strategies for At-Risk High School Students in Three Urban Districts*** (December 2005). This report provides comprehensive information to practitioners on high school remediation strategies. It is designed to serve as a "field manual" for district leaders, MCAS directors, high school principals, and lead teachers (in both academic support and regular education programs).
- **Final Report** (to come in 2006). The *Keep the Promise* initiative's final report will draw conclusions and make recommendations based on all three years of research.

Contents

Introduction and Context

Remediation's Role in the Evolution of Massachusetts School Reform

We have a chance to succeed in this second round of reform, if we apply what we learned in the first.

Massachusetts school reform will take a generation (at least) to complete. It was born in 1993 with passage of the Massachusetts Education Reform Act. By federal law — the No Child Left Behind Act — the goal of proficiency for every high school graduate is to be met by 2014. In other words, the effort will turn 21 in the year it is officially scheduled to reach maturation by fulfilling its goals. As of the current academic year — 2005-2006 — it has become a teenager.

As every parent comes to learn, the teenage years are mysterious, uncharted territory — challenging and wonderful in equal measure. They can make the first twelve years seem relatively simple and easy by comparison (though they undoubtedly had their moments of sleeplessness and high drama, too).

So we may find the next stages of school reform's adolescence, when — having found ways to bring nearly all public school students to at least "needs-improvement" levels of achievement on the MCAS over those first dozen years — we are confronted with the exponentially more complex challenge of bringing all students to proficiency.

In an era of constrained public investment, at a time when public policy planning seems to extend only to the next election, the chances of the Commonwealth stretching to achieve this goal over the next eight years might seem remote to the point of impossibility. Except for one thing: we actually did pretty well during those first twelve years. School reform has gotten off to a good start in Massachusetts — good enough to be held up as a model, nationally. Good enough to lead all states in achievement at all four levels tested by "the nation's report card," NAEP (math and reading at fourth and eighth grade, released in the Fall of 2005).

We've all learned a lot: teachers, school and district administrators, policymakers, legislators, and nonprofit, business, and community leaders. We have a chance to succeed in this second round of reform, if we apply what we learned in the first.

Keeping Massachusetts' Promise

Refining Remediation is the fifth installment from the *Keep the Promise* initiative, a three-year research project led by the Mass Insight Education and Research Institute in conjunction with the Boston, Springfield, and Worcester Public Schools.

Since 2003, *Keep the Promise* has been investigating school reform's most critical dimension: its success in reaching and serving the students most at risk of leaving high school without the skills required to construct a productive, fulfilling life. Beginning that year, 2003, Massachusetts has held all students accountable for achievement of the state's "competency determination." *Keep the Promise*, in a series of reports that are landmarks in the national research literature on at-risk students, has asked: How have

we done in helping these students — specifically, those served by the three largest urban school districts in the state — to reach the standards for which we're now holding them accountable? If Massachusetts school reform originated with the premise that accountability would be matched with adequate, informed support, what can we learn through this research that will help us keep that promise?

The answers to that question have to do with much more than simply improving the effectiveness of remediation programs — i.e., separate, distinct educational services for students identified as needing extra help. They have to do with the fundamental architecture and design of public education. In a completely realized standards-based education system, there may be less of a place for something traditionally labeled "remediation." Instead, schools commonly and routinely allow children to learn differently and at different rates, toward a consensus-driven set of achievement standards that signify "graduation-ready." Schools are organized and teachers are prepared to meet each student's individual needs — always working towards the achievement of minimum competency levels (at least), as set by the state. That is as true in the third and fourth grade as it is in the tenth or twelfth.

There are schools in Massachusetts today that come close to embodying this fully realized vision of standards-based reform. They are not "MCAS factories," where successful test-taking has replaced successful skill-building as the highest value. Leaders at some of these schools might argue, in fact, that their educational model gives only moderate consideration to the state's curriculum frameworks and MCAS assessments. But they are nonetheless enabling most of their students to develop a level of knowledge and skill that is revealed, via MCAS, to be proficient or advanced.

Mass Insight Education has studied a number of these schools over the past five years, through a separate research program known as the Building Blocks Initiative for Standards-Based Reform. *(See www.buildingblocks.org.)* We have extracted some findings from that research and included them here, in this *Keep the Promise* report, because they are harbingers of the ultimate expression of standards-based reform (which is why we call them "Vanguard" models). *See the sample strategies in the Appendix.*

From Refining to *Redefining*

This *Keep the Promise* report represents a bridge between current remediation practice in the state's largest three school districts — a field guide to the strategies these districts have developed over the past six years, as implemented in six representative high schools — and the emerging whole-school models represented by the Vanguard schools. The Boston, Springfield, and Worcester school districts have learned a lot about remediation over the years, and the academic support programs they have put in place (and struggled to retain in the face of state budget cutbacks) are shown by *Keep the Promise* research to have played an important role in helping their at-risk high school students pass MCAS.

But all of that progress has brought us — and most of these students — just halfway up the mountain. After twelve years of reform, only 62% of Massachusetts' tenth graders attained scores of Proficiency or Advanced on their MCAS math exam in 2005, and just 65% did so in English/Language Arts. In the next phase of reform, the Commonwealth's public schools will be called on to help all students achieve at the Proficient level or better. That goal will call in turn for more than a refining of traditional remediation programs. It will call for redefining what we now call remediation. Some schools in the state — including some in Boston, Worcester, and Springfield — have already accomplished this redefinition and are bringing substantially higher percentages of their students to Proficiency or Advanced. Identifying and understanding the lessons from those schools will be a focus of *Keep the Promise*'s final report, due to be released in the winter of 2006.

In the meantime: *Refining Remediation* provides the most in-depth review ever published of the extraordinary efforts underway in Massachusetts' urban high schools to "keep the promise" to their at-risk students. Just three years ago, common wisdom predicted a "train-wreck" end to the state's experiment with standards and accountability, with unacceptably high failure rates among seniors in the Class of 2003. Remediation strategies such as those examined in this report clearly helped schools, students, and the state to dismiss that gloomy forecast. These investments by the state, and the hard work of educators to create and implement these programs, made passing the first hurdle possible. Without this commitment and follow-through to help the first generation of accountability-era students develop passing-level skills, the entire higher standards reform effort might well have jumped the tracks.

On behalf of all of the researchers, writers, advisors, financial underwriters, and educators who helped to produce this report, we hope its findings help schools across the Commonwealth improve the ways they serve students most in need of their help — and policymakers to understand and appreciate the impact their investments have had.

William H. Guenther, President

Andrew Calkins, Executive Director

Fall 2005

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Executive Summary

WHERE WE ARE NOW:
How schools in Massachusetts' three largest urban districts are refining high school remediation in a higher-standards world

Massachusetts remediation educators had been on the front lines of educational reform for at least five years prior to the implementation of the graduation competency determination in 2003. *Keep the Promise* research (along with previous Mass Insight Education research[1]) undertaken from 2001 through 2003 revealed how the dynamics of higher-standards reform gradually began to take hold with students and educators in the state's three largest urban districts. In 2003-2004, the second year of the *Keep the Promise* initiative, we looked in greater depth at the workings of remediation in six focus schools in Boston, Springfield and Worcester, to determine what strategies their educators have evolved to help them support at-risk high school students, and — perhaps just as importantly — what challenges they still face in the daylight of a high-stakes world.

With its ground-level analysis of what's working, this report is intended to assist those responsible for planning and running remediation support for high school students: district superintendents and other central office staff, high school leadership teams, and educators developing and delivering remediation programs. We believe the insights from the *KTP* front line will be of interest to educators who are attempting to make informed choices about the nature and scope of remediation programs in their own schools and districts. While more rigorous analysis of effective practices, as identified and documented by performance outcomes, will follow in the next, final report from the *Keep the Promise* initiative, this manual of current practices and policies highlights a number of key findings and important questions for remediation practitioners and policy-makers alike.

Common Challenges, Promising Strategies

Keep the Promise (*KTP*) looked across the six focus schools at five common challenges — five areas of strategic concern shared by every district in Massachusetts in helping students develop the skills and knowledge necessary to pass the MCAS exams. These five challenge areas will be recognized by school districts everywhere, both within and outside of Massachusetts. In our study of the *KTP* districts, particular policies and practices stand out — some pursued by just one school or district, others practiced to some degree by all involved in the study. They include the following:

Challenge Area I: Staff, Time and Budget Management

- **Finding 1**. Worcester Public Schools' centralized remediation program, coordinated by a district-wide remediation management structure including dedicated "MCAS Specialists" at each high school, appears to offer strong, consistent support to the city's at-risk population and those who serve them.
- **Finding 2.** While schools tend to offer a range of remediation program models (including after-school, weekend, summertime, and off-site partnership programs), in-school regular-school-day remediation that provides full course credit has become established as the cornerstone of remediation provision.
- **Finding 3.** Boston, Springfield and Worcester managed to keep most eleventh and twelfth grade remediation running at some level despite drastic cutbacks in state funding in FY04. These cuts did, however, result in deep and damaging cuts to pre-tenth grade remediation, as well as to the ability of remediation educators to continue to innovate, to plan and work proactively to guide remediation efforts in a time of continued transition.

Challenge Area II: Curriculum and Instruction

- **Finding 4.** Some of the most exciting practices unearthed in the *KTP* districts feature not improvements in remediation provision itself, but in the linking of remediation strategies into the broader educational context. Increasing

[1] *Taking Charge*, 2002; *For the First Time Ever*, 2002; *Seizing the Day*, 2003; *Beyond Tests and Good Intentions*, 2004; *What We Know Now*, 2004 — all published by Mass Insight Education

collaboration among remediation and regular teachers, the inclusion of English and math department heads on after-school remediation teams, and the integration of MCAS remediation into core classes all work to ensure the centrality of standards-based learning as well as to help at-risk students in the focus schools.

Challenge Area III: Teaching Quality

- **Finding 5.** The time and mechanisms to enable collaboration and peer support appear in all three districts to be a vital factor for success.

Challenge Area IV: Participation and Attendance

- **Finding 6.** Despite the emphasis on in-school remediation, approximately half of students responding to the Year Two *KTP* survey attended at least one non-required remediation program. Attracting students sometimes involves extraordinary efforts to communicate with parents (especially non-native English speakers) through community groups and local media. Retaining students involves encouragement, personal contact, and (in some cases) the enforcement of learning contracts with consequences.

Challenge Area V: Helping the Most Challenged

- **Finding 7.** Increasingly high percentages of high school students now pass MCAS the first time, and after the first re-test. Those requiring continued remediation are disproportionately students with disabilities or English language learning needs, and also include individuals with motivational issues and family time commitments. The *KTP* focus schools are providing programs at alternative times and with a variety of motivational components, but are only in the early stages of crafting tailored, intensive learning approaches for SPED and ELL populations.

Challenges Yet to Be Addressed

In two areas, it is notable that major challenges remain without what we could identify as integrated, proactive strategies (at the school or state policymaking levels) to address them. These include:

- **Lack of resources** to allow remediation professionals to address the bigger picture of student achievement and plan proactively. Because of state cuts to MCAS remediation funding from their FY03 levels, remediation in ninth and tenth grades (prior to tenth grade MCAS administration) has shrunk dramatically in the *KTP* districts, setting the whole trajectory of student assistance back and possibly rebuilding the audience for post-tenth grade remediation for years to come.
- **Subgroups of students** who are clearly not being helped adequately by existing programs, including those who do not attend school regularly, special education students, and those with English language learning needs.

Where We Are Headed: From *Refining* to *Redefining* Remediation

As *KTP* field researchers discovered, remediation program managers and even district remediation administrators in our focus schools and districts are generally immersed in a "set-aside" mentality — working their hardest to design and deliver support with decreased resources, but within the remediation structures and expectations created with the injection of ASSP funding set aside for this purpose several years ago. In that sense, they are most centrally focused on *refining* remediation — seeking to improve the effectiveness of extra-help programs by:

- improving counseling
- targeting instruction to individual student needs
- decreasing class size
- offering more varied class times and other ways to attract and retain students
- experimenting with centralized or intentionally decentralized approaches to organizing traditional model remediation programs.

But it is clear to our researchers that *KTP* remediation and district educators are also beginning to expand the scope of remediation — to *redefine* remediation — by:

- moving remediation into the school day and incorporating it into regular student schedules
- offering course credit
- integrating remediation better with overall school planning and mainstream curricula
- focusing on better teacher collaboration and development around strategies to serve at-risk students
- incorporating features of effective remediation, particularly individualized student attention, into whole-school models serving disadvantaged and at-risk high school students.

These evolving concepts of remediation will be discussed in greater detail in the final *Keep the Promise* report, due to be released in 2006.

CHALLENGE I. Management and Budget

Question 1

How can districts and schools best organize resources — including staff and time — to provide the most effective support for MCAS remediation programs?

What we know

In order to maximize value to students, school districts must use all their resources — including staff and time as well as money — in the most effective ways possible. In the remediation arena, districts have had to determine how best to allocate the state's Academic Support Services Program (ASSP) funding and other available resources to implement programs that truly meet students' needs. Sharp decreases in the state funding in FY04 focused even more attention on the efficient organization of resources, and on the inevitable trade-offs required in decision-making.

Challenge I, Question 2 focuses directly on the reorganization of financial and other resources in response to state budget cuts. Our review of the *KTP* districts illustrated, however, the challenge of ensuring the optimal use of staff and time resources at any budgeting level. Two of the many choices facing these three large urban districts stand out:

- **Staff/Management**: On the management level, what mix of consistent central office direction, and school-level responsibility for organization, staffing, and instructional design provides the most effective support for remediation efforts?
- **Time**: On the program level, which use of student and teacher time appears to offer optimal prospects for participation — program models operating during the school day, outside the school day, or during the summer?

Staff/Management

On this, perhaps the most far-reaching of the questions addressed in this report, the *KTP* districts offer an interesting contrast. Worcester clearly differs significantly from Boston and Springfield with regard to the structure of their remediation programs and the role of central office personnel in managing and overseeing activity. *(See more on this in the strategy section beginning on page 10.)* We can therefore explore the differences between a strongly centralized and standardized approach to remediation (offered in the Worcester Public Schools) and approaches that, while centralized in some aspects, rely more largely on school-level responsibility for program planning and implementation (in the Boston and Springfield Public Schools).

We are not, at this stage, able to establish which approach produces the best outcomes. (In its third and final year, *KTP* will be able to provide deeper insight into the relative effectiveness of policies and programs across and within districts, by analyzing extensive individual student record data relating to participation and outcomes.) But Worcester's centralized approach is well defined, and includes a number of specific management roles that would be replicable in other districts. Those who work in the system cite the direction from central office, as well as the support and technical assistance that are provided along with it, as valuable, appreciated and effective. The consistency of MCAS performance across Worcester high schools also suggests that it is worth looking in more detail at elements of this strategy.

Chart 1 compares the percentage of class of 2004 students meeting competency determination (CD) across traditional high schools in the three *KTP* districts (as of June 2004, the time of their expected graduation).[1] The schools across Worcester perform at more uniform levels than the high schools across Boston and Springfield. They also meet CD at significantly higher levels than the schools in the other districts, but there are a number of factors that contribute to these competency results on a district-by-district as well as a school-by-school basis, including levels of poverty, mobility, special populations, etc. *KTP* research will more fully explore this key finding over the next year as more district, school-based, and student record data become available for detailed analysis.

Chart 1: Comparison of High School MCAS Performance for Students from Class of 2004

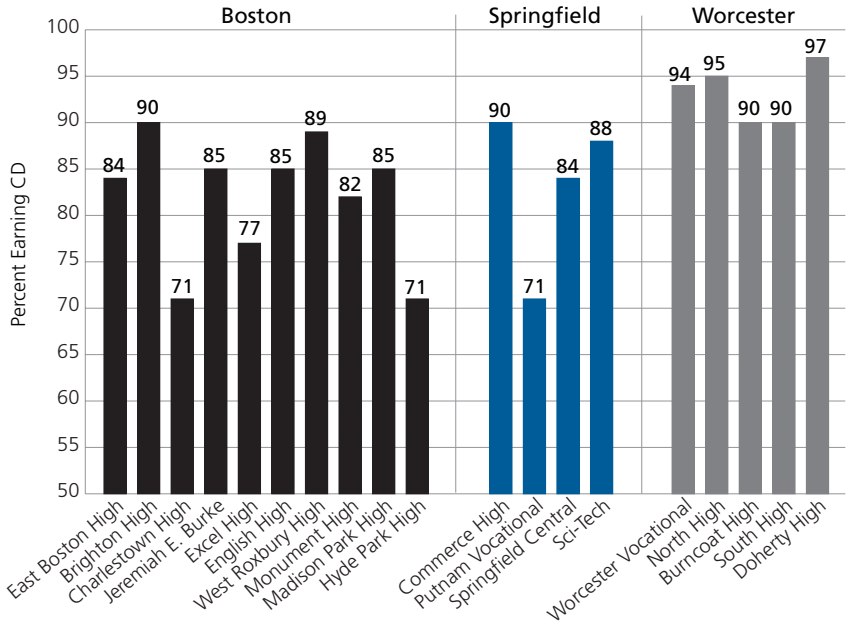


Chart 1 compares the percentage of Class of 2004 students meeting competency determination across high schools in the three KTP districts.

[1] CD rates obtained from Massachusetts Department of Education, *Progress Report on Students Attaining the Competency Determination: Statewide and by School and District: Classes of 2004 and 2005, June 2004.*

Use of in-school time for remediation

KTP district experience illustrates that schools must and do offer a range of programs to suit the differing needs of at-risk students. Programs offered at a selection of out-of-school hours, as well as summer courses, fill real needs for different groups of at-risk students (particularly some of those most at risk — see Challenge V, Question 8).

Our research has also found that the provision of remediation during school hours has become a cornerstone of all three of the *KTP* districts' offerings, although *KTP* districts and schools sometimes deliver these remediation services in dissimiliar fashion. (For the experience of the last school in Springfield to switch from after-school to in-school remediation, see the strategy section.) When ASSP grants were first established, the funding was limited to programs held before or after school, on weekends, or during the summer. At the time of Mass Insight Education's *Taking Charge* report (March 2002), 63% of students who were not attending extra-help programs said they would do so if programs were offered during school hours. In FY01, as part of a DOE pilot program, Worcester began to offer extra help opportunities during the school day. The pilot proved successful, playing a key role in helping schools reach more students. In-school remediation is popular largely because it capitalizes on students' school attendance — coat-tailing on attendance enforcement policies already in place, downplaying the "voluntary" nature of participation, and displacing only non-core curriculum activities.

This strategy seems to be paying off. Evidence indicates that students are participating in in-school programs at higher frequencies than after-school and summer remediation options. Of those students from the class of 2004 who indicated on the *KTP* student survey that they participated in at least one remediation program after taking their tenth grade MCAS, 69% report attending a program during the school day (up from 60% in 2003), 58% report attending an after-school program, and 21% report attending a summer remediation program. We also know that a high percentage of students who participated in in-school remediation programs felt that these services helped them pass subsequent MCAS retests. In fact, almost 80% of students who reported taking only in-school remediation indicate that these programs had a positive impact ("some" or "a lot") on improving their chances of passing MCAS.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Organizing resources to provide the most effective support for remediation programs

KTP school(s) or district(s):

- **Centralize remediation policies and management to coordinate standardized programs**
- **Structure MCAS remediation services during the regular school day**

STRATEGY 1.1

Centralize remediation policies and management to coordinate standardized programs

WPS

The MCAS support services and programs available to students at *KTP* focus high schools (Burncoat High and Worcester Vocational High School, which received on-going visits from *KTP* researchers) are part of a centralized, standardized district offering. The district funds and supports remediation services in all district high schools evenly, and mandates the same staffing formulas, materials, program offerings, and teacher training opportunities. The district has made a concentrated effort to establish a consistent program across all schools, partially to address the high levels of student mobility and partially to increase effectiveness by capitalizing on successful strategies.

The core elements of Worcester's centralized approach include: a well-defined remediation management structure; a service-oriented district specialist; full-time school MCAS specialist positions; and an effective communication system.

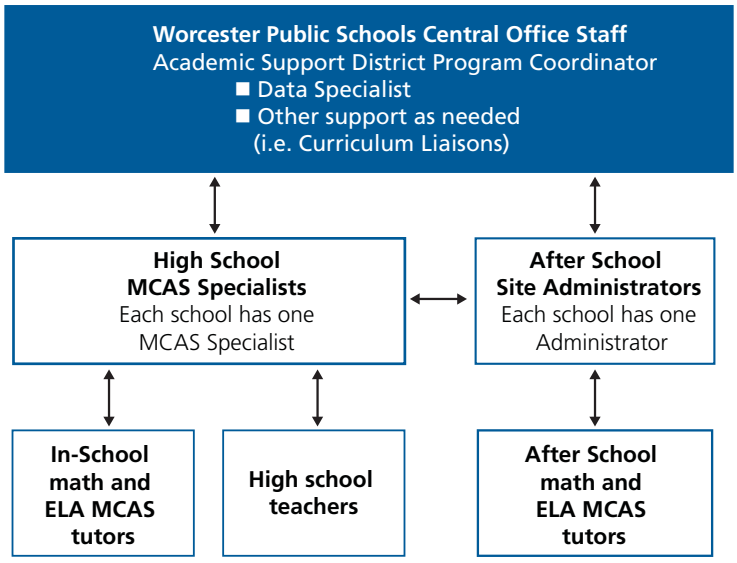
Defined Remediation Management Structure

Worcester uses a consistent, dedicated management structure to ensure the implementation of the district's approach. The structure works downward from the district Program Coordinator, through high school MCAS Specialists, and after-school remediation site administrators, to in- and after-school MCAS teachers and tutors, as well as to mainstream high school teachers. *(See management organization chart on the next page.)*

Service-oriented district and school MCAS positions

The Academic Support District Program Coordinator and the High School MCAS Specialists are the key positions in Worcester's remediation management structure. (After-school site administrators are also important, but more similar to roles in other districts, so are not discussed here.)

Worcester Public Schools Academic Support Structure



ACADEMIC SUPPORT DISTRICT PROGRAM COORDINATOR PRINCIPAL RESPONSIBILITIES

1. Provide support to school-based MCAS Specialists and after school site administrators (materials, organizational, etc.).
2. Liaise between district and DOE.
3. Schedule, plan, and facilitate meetings between MCAS specialists, after school site administrators, summer remediation staff, etc.
4. Plan and conduct training for all staff working on remediation, and professional development for school-based staff.
5. Communicate and share data with outside researchers (i.e. *KTP*).
6. Assist with grant writing, provision of data for assessment purposes, etc.
7. Coordinate and assist with all data collection as required for individual student appeals process.
8. Work closely with district math and ELA liaisons to develop curriculum based on data generated from analysis of MCAS test questions/responses.
9. Investigate and share best practices statewide and nationally (i.e. attend conferences).
10. Conduct site visits if appropriate.

Academic Support District Program Coordinator

The Academic Support District Program Coordinator coordinates MCAS activities in the district, and has central office responsibilities for grant-writing, provision of data, investigation of best practice, etc. She also, however, spends a large part of her time in a "technical assistance" or "service" role, providing support, materials, advice and development to the school-based remediation management and teaching staff. While Boston and Springfield Public Schools have central office staff with many of the same coordinating responsibilities for MCAS remediation as the Worcester coordinator's, *KTP* field researchers found that the Worcester position included a larger component of school-facing support. In addition, Worcester's coordinator is responsible for all remediation support, whereas the parallel district remediation managers in Boston and Springfield are responsible only for ASSP-funded programs. *For a list of the Academic Support District Program Coordinator's principal responsibilities, see the box to the left.*

MCAS High School Specialists

Each of the Worcester high schools has a dedicated MCAS Specialist, whose responsibility is to oversee all MCAS support programs and services — especially those available during the school day. In contrast, in Boston and Springfield Public Schools these roles are more often either shared among a number of staff, or assigned to one person as an additional responsibility on top of their "regular" job. The Worcester High School MCAS Specialists have a range of roles facilitating MCAS support services, encompassing student support, test administration, data analysis, curriculum work, teacher coaching, program scheduling and coordination of communication around MCAS issues. *For the Worcester Public Schools' job description of this position, see the box on the next page.*

HIGH SCHOOL MCAS SUPPORT SPECIALIST
WORCESTER PUBLIC SCHOOLS

ACCOUNTABILITY OBJECTIVE
This position will facilitate the development and enhancement of MCAS support services for students.

PRINCIPAL ACCOUNTABILITIES

1. Work with the Principal to identify and provide services to students in grades 9-12 in the MCAS support program.
2. Assist schools in aligning curriculum and classroom lessons to the new Mathematics/ELA Curriculum framework.
3. Administer pre/post student diagnostic tests; assist in the interpretation of the MCAS and other performance indicators re: Mathematics/ELA.
4. Assist in the diagnosis of students' strengths and weaknesses.
5. Model effective instructional practices in English and/or math classes.
6. Support classroom teachers in planning lessons.
7. Facilitate student transition to after-school MCAS support program.
8. Maintain two-way communication between after-school and in-school staff concerning student performance.
9. Monitor student attendance and grades.
10. Communicate with parents concerning student performance.
11. Coordinate with identified school personnel, activities outlined in the Student Success Plan and Folder.
12. Meet with the ELA and Mathematics Curriculum Liaisons on a weekly basis to discuss curriculum issues.
13. Responsible for providing written reports (on request) to the school system management team detailing MCAS programs at the school site.

QUALIFICATIONS

- Bachelor's Degree
- Demonstrated successful teaching experience
- Demonstrated experience in curriculum development
- Minimum of four years teaching experience
- Massachusetts Teaching Certification

WORK YEAR:
Teachers' work year

In addition to the responsibilities listed in the job description, Specialists told KTP contacts that they also spend significant time doing the following:

- Collecting, organizing, and preparing all data/reports required for submitting appeals on behalf of students.
- Managing the process of scheduling students into during school MCAS remediation programs.
- Coordinating the MCAS testing process for the entire school (some MCAS Specialists).

Depending on skills, relationships with administration and teachers, the time of year, experience, etc., individual Specialists devote varying levels of attention and time to each of these responsibilities.

Effective communication system

As part of their remediation structure, WPS has put in place a system of communication that enables all remediation staff to acquire the latest information and materials consistently throughout the year. This system is designed around monthly meetings between the central office Academic Support District Program Coordinator — who receives constant state and district-level MCAS information — and the high school MCAS Specialists. Information shared at these meetings is passed along by the school MCAS specialists through daily contact with the in-school tutors and after-school site administrator, and through department and staff meetings with the regular academic teachers. The district's Academic Support District Program Coordinator also meets regularly on site with each school's after-school site administrator who then passes information on to the after-school tutors. This system allows for rapid dissemination of information to all staff members and provides a strong component of ongoing support to remediation staff.

This structure has proven highly successful and advantageous in a number of other ways. For example, the MCAS Specialists from all the high schools work closely together — with support from central office — in developing effective remediation strategies, materials,

WORCESTER REMEDIATION COMMUNICATION SYSTEM

- Regular monthly meetings between central office and MCAS Specialists
- Frequent interaction amongst MCAS Specialists
- Daily contact between MCAS Specialists with In-School Tutors and After School Site Administrators
- Periodic formal and informal meetings between MCAS Specialists and Academic Teachers

and problem-solving techniques which are applicable in multiple school settings. The structure also benefits student transfers between one Worcester high school and another — something that occurs frequently. The student's academic status and needs are not only consistently indicated on their Individual Student Services Plan (which details both past remediation experiences and current plan of action), but this information is immediately familiar to the MCAS Specialist at the receiving school.

STRATEGY 1.2

Structure MCAS remediation during the regular school day

BPS

SPS

WPS

All three *KTP* districts have realized significantly improved student participation by offering remediation services during the regular school day. This is true despite the fact that the structure and type of in-school remediation differs among the districts, and — in Boston and Springfield — between the focus high schools. In Boston, where these efforts are largely supported by local resources, the most common in-school approaches are either a) special MCAS remediation classes with a focus toward individual student academic needs in math and ELA, or b) a "long block" or "double block" of English or math (combining two class periods together for approximately 80 minutes in total), within which MCAS remediation is integrated with core instruction. Worcester Public Schools, which targets its school day program towards seniors first, and then juniors as space becomes available, provides small group tutoring by tutors hired by each high school.

In Springfield during-school MCAS remediation for students who failed their initial attempt on the test is mostoften incorporated into remediation classes serving any student who is behind in his or her academics — including those who have not yet taken their MCAS or who have already passed it. The focus of these in-school classes is pulling up to grade-level, skill expectations, more so than passing the MCAS.

…by doubling time on ELA and math

Charlestown

At Charlestown High School in Boston, students who have not passed MCAS are often scheduled to receive two blocks of instruction in their core subjects — one focusing on regular academic instruction and one geared specifically to the MCAS content area(s) with which they still need help. For example, the sample student schedule on the next page displays a typical eleventh grade schedule for a student who still needs to pass the math portion of the MCAS. Notice that "Michelle" is assigned to a regular algebra class as well as an "MCAS math" course, increasing her time on math daily from the 40 minutes logged by regular students to 80 minutes.

SAMPLE AT-RISK STUDENT SCHEDULE

Charlestown High School, Boston

Last Name: Winters	**First Name:** Michelle	**Middle Name:** N/A
Student ID: 555-555	**Year of Graduation:** 2005	**School:** Charlestown HS
Gender: Female	**Grade:** 11	**Date of Birth:** 10/12/87

Semester	Period (40 min.)	Course Title	Course #	Room #
Fall	1	PHYS ED I	081	GYM
Fall	2	COLLEGE ENGLISH II	153	530
Fall	3	GLOBAL ISSUES	25	207
Fall	4	**MCAS MATH**	765	535
Fall	5	BIOLOGY I	553	321
Fall	6	TECH LIT 2	C52	111
Fall	7	**ALGEBRA I**	416	531

** Based on actual student schedule from Charlestown High School*

The MCAS class is not voluntary or optional, but a mandatory part of relevant students' regular course schedule, carrying the same expectations for attendance and accounting for the same number of credits as any other class. Depending on the individual student's academic status — including the total number of credits earned to date, credits required for graduation, availability of courses, etc. — the school will determine the most logical course for students to "give up" in order to attend remediation. Typically, they will first look at open periods, study halls and electives before pulling any student out of core academic classes. By having two blocks for math and English, schools like Charlestown High can provide on-going instruction on the Massachusetts learning standards, while simultaneously focusing on the problem content areas, and general test taking strategies.

East Boston

At East Boston, the MCAS remediation and regular English or math classes are booked back-to-back to provide a continuous 80-minute "double block" of teaching time. Within this period, MCAS remediation can be integrated into core instruction, and the amount of time devoted to each can be varied according to the needs of the students and the time of year.

Despite the advantages of in-school remediation classes, one of the difficulties encountered in programs like those at Charlestown, East Boston or Commerce High, is keeping class size small enough to deal with the varied abilities of the students. Teachers must work hard to foster basic motivation in some students, while moving ahead with specific content for those already engaged in the learning.

… by providing full course credit for remediation

SciTech

To learn and improve, students need not only sign up for, but also consistently attend remediation classes. In-school scheduling has the advantage of avoiding competition with out-of-school work, family and leisure activities. Scheduling remediation between 8:30 and 2:00 may not in itself, however, guarantee attendance. A few years ago, the High School of Science and Technology in Springfield used extra blocks of English and math instruction to increase at-risk student exposure to MCAS subjects. However, students did not receive credit for attending the MCAS-focused class. According to SciTech's

CRITICAL ELEMENTS OF IN-SCHOOL REMEDIATION

- Increase participation by scheduling during the school day
- Increase attendance by giving full class credit
- Leverage instructional advantages by choice of model (e.g. gain the advantages of small class size through tutoring classes, or the advantages of integrated instruction through double-block regular/remediation instruction)
- Reduce impact on other student learning by having the remedial course replace study halls/limited range of electives

principal, students who attended the standard subject class regularly skipped the MCAS class, thereby defeating the purpose of the extra daytime sessions.

As its first response, SciTech chose to eliminate school-day MCAS remediation classes from student schedules, and provide after-school remediation as the only means of extra help for those who failed MCAS. However, to address continuing problems with remediation program attendance, as well as many other organizational issues at the school, SciTech has now begun the process of switching its entire schedule to double-length (for-credit) sessions for all classes, SciTech students will have one extra-long class in English and math (as well as other subjects) — enough time for teachers to cover subject material and MCAS preparation when appropriate. (An alternative solution, the Charlestown strategy described above, would have been simply to make the extra MCAS session a scheduled, for-credit class.)

Question 2

How can districts continue to provide remediation programs in the face of massive state cuts in funding?

What We Know

MCAS remediation programs in Massachusetts schools have been funded in large part by the Commonwealth's Academic Support Services Program (ASSP). Since 1998 ASSP has provided about $200 million, including $50 million in each of the 2001, 2002 and 2003 fiscal years. These funds were used to establish programs for students in all grades K-12, and emphasized the creation of intensive small-group instructional opportunities, including: tutoring and mentoring programs, supplemental classes, computer-based learning modules, and programs that link remediation services with work-based learning opportunities.

Stepping backward: state funding cut drastically in FY04

In FY04 funding was reduced to $10 million (an overall cut of 80%) with new limitations that schools could only use funds to serve students from class years 2003 (out of school), 2004 (seniors), or 2005 (juniors) — although schools were able to request permission to use funds to serve students from class year 2006 (sophomores) if they could demonstrate that adequate services have been offered to all eligible seniors and juniors already. The table on the next page shows the drastic impact of this funding cut in *KTP* districts Springfield and Worcester.

ASSP FUNDING ALLOCATED BY YEAR AND PROGRAM

Springfield and Worcester Public Schools: FY03 and FY04 Comparison

	Springfield		Worcester	
Program	**FY03**	**FY04**	**FY03**	**FY04**
School Year Programs	$832,273	$229,968	$972,298	$66,286
Summer Programs	$1,214,627	$124,832	$959,960	$292,914
TOTAL	$2,046,900	$354,800	$1,932,258	$359,200

FY03 includes funds for summer 2003 programs.

"The drastic reduction in remediation funding has had a far-reaching negative impact."
—Thomas Payzant

While this report focuses on FY04, in FY05 and FY06 another $10 million was allocated by the state for ASSP with very similar criteria for use of funding. Educators we spoke to believe these cuts in remediation have been far too drastic, not only compromising the quality of programming to those students still eligible for services, but also totally eliminating the pipeline of support previously established for students in grades K-10.

"The drastic reduction in remediation funding has had a far-reaching negative impact," Boston superintendent Thomas Payzant told us. "This year we have fewer teachers, fewer remediation programs, and consequently, fewer students receiving the academic support they need."

Further information on the decrease in remediation funding can be found in the Mass Insight policy report, *Stepping Backwards: The Fraying of Massachusetts' Commitment to Students at the Front Lines of School Reform*, published in April 2004.

Quantity and quality of high school programs suffered

While ASSP funds were withdrawn completely from K-8 provision, even high school remediation experienced a cut in 2004 of two thirds, since during FY03 $30 million of the total $50 million was targeted for high school students. The biggest effect — determined by the restricting of remaining funds to programs for eleventh and twelfth graders — was the drastic reduction or termination in most schools of remediation programs for ninth and tenth graders. This stopped in its tracks just the type of proactive, early intervention that some educators see as the most promising direction for remediation in the future.

In addition, although each of the *KTP* districts and focus schools has made a determined effort to maintain the structure for services to be delivered to eleventh and twelfth graders, inevitably the quality of most of these programs and services was also adversely impacted. For example:

- **Remediation class sizes and student-to-teacher ratios have been increased.** A tutoring class at Commerce High School in Springfield that once had one teacher for every

five students now reports having twenty-five students. At various times throughout the 2003-2004 year, Worcester after-school and summer remediation class sizes also increased significantly.

- **Hours of service have been scaled back.** In 2002-2003 Worcester Vocational High School had six teachers for after-school programs, but in 2003-2004 they were able to fund only two. Also, programs were offered two days a week instead of the former three. Worcester summer school programs were decreased from 20 days to 15, and Springfield also reported having to decrease program hours in the face of increased student demand.
- **Monitoring of student progress has been decreased or eliminated.** In 2002-2003 each senior at Charlestown High School in Boston who needed to pass MCAS met with an advisor individually to review, plan and monitor progress as they prepared for the retests. In 2003-2004, although the test preparation programs were still offered and attended, students no longer had staff responsible for monitoring their progress. The level of follow-up has also been significantly scaled back at East Boston High.
- **Remediation educator training and collaboration opportunities have been reduced.** With the reduction in numbers of remediation staff, and larger numbers of students served by each remediation educator, time and opportunity for collaborative planning and development have inevitably decreased.
- **Incentives have been eliminated and school-to-work programs cut or scaled back.** Most of the participation incentives — including gift certificates, transportation, and paid internships — were eliminated in FY04 (although some were reintroduced for FY05). In addition, some collaborative programs that offered school-to-work or community-based programs were either discontinued or offered to more limited numbers of students. For example, Burncoat High School cancelled two small-scale but innovative partnerships with a community college and a local housing project. Springfield Public Schools' two summer programs with the School to Work Local Partnership, hailed by some as among the best in the state, have continued but had to scale back on number of students served.
- **Even some juniors and seniors in need of help could not be served.** Many educators believe the limitations on how funds could be used in 2003-2004 were too strict. ASSP funding could only be used to serve juniors and seniors who previously failed MCAS. Therefore, high school students who moved into Massachusetts from another country or state could not be supported since they had not yet taken the MCAS, even if all indications were that they would be likely to fail. This issue is particularly relevant for these urban districts with large immigrant populations.

In order to offer the programs and services they did in FY04, the *KTP* districts had to think "out of the box" — to reallocate funding from internal sources, to search out new resources, and think creatively for ways to continue to offer programs that in some cases they had just recently created and implemented. These local efforts by individual schools and districts further demonstrate the considerable commitment to helping these students improve their performance toward high school graduation.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Providing remediation programs in the face of state cuts in funding

KTP school(s) or district(s):

- **Reallocate local funding to cover priority programs**
- **Utilize local college and community volunteers to provide additional student services**
- **Integrate remediation services into mainstream curriculum where possible**

STRATEGY 2.1

Reallocate local funding to cover priority programs

BPS

SPS

WPS

Each of the *Keep the Promise* study districts supplement state-funded remediation with considerable local resources. Where possible, the districts have increased their local funding to try to make up for some part of the lost state support. Boston, for example, was able to allocate approximately $1.5 million to sustain summer school tutoring programs for grades six through nine (though this still left a shortfall in the program funding). Up until FY04, Worcester relied predominantly on state funding for its targeted MCAS remediation. However, in order to maintain their core programs and services, Worcester also now uses a substantial amount of district funds for remediation, picking up funding for their MCAS High School Specialists, and some of their tutors. Springfield was unable to expand local funding since they were already operating on a very tight budget. Some schools responded to the funding gap by seeking grants from private sources, but this has proven very difficult.

The reallocation of local funding is useful as a stop-gap and top-up measure, but has not allowed *KTP* districts to restore the level of service provided prior to the state cuts, nor to move forward with more innovative or proactive policies in the way that remediation educators feel is needed to address current and future remediation challenges.

STRATEGY 2.2

Utilize local college and student volunteers to provide additional student services

Burncoat

A partnership has been developed over the past few years between Burncoat High School and nearby Holy Cross College. Initiated as a placement program for college students doing teacher training, the partnership has expanded over the years to include community service, volunteer, and internship opportunities for Holy Cross College students at the high school. One of the more popular experiences for these college students over the past year has been assisting BHS students with individual tutoring — most often as part of Burncoat's academic remediation programs (but also available as one-on-one tutoring after school and not aligned with Burncoat's structured remediation programs). As a result, on some days, BHS students have had their remediation in the form of one-on-one tutoring — an option not otherwise viable. Furthermore, both students and staff report that the rapport between Holy Cross and BHS students has been very positive. In the past, the BHS MCAS Specialist has been able to provide specific MCAS-related training to these Holy Cross students and/or their placement supervisor. She had to discontinue this in FY04, given time constraints created by budget cuts.

STRATEGY 2.3

Integrate remediation into mainstream curriculum where possible

The provision of extra support for students who have failed or are at risk of failing MCAS is essential work, part of the compact that the Commonwealth of Massachusetts entered into in the introduction of high stakes testing — making sure that students at risk could be helped to reach the bar no matter what school they attend. Particularly at this early stage in the adoption of the graduation requirement, state resources need to be targeted at meeting the needs of this population. The best or only way to provide this help will remain for some students through separate remediation programs and services, and the *KTP* districts and schools clearly feel that funding for the existing remediation programs must be restored. This is particularly important because the elimination of remediation support for K-10 students could result in a larger number of students failing the tenth grade tests and continuing to need extra help into higher grades. Resources for remediation would also, of course, need to be factored into any raising of the "passing" grade required for graduation.

However, the *KTP* educators also see value in integrating remediation approaches into mainstream classes as part of MCAS preparation, and the individualizing of learning through individual learning plans and smaller learning communities. *Examples of moves in this direction are included in the first strategy within Challenge II, Question 4.* While these approaches were intended to be pursued at this stage in the reform cycle as additional to the continued provision of separate remediation, they have been invested with additional importance because of the cutbacks in targeted remediation funding. For ninth and tenth grade at-risk students, attention to MCAS within mainstream English and math classes may now be all the support they get.

CHALLENGE II. CURRICULUM AND INSTRUCTION

Question 3

How can we increase the effectiveness of remediation instructional strategies?

What We Know

One of the most exciting developments in K-12 education today is the increasingly effective use of data to drive curriculum and instructional strategies, particularly in ways that individualize instruction. Within remediation efforts, item analysis of individual MCAS results, along with other data, is being used to target students' strengths and weaknesses, and to focus school remediation on identified topics or writing challenges.

Student learning is also improved through the provision of a variety of instructional strategies. Promising practices employed within Boston, Springfield and Worcester remediation range from the use of one-on-one tutoring, to attention to test-taking strategies and psychological factors that impede success.

Another of the keys to how effectively individualized remediation is implemented is how well information about the students and their needs is communicated both to them and among the educators who are serving them. *KTP* district experience suggests that a crucial tool for communicating with students is the initial student meeting. *(For more on this and other aspects of personal contact with students, see Challenge IV, Question 7 strategies.)*

For collaboration among teachers, Individual Student Success plans and student folders play a varying role in the three *KTP* districts. Springfield spent time and money a few years back to store all their ISSPs electronically, but they are available to teachers only through the department heads. Worcester's success plans are a fairly brief record of the student and remediation services they have participated in to date, however both *KTP* focus schools in Worcester also develop (and constantly update) supplementary folders of information on the student's record. Success plans at Commerce High School in Springfield have useful historical summaries of MCAS scores and descriptions of academic strengths and weaknesses from item analysis. *(See sample plan in first strategy below.)* But overall, *KTP* field researchers reported that the documents used throughout the three districts stopped short of drawing together all the relevant information, and in general provided historical information rather than setting out a plan for future provision. Feedback from some schools indicated that staff see the plans as another piece of bureaucratic paperwork, although they were felt to be useful in the appeals process. Given the importance of communication and the challenge of individualizing remediation services, *KTP* researchers have identified success plans as a topic for further investigation in Year Three.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Increasing the effectiveness of remediation instructional strategies

KTP school(s) or district(s):

- **Use data to tailor the content of remediation**
- **Provide one-on-one or small group tutoring**
- **Team remediation teachers to encourage specialization**
- **Teach test-taking strategies and address psychological factors impeding success**
- **Promote standards-based teaching and learning approaches**

STRATEGY 3.1

Use data to tailor the content of remediation

All of the schools we visited used individual student data extensively, to target services and to respond to each student's strengths and weaknesses. Charlestown High School performs ongoing analysis of previous MCAS scores, in-class assignments, IEP records, ISSP plans, and any language assessments. Charlestown has also been "adopted" by Bain and Co. (a management consultancy firm), which provides extensive data analysis. Bain gives detailed reports to Charlestown about which areas need to be improved and which teaching strategies appear to be most effective. Charlestown's headmaster describes emphatically how valuable these detailed reports are to his school. At Burncoat High School, in addition to viewing each student's ISSP, MCAS scores, transcripts, and other assessments, remediation staff will sometimes even seek out a particular student's eighth grade teachers to understand more about his or her strengths and weaknesses. Throughout the Worcester system, after-school remediation instructors use past MCAS analysis, classroom teacher feedback and individual student interviews to group students, when possible according to need, e.g., those who have not taken Algebra, or students whose MCAS grades were substantially below the cut-off.

Charlestown

Burncoat

At East Boston High School, there are regular meetings between the ELA/math heads and each set of grade level teachers. In these meetings, discussion centers around each student's particular needs, as evidenced through performance on standardized tests and in-class assignments, and how the teacher has responded to those strengths and weaknesses. The lead ELA and math teachers, as well as the teacher's peers, offer constructive feedback on the teacher's strategies. A consistent finding across various schools is the importance of informal as well as formal structures for communicating information about student needs. Open channels of communication among staff allow for the effective transfer of knowledge gained from the analysis of data.

East Boston

Students at East Boston High School also have access to the PLATO and SMART READER programs that give instantaneous feedback about problem areas. The PLATO program is an MCAS specific, self-guided program that contains MCAS practice questions, lessons on how to solve particular question types, and full MCAS tests. Students are given instant feedback about their particular problem areas

Commerce

At Commerce High School in Springfield, staff use item analysis to create summaries of academic strengths and weaknesses, and appropriate support strategies, both of which are recorded on the Student Success plans. *(See sample.)*

Student Success Plan *****CONFIDENTIAL*****

School:	High School of Commerce	**Counselor/Teacher:**	
Last Name:	[redacted]	**Student ID:**	[redacted]
First Name:	[redacted]	**Grade Level:**	12
Middle Name:	[redacted]	**IEP:**	00
Lunch Status:	F	**TBE:**	04
Address1:	[redacted]	**Parent/Guardian Name:**	[redacted]
Address2:		**Telephone #:**	[redacted]
City:	Springfield	**Work #:**	[redacted]
State:	MA	**Zip Code:**	01105

Academic Achievement Data

Test	Date	Grade	Section	Score
MCAS	6/1/2001	8	Eng Perf Lev	W
MCAS	6/1/2001	8	Eng_Raw_Sc	27
MCAS	6/1/2001	8	Eng_Scaled	218
MCAS	6/1/2001	8	Math Perf Lev	W
MCAS	6/1/2001	8	Math_Raw_Sc	19
MCAS	6/1/2001	8	Math_Scaled	218
MCAS	6/1/2003	10	Eng Perf Lev	F
MCAS	6/1/2003	10	Eng_Raw_Sc	29
MCAS	6/1/2003	10	Eng_Scaled	216
MCAS	6/1/2003	10	Math Perf Lev	F
MCAS	6/1/2003	10	Math_Raw_Sc	16
MCAS	6/1/2003	10	Math_Scaled	218
MCAS	11/1/2003	11	Eng Perf Lev	F
MCAS	11/1/2003	11	Eng_Raw_Sc	34
MCAS	11/1/2003	11	Eng_Scaled	218
MCAS	11/2/2003	11	Math Perf Lev	F
MCAS	11/2/2003	11	Math_Raw_Sc	15
MCAS	11/2/2003	11	Math_Scaled	216

Attendance Record

Year	School		Type Absence	Count
2004	COMM		Apprvd Abs	1

Attachments

Academic Strengths and Weaknesses

Academic Strengths

Item	Description
	multiple choice type questions
	number sense and statistics

Academic Weaknesses

Item	Description
	open response type questions
	measurement and geometry
	multiple choice questions
	writing - topic development and open response

Academic and Support Strategies

Student Signature:		**Parent Signature:**	
Principal Signature:		**Date:**	
Review Date:			

District/School Academic Support Strategies

Reason for Intervention	Intervention	Status	Start	End	Results
Failed MCAS Math	In School Classes-Math Enrichment	A	9/3/2003	6/10/2004	intermediate math instructs test taking skills and in all state standards for mcas
Failed MCAS English	After School Tutoring	A	11/1/2003	2/28/2004	
Failed MCAS English	In School Classes - Please List	A	9/2/2003	6/10/2004	
Needs Improvement - ELA	CPS-Support Classes During School	A	9/2/2003	1/18/2004	00490475 - Read/Study II
Needs Improvement - Math	CPS-Support Classes During School	A	9/2/2003	6/18/2004	01050451 - Interm Math

STRATEGY 3.2

Provide one-on-one or small-group tutoring

SciTech

At many schools, including SciTech in Springfield, one-on-one programs provide a powerful remediation tool for at-risk students. SciTech's federally-funded Gear Up program provides one-on-one tutoring and counseling that is individually tailored to meet eligible students' needs. Eligibility is determined by the middle school which the student attended (Gear Up only works with a few middle schools in the district), or for older students, through self-referral and referral by teachers and guidance staff. After evaluation and counseling with Gear Up, a student receives one-on-one tutoring and counseling with peer or college students in MCAS remediation, specific subjects, or college preparation. With one-on-one instruction, a student's concerns can be quickly addressed and instruction can be focused on problem areas. During the 2004 school year, Gear Up tutoring services were opened up to all students in all grades, however, this was not possible for 2004-2005.

Commerce

The after-school remediation program at Commerce in Springfield provides an alternative approach based on a small group. The program addresses career motivation and resume writing alongside math and English skills. Low student-teacher ratios are vital to this program, which has just completed its fifth year.

STRATEGY 3.3

Team remediation teachers to encourage specialization

WVHS

One of the innovative teaching strategies being employed at Worcester Vocational High School is the grouping of teachers around particular content areas. Over the course of a summer remediation class, instead of having one teacher cover many content areas, the program rotates teachers who focus on specific subjects. For example, one teacher who is strong in geometry will teach important standards within that curriculum strand. Another teaches Algebra I standards, and another focuses only on open-response questions. Then they rotate. So the teacher teaches the same thing three times a day, over the course of a twenty day course, focusing on a defined set of essential learning standards. This strategy has enabled remediation teachers to concentrate on a defined set of objectives, and hone the most effective ways to teach to them.

STRATEGY 3.4

Teach test-taking strategies and address psychological factors impeding success

Burncoat

At Burncoat High School in Worcester, remediation staff are focusing not only on the academic content of the exam, but also on test-taking strategies and the psychological factors that may be effecting student success. *See more on this approach under Challenge V, Question 8.* Many students get nervous and answer a question in the wrong way because they didn't understand what was expected of them. These remediation strategies focus on helping the student to understand the question and develop the skills to narrow down the range of options and then formulate an appropriate response.

According to Burncoat High School's ELA tutor:

"I teach the students to pace themselves as they would if they were taking the exam. We work using past exams and completely run through the previous reading selections, multiple choice questions and open-response questions. I teach them to have a conversation with themselves. I teach them to remain calm and positive. They are prepared to take the exam, prepared to eliminate all outside distractions and stress. They are taught basic things like stress reduction, sleep, eating, what to wear, where to sit. We use many exercises to practice and improve their power of positive thought. They close their eyes and imagine themselves taking and passing the test; then receiving the news of passing, all the way to walking the stage at graduation. These kids have been beaten down, some failing the test five times. I know that most of them have the brainpower to pass the test. However, I have to get them to believe in themselves. They go into the test prepared in all areas. They will not let anything distract them, and they will not be surprised by anything that the test throws their way."

STRATEGY 3.5

Promote standards-based teaching and learning approaches

… by incorporating greater interactivity in classroom instruction

WVHS

Across the board, in both regular and remediation classes, Worcester Vocational School has moved away from a more traditional, "lecture-based" instructional style towards an interactive approach. In a larger sense, the motivation for the change was to encourage students to think about all of their academic and vocational subject matter in a personal manner, in order to make it more relevant to their everyday lives. This change in focus dovetailed nicely with the emphasis in MCAS on open-ended response questions that allow for student creativity and critical thinking. Students are required actively to engage the subject material, and use their own experiences to formulate answers.

… by posting rubrics for open response questions

Commerce

Springfield's High School of Commerce has also focused on improving student performance on the most demanding open-response MCAS element: long composition. The Coordinator of Collaborative Teaching and Professional Development for English developed a school hallway poster presentation demonstrating the grading rubric for the long composition. For each score, the poster provided:

- a corresponding composition example
- an explanation of why each answer received the score given.

Copies of the poster are displayed in hallways at either end of the school. While this poster presentation is simple in nature and easy to create, according to the MCAS Coordinator, it had "an impact out of all proportion" at Commerce, among both students and teachers. As part of a larger campaign to rally students and teachers around the MCAS, it inspired both classroom discussion and student self-reflection.

Question

4

How can lessons learned from implementing effective remediation inform and improve education generally?

What we know

It is clear that the six focus schools and three *KTP* districts are putting great energy into the targeting and improvement of remediation instruction. But remediation efforts for individual students should not, and do not, stand alone. Increasingly, the three *KTP* districts have also worked to incorporate effective remediation approaches into overall school strategies and the broader educational context, in order to provide more effective education to all students.

This type of linking and integration comes from (and benefits) both sides — remediation and mainstream education. Districts and administrators want to be sure that remediation is fully informed by whole-school advances in standards-based education, from updates in curriculum to increasingly interactive forms of classroom instruction. At the same time, they want to incorporate remediation successes (with small-group instruction, for example, and targeting of learning based on MCAS item analysis) into mainstream teaching.

At some levels, the integration of remediation and regular classroom instruction takes place naturally. In two of the three *KTP* districts, in-school and after-school remediation teachers are typically drawn from ELA and math teaching staff at the same high school. In some in-school remediation delivered within a double time block, remediation literally shares the stage with core ELA and math instruction. But even when remediation is delivered by different teachers and at different times, *KTP* schools have begun to use a growing variety of methods to maximize interaction among remediation teams and regular educators, and to enable the sharing of ideas, approaches and materials.

While it is always valuable to integrate different components of students' learning experiences, this takes on increasing importance as large-scale reforms take hold. There are several large-scale school reform efforts underway in Massachusetts aimed at reducing the size of large high schools and restructuring them into more personalized learning environments. In fact, all three of the *KTP* districts are currently part of this effort, as supported by grants from the Gates Foundation, the Carnegie Foundation and/or the federal Smaller Learning Communities Initiative. In these smaller learning environments, it should be possible to expand the emphasis of "MCAS support" from post-failure, separate remediation programs to include additional, earlier, pro-active and individualized support that is integrated into mainstream classroom curricula. Unfortunately, early evidence from the *KTP* districts is that this thinking has yet to feature in smaller learning community development in explicit ways. *(See last strategy in this section.)*

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Linking remediation strategies into the broader educational context

KTP school(s) or district(s):

- **Incorporate MCAS preparation and remediation into the regular education classroom**
- **Frontload teachers gifted at addressing standards into ninth and tenth grade core classrooms**
- **Include math and English heads/senior teachers on the after-school remediation team**
- **Use MCAS to help bring vocational-technical and traditional academic education together**
- **Move toward smaller learning communities that foster integrated learning individualized teaching approaches**

STRATEGY 4.1

Incorporate MCAS preparation and remediation into the regular education classroom

… through projects coordinated by an MCAS Specialist

Burncoat

At Burncoat High School, the MCAS Specialist works with regular education math teachers, English teachers, Special Education teachers, and bi-lingual teachers to develop specific classroom projects based on the make-up of their classroom population. Through analysis of previous MCAS results and other testing information, the MCAS Specialist will work in collaboration with classroom teachers to devise student projects that will address areas of concern for students still struggling academically. The MCAS Specialist has specific knowledge of the MCAS exam and the areas of trouble for each student, while the classroom teachers have specific information about the kinds of projects that could help the student master content they have struggled with. Teachers at Burncoat also receive copies of previous MCAS questions from the MCAS Specialist, which they use in the classroom to help prepare students for the exam.

…through a joint MCAS Specialist/Curriculum Coordinator

East Boston

At East Boston High School, the inclusion of MCAS-related concerns in ninth and tenth grade regular education classrooms occurs through a slightly different structure. The MCAS Coordinator, who also serves as the school's Assistant Headmaster for Curriculum, naturally has regular meetings and informal discussions with the math and English department heads. The school sees the Coordinator/Assistant Headmaster's two roles as inextricably linked. Since the MCAS exam tests students' understanding of the curriculum frameworks, as well as the fidelity of regular classroom teaching to those frameworks, there is a close relationship between standards, MCAS testing and what occurs in the regular classroom. There is no "firewall" between them. The East Boston MCAS Coordinator is thus in a good position to ensure that mainstream curriculum and remediation approaches are working effectively together.

… through math and ELA coaches

Commerce

In 2003-2004, and continuing through 2004-2005, Commerce High School in Springfield established a new mechanism aimed at more effectively linking remediation approaches to the regular classroom setting. Through a competitive grant, Commerce High was able to hire two specialists — one in math and one in English — to bring new support to classroom teachers. By working closely with all math and English teachers, these "collaborative coordinators" help develop classroom materials and support the effective teaching of academic learning standards. One important part of their role is to prepare weekly MCAS review packets for teachers to incorporate into the regular classroom setting. These coordinators work as a bridge between remediation staff and regular education staff to allow the sharing of approaches and materials.

STRATEGY 4.2

Frontload teachers gifted at addressing standards into ninth and tenth grade core classrooms

SciTech

Charlestown

KTP focus schools not only integrate standards, MCAS and remediation approaches into regular classrooms, but have also reorganized staffing resources to meet these perceived needs. The principals of SciTech High School in Springfield and Charlestown High School in Boston have both made conscious decisions to move teachers who consistently demonstrated an ability to get students to pass the MCAS hurdle to ninth and tenth grade ELA and math classes. The schools believe that by moving these teachers to the earlier high school grade core classes, there will be less initial failure on the tenth grade MCAS and a smaller pool of students who require remediation services thereafter.

STRATEGY 4.3

Include math and English department heads/senior teachers on the after-school remediation team

SciTech

At the Springfield High School of Science and Technology, the remediation staff for after-school programs include the most senior math and English teachers, as well as both the math and English department heads. The school's Vice Principal notes that in all her experience in education she has never worked in another district where the veteran teachers are so truly committed to teaching inner city students. The school's philosophy is that all staff must share responsibility for helping all students achieve their highest potential. The school stresses that remediation staff and regular staffs have similar roles and responsibilities, and that everyone needs to work together for remediation activities to make a positive difference. Having senior staff and department heads deeply involved in providing remediation services helps to ensure that students at SciTech experience a smooth transition between school day classes and after-school remediation programs.

STRATEGY 4.4

Use MCAS to help bring vocational-technical and traditional academic education together

WVHS

At Worcester Vocational High School, an increasingly strong relationship exists between the academic teachers and the vocational-technical teachers. A number of reasons account for this positive development, not the least of which is the deployment by the school MCAS Specialist of unique strategies to fully engage the vocational education teachers in the process of helping students prepare for and pass the MCAS. Examples of these promising strategies include:

- The MCAS Specialist has provided training in MCAS item analysis and testing methods to all vocational education teachers. This has been especially helpful to these teachers as a means of making connections among MCAS, the Massachusetts learning standards, and their particular trades.
- Vocational teachers have taken part in professional development training around the MCAS appeals process, conducted by the school's MCAS Specialist with support from central office staff and materials.
- The high school recently piloted a "problem of the week" instructional program. This program, in which both academic and vocational teachers focus instruction around a common problem, has lead to more frequent conversations between the two sets of teachers.
- Vocational teachers have proctored the tenth grade full MCAS test administration, helping students to understand that the trade curriculum is equally valuable, and that these teachers are equally invested in their MCAS success.
- Trade teachers have filled key roles — including those of site administrator and MCAS tutor — in the high school's after-school and summer remediation programs.

Together, these strategies and others have helped to bridge academic and vocational education for staff and students, and have undoubtedly played a part in the school's 94% competency determination rate for class year 2004 as of June 2004.[2]

STRATEGY 4.5

Move toward smaller learning communities that foster integrated, individualized learning

BPS

SPS

WPS

A central goal of the *smaller learning communities* reform efforts being undertaken by all three *KTP* districts is to develop more cohesive learning environments, in which all staff work closely together to develop curriculum, support students and one another, and use data to drive their school improvement practice. Within this smaller, more cohesive environment, there is also an emphasis on individualizing students' learning plans — an approach which, early charter and public school "small communities" experience suggests, can move the emphasis of "MCAS support" efforts from post-failure, separate remediation programs to earlier, pro-active, and individualized support integrated into the mainstream curriculum.

Perhaps for that reason, there does not seem to have been much explicit consideration within the *KTP* districts about how remediation programs will work within smaller learning communities. In Worcester, for instance, the district Academic Support Program Manager also happens to be the coordinator of the smaller learning community initiative. Her vision for the initiative — including common planning time, opportunities to look at student work, expanded professional development — centers generally on increasing opportunities to target individual student needs, a central strategy of many so-called remediation programs. This development is one that *Keep the Promise* will be looking at in greater detail in the final year of research.

[2] Data obtained from the Massachusetts Department of Education

CHALLENGE III. STAFFING AND TEACHER QUALITY

Question 5

How can we provide remediation staff with the most effective preparation, training and on-going support?

What We Know

The quality of instruction is a key component of the success of remediation programs, so recruiting the right staff and providing them with effective training and support is one of the most important challenges high schools must meet if they are to translate hard-won student participation into improved performance.

To a large extent, the *KTP* districts recruit their remediation staff for any given high school programs from the classroom staff already teaching in that high school. Most of the schools, like East Boston, ensure that after-school staff only teach within their certified areas of instruction. These practices ensure both an acceptable level of teacher qualification and continuity for students between regular and remedial classes. There are two major exceptions. In Worcester, in-school remediation tutors are part-timers hired by the school, and so are not necessarily certified teachers (although some may have those credentials — the math tutor at BHS is a certified math teacher). They do not have additional classroom responsibilities, but they do take part in training provided by Worcester central office and receive on-going support from the MCAS Specialist. Similarly, Charlestown's after-school program instructors need not be certified teachers; some are retired teachers, graduate students or other individuals with demonstrated experience in instructing small groups.

Recruiting of remediation teachers and tutors in the *KTP* districts is accomplished through a combination of central office and principal involvement. In Springfield, for instance, teachers apply for after-, before- and summer-school positions through the district administration office, and are jointly chosen by the district math or English supervisor and high school principal. In Worcester, the After-School Site Administrator, principal and Academic Support District Program Coordinator do the hiring. In the provision of training and on-going support, district offices take an even stronger role, as evidenced in the strategies below.

Recruiting the right staff and providing them with effective training and support is one of the most important challenges high schools must meet.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Providing remediation staff with effective training and on-going support

KTP school(s) or district(s):

> **Mandate comprehensive, customized teacher training**

> **Provide time and support for collaboration**

> **Run content-oriented MCAS workshops**

STRATEGY 5.1

Mandate comprehensive, customized teacher training

WPS

At Burncoat and Worcester Vocational School High Schools in Worcester, all remediation teachers and tutors, working in all program models, are required to attend a district-wide ten-hour customized teacher training program. This WPS training program is comprehensive, covering such areas as:

- Program guidelines and expectations
- Strategies for working with special needs students
- Item analysis and other data techniques used to identify student areas of need
- Training in the use of computer programs
- Dissemination and review of books and curriculum and teaching materials
- Collection of student work for possible use in the appeal process.

While Boston and Springfield also provide some district training, Worcester's approach is the most standard and comprehensive. Worcester administrators feel the strong training program has a vital impact on teaching quality. Worcester's student respondents to the Year Two *KTP* survey rated the quality of their remediation teachers as "great" or "good" at higher levels (70%) than in Boston or Springfield (62% and 55% respectively).

STRATEGY 5.2

Provide time and support for collaboration

WPS

In addition to the mandatory training sessions mentioned just above, Worcester's remediation programs have been designed to promote staff collaboration throughout the year.

After-school tutoring, for example, takes place from 2:00 to 3:00, and is followed by a half-hour block for program staff to meet together to talk about students, update ISSPs, design instructional groupings, and conduct strategic planning. This same common meeting and planning time also features as part of the summer remediation structure. This strategy has been very well received by staff and helps complete the communication loop set up within the district. *(See Challenge I, Question 1, for more on Worcester's system-wide management and communication structures.)*

Commerce

The High School of Commerce in Springfield has also given priority to supporting collaboration, by hiring Coordinators of Collaborative Teaching and Professional Development for both English and math. The two coordinators work with both remediation and regular education staff to offer ongoing support and training, to assist in the development of class materials, and to oversee the spread of effective teaching strategies. The English coordinator, for example, works closely with remediation staff in preparing weekly MCAS review packets for classroom teachers to incorporate into their daily lesson plans. Both coordinators informally assess performance of regular and remediation teachers, offering constructive guidance to improve classroom management and presentation of subject material. They also seek out and introduce cutting-edge MCAS remediation materials as well as regular classroom resources. Commerce funds these positions through a competitive grant first awarded two years ago.

STRATEGY 5.3

Run content-oriented MCAS workshops

WVHS

In addition to the district-mandated ten-day remediation training, Worcester Vocational High School offers a series of on-going workshops to familiarize teachers with the content of the MCAS exam, and to extend their skills in analyzing results to inform teaching practices for individual students. The workshops are offered jointly by the school's Literacy Coach and the MCAS Specialist, to an audience of remediation staff and regular education teachers (often the same). Vocational education teachers use the information gathered from a student's MCAS exam to create real world examples and projects that teach the content areas that the student is struggling to master. The remediation staff learn effective teaching strategies for the various concepts being tested by MCAS, and then have the opportunity to infuse these ideas into their remediation classes.

CHALLENGE IV. ATTRACTING AND RETAINING STUDENTS

Question 6

How can we provide effective mechanisms to attract students into remediation programs?

What we know

We know that greater numbers of students in grades 11-12 (who have failed their 10th-grade ELA or math MCAS) are participating in remediation programs now than just a few years ago. In fact, in our most recent *KTP* survey, in 2004, just over 70% of eligible juniors and seniors in Boston, Springfield and Worcester who failed the MCAS on their first try indicated that they had participated in some type of remediation program to help them prepare for an MCAS retest. This represents a significant increase over the 45% who said they had participated in such programs in a similar MIE study conducted in 2002 (*Taking Charge*). (MIE is currently analyzing student record data of all students in the three *KTP* districts to determine actual rather than self-reported participation, and to track the trend year-by-year, which would also show the impact of individual year budget cuts, if any, on participation rates.)

Why this increase, when state funding for remediation has fallen during this period? Funding was actually retained for students in upper grades who failed 10th-grade MCAS tests; it was eliminated at every other level. It appears likely that students now moving through high school have accepted MCAS as a part of the landscape, when their predecessors in 2002 expressed the hope that the MCAS graduation requirement would not be enforced.

Getting kids to participate in remediation programs is not just a "nice to have:" Worcester ASSP program participants in the 2002-2003 school year showed significantly higher rates of passing math and ELA retests and earning their competency determination *(see the table below)*.

MCAS PERFORMANCE BY ASSP PARTICIPATION DURING THE 2002-2003 SCHOOL YEAR

Worcester Public Schools: class year 2003

	ASSP participants		Non-participants	
Subject area	**#**	**% passing retest**	**#**	**% passing retest**
ELA	133	73%	59	39%
Math	240	66%	81	40%
Competency Determination	295	66%	80	39%

Differences between groups of participants and non-participants are statistically significant at $p < .05$ using Chi-square. Participation include summer 2002 program.

Participants believe attendance will help them pass

Knowing how vital participation is, schools have refined a variety of strategies to get kids to show up. *KTP* research provides us with the first insight into which of these strategies kids themselves credit most with influencing their decision to attend remediation programs. Sixty-eight percent of those surveyed cite their desire to pass the MCAS, coupled with the belief that extra help programs would improve their chances of passing, as a big reason for attending. This is by far the reason cited most often for participating in these programs. Encouragement from teachers, other school staff, and parents/guardians were other reasons mentioned most frequently.

Non-participants cite responsibilities and lack of need for help

Despite some great efforts schools are making towards attracting students into these programs, large numbers are still choosing not to attend. It is helpful for schools looking to bring in more students to know why those that are eligible say they do not take advantage of these extra help opportunities.

REASONS WHY STUDENTS SAY THEY PARTICIPATED IN REMEDIATION PROGRAMS

	Big reason	Small reason	Not a reason
I knew I needed to pass the MCAS to get a diploma and believed. the extra help would improve my chances of passing.	68%	21%	12%
My teachers/other school staff encouraged me to attend.	45%	32%	23%
My parents/guardians encouraged me to attend.	45%	32%	24%
I first tried to pass on my own, when I didn't I decided to get help.	33%	31%	36%
My friends encouraged me to attend.	21%	31%	47%
The program offered academic credit for participating.	25%	28%	47%
I was scheduled into the class and had no choice.	25%	26%	49%
The program offered a gift certificate or similar type of incentive for participating	19%	26%	55%
MCAS program linked with a job so I had the opportunity to gain work experience (paid or unpaid).	19%	23%	57%
The program let me learn on the computer	14%	22%	64%

Reflects survey respondents who reported participation in at least one remediation program. Percentages include only those from total eligible to respond who actually did provide a response. Thus, range for each n is between 862 - 880.

Students most commonly report that the following reasons were a factor in their decision to not attend remediation: they have too many responsibilities (61% of those who did not participate in remediation); they felt they could pass without extra help (61%), or they spend enough time at school already preparing for MCAS (55%). The responses were similar to those given by students who were signed up to participate, but who attended irregularly or stopped attendance before the end — see table under Question 7.

Many of the strategies being used by *KTP* schools and districts address factors mentioned by both participants and non-participants. The strategy section below illustrates moves focused on facilitating communication, support and encouragement for at-risk students, while strategies under Challenge V, Question 8 address more directly the provision of alternatives for students with job, family and other responsibilities.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Attracting students into remediation programs

KTP school(s) or district(s):

- **> Use whatever it takes to engage parents — from community connections to native language communications**
- **> Craft supportive and effective programs that will be promoted by word of mouth**
- **> Leverage local media to reach out more effectively**

STRATEGY 6.1

Use whatever it takes to engage parents — from community connections to native language communications

WWHS

Burncoat

At both Worcester Vocational and Burncoat High Schools in Worcester, as soon as test scores are released students are notified of the academic support options available to them. This contact may come from the MCAS specialist, a teacher, or a guidance counselor. In addition, the school immediately sends letters home to parents/guardians informing them of their child's situation, and detailing all of the available options to help them pass MCAS. Parents/guardians are asked to return the letter indicating whether or not they are signing their child up for a program.

To engage students from the class of 2004 who left their respective high schools without meeting the competency determination, WPS went a step further, partnering with the Worcester Community Action Council (WCAC) to pilot new ways of reaching these students and furthering their chances of taking and passing future MCAS retests. WPS provided WCAC with key information on each of these students including home contact information, important school history data like whether or not student was previously involved in remediation programs, and what they needed to still work on to pass MCAS. WCAC sent letters home in English and Spanish using certified mail. They then called homes, conducted home visits (with interpreters when necessary) and tracked down these students with three objectives in mind:.

1. To get these students involved in the district's summer College Community Connection academic remediation program. See the WPS school profile for more about this summer work and learning program.

2. To have them attend WCAC's own program on Fridays. This program was funded by WPS and provided career readiness training and activities such as attending job fairs, using career programs on the computer, and researching available future opportunities.

3. To get these students to take the retest in July.

Students could conceivably have met all three objectives, since the College Community Connection program met Monday through Thursday. 2004 was the first summer this program was in place. Administrators found it so successful that they decided to continue it throughout the school year. As a part of this, WCAC planned to contact the out-of-school students who did not pass the summer retest and encourage them to attend other programs available at Quinsigamond Community College, or the WVHS MCAS Nights program, and then take the retest again in March.

East Boston

At East Boston High School, the Director of Bi-lingual Education sends information about remediation programs (offerings, times, etc.) home to the parents of all bi-lingual education students in the native language of each parent. She also routinely calls parents of children who are eligible for remediation services and encourages them to make sure than their son/daughter attends these programs. These efforts have seemingly paid off as 79% of bi-lingual education students at EBHS report participating in remediation services. Importantly, strategies like these, which actively engage parents in the recruitment process, are fully complementary to the school's stated goals. In fact, one of the school Headmaster's major goals for the year is to foster parental involvement by strengthening the parent's role in getting eligible students to attend remediation services.

STRATEGY 6.2

Craft supportive and effective programs that will be promoted by word of mouth

Burncoat

At Burncoat High School in Worcester, staff feel that one of the best methods for attracting new students into the program is through word of mouth from students already participating. Many Burncoat students cited friends' encouragement to attend as a reason for joining remediation programs. Students also credited the encouragement and support perceived to be associated with the programs as a reason they chose to attend (as well as why they continue to attend). It is worth remembering that, as with most service provision, if existing customers are happy with what they are getting, they can prove to be the most effective promoters of the service.

STRATEGY 6.3

Leverage local media to reach out more effectively

Commerce

Commerce High School in Springfield has utilized the local media in creative ways. Students in one of the school's video classes have produced Public Service Announcements geared toward educating parents and students about the importance of passing the MCAS. The announcements are being run on local news channels. In addition, one of the school guidance counselors has featured as a guest speaker on a local Spanish radio station, discussing the importance of passing MCAS, as well as parental involvement in students' academics.

Question 7

How can we provide effective mechanisms to retain students in remediation programs?

What we know

Only about half of participants attend until they pass

Perhaps even greater than the challenge of recruiting students in the first place is that of keeping them in the programs. While more and more students have, indeed, signed up for remediation programs over the past few years, large numbers of students either marginally participate in the classes in which they enroll, or drop out altogether. Indeed, only half of our survey respondents reported that they either fully participated until passing MCAS or that they were still participating in hope of passing future retests. The other half reported that they stopped attending before passing or sometimes attended, but not regularly.

Non-participants cite responsibilities and too much time already preparing

Students report a number of reasons for their lack of full participation, the most common being that they had too many other responsibilities including those related to a job

EXTENT OF STUDENT PARTICIPATION IN REMEDIATION PROGRAMS

	%
I sometimes attend extra help, but not regularly.	31%
I started attending extra help but stopped even though I haven't yet passed MCAS.	19%
I am still working to pass MCAS and fully participating in these programs.	21%
I fully participated until I passed MCAS. Then I stopped.	29%

n = 809 and reflects survey respondents who reported participation in at least one remediation program. Does not include those students who participated but chose not to respond to this question.

or family matters. Many also indicated that they were tired of spending so much time preparing for the MCAS, they felt they had learned enough and could pass without more extra help, or that when they attended they didn't feel as if they were learning anything.

To reach out to these students, *KTP* educators have used a selection of approaches grounded in encouragement and personal contact on one side, and the enforcement of consequences on the other.

REASONS STUDENTS INDICATE FOR NOT FULLY PARTICIPATING IN REMEDIATION PROGRAMS

	Big reason	Small reason	Not a reason
I had too many other responsibilities (job, family, etc.).	34%	37%	29%
Tired of spending so much time preparing for MCAS.	30%	37%	33%
Felt I had learned enough and could pass MCAS without much more extra help.	21%	36%	43%
When I attended, I felt like I wasn't learning anything.	18%	31%	51%
Felt I would never pass the MCAS so I decided to stop attending.	15%	26%	59%
Didn't like the teachers in the program.	14%	24%	63%
I felt embarrassed about needing the extra help.	12%	22%	66%
My friends pressured me to stop attending.	7%	21%	72%
I didn't like the other students in the program.	9%	18%	73%

Reflects survey respondents who reported that they stopped attending a remediation program before passing or sometimes attend, but not regularly. Percentages include only those who actually provided a response. Thus, range for each n is between 462 - 475.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Retaining students in remediation programs

KTP school(s) or district(s):

- **Maximize opportunities for remediation staff to become familiar with students**
- **Use data to promote students' understanding of their strengths and weaknesses**
- **Use learning contracts to convey to students that learning is a two-way street**

STRATEGY 7.1

Maximize opportunities for remediation staff to become familiar with students

Burncoat

The Burncoat High School remediation staff get to know their students early on, beginning with their ninth grade transition program. These relationships grow after the tenth grade MCAS scores are reported, as those students still needing to pass MCAS meet with the school's MCAS Specialist to review their status and available extra help options. Burncoat's MCAS Specialist describes these first post-MCAS contacts as crucial: "I ask them, 'well … what do you think is going on?' And it may be issues like they missed a lot of school because they had a baby, or they were very sick that year, or they were helping their family at home and so they weren't in school a lot. Maybe they had a little crisis and that's why freshman year they failed all of their classes. And so I think even though I can't fix it [the past], when a kid gets to express these things it really does help them a bit."

Following these initial sessions, the MCAS Specialist continues meeting with students individually throughout the year to discuss progress, share re-test scores, and attempt to solve issues related to student participation that may arise. The student also has daily contact with the math and ELA tutors, sometimes over the course of two years, if that's how long it takes them to pass the exam. The key here is that a student has someone to listen to him or her and understand what he or she is going through.

This consistency requires two things. The first is this repeated — sometimes daily — opportunity for students to have contact with remediation staff. The other is for that staff to remain in place. Burncoat has made a real effort to retain the staff assigned to remediation programs over the past few years. This consistency in staff has thus enabled these relationships — grounded in familiarity with each student's individual academic needs and personal issues — to flourish. These relationships appear to carry weight, as 70.6% of BHS students rated the encouragement they received to continue in their remediation programs as "great" or "good" compared to an overall average of 50.2% (all *KTP* districts minus BHS

respondents). BHS respondents would also recommend remediation programs to other students at their school far more often than those at other schools in the three districts (97.1% compared to an overall average of 84.9% for all respondents minus BHS).

STRATEGY 7.2

Use data to promote students' understanding of their strengths and weaknesses

Commerce

At the High School of Commerce in Springfield, the ELA and the math department heads conduct item analyses of individual student MCAS results. The item analyses are shared with all teachers, guidance counselors and each student failing the exam. The direct feedback to students in terms of what they missed on the exam as well as how to solve the problem in the future helps each student learn what is expected of them on the exam. Guidance counselors at Commerce use the item analysis when counseling students who failed the MCAS.

WVHS

At Worcester Vocational they also provide each student with a copy of his or her item analysis. The teacher starts by emphasizing any point they did get, encouraging them to think from that starting point to add points. Students emphasized to *KTP* researchers how knowing that "they didn't fail everything" has allowed them to begin these programs with more hope. All previous scores are reviewed to demonstrate that progress is being made and that the student is getting closer and closer to passing. Students also receive strong words of encouragement to continue attending remediation programs, and are provided with a packet of information on available support options. Letters are immediately sent home to the parents, including a copy of the item analysis and details of the remediation options that would suit their child.

STRATEGY 7.3

Use learning contracts to convey to students that learning is a two-way street

Burncoat

In general, the remediation programs at Burncoat High in Worcester are taken very seriously, with clearly defined expectations and standards with regard to student effort, attendance, etc. In order for students to participate in the in-school ELA or math tutoring program, they must sign a contract outlining their commitment and detailing the consequences if they do not fulfill these obligations. In fact, if a student fails to meet his or her commitments he or she may be asked to leave the program. In turn, these contracts promise students the opportunity to learn the content and test-taking strategies necessary to maximize their chances of passing MCAS before they graduate. Certainly, Worcester survey respondents indicate that the district is working hard to live up to its promises, as they rated the test-taking strategies taught through their remediation classes as being either "great" or "good" (60%) significantly more often than students from Springfield (46%) or Boston (48%).

CHALLENGE V. ADDRESSING STUDENTS WITH THE GREATEST CHALLENGES

Question

8

How can we get students with the highest hurdles — lowest MCAS scores, family considerations, special needs — to participate and succeed in remediation?

What we know

As we have seen, schools have developed a variety of recruitment methods and remediation programs in order to reach their target population. Certain subsets of this population, however, face distinct, more challenging hurdles, that may require more radically alternative strategies to promote attendance and provide effective instruction.

One hurdle to participation can be very low initial MCAS scores. Previously, *KTP* research found that remediation programs were more successful at targeting students within range of passing MCAS than those further behind. When analyzing ASSP participation rates, we found that students who scored in the 200-208 range on their initial MCAS attempt were far less likely to participate in ASSP-funded remediation programs than those who scored between 210-218. (*KTP* is currently undertaking a groundbreaking analysis of student record data from district as well as ASSP programs that will look in much greater detail at potential differences between these "low fail" and "high fail" groups.)

KTP student interviews also revealed a wide range of family, social, economic and motivational difficulties that can present obstacles, cutting across the low- and high-fail groups. Some students have childcare conflicts or other family responsibilities, or are particularly tough to motivate because they see no connection between MCAS and their own lives. Other students may be at higher risk because they are so far behind in class credits that they cannot afford the time to attend the in-school remediation class.

Worcester ASSP remediation program data for 2003 also suggests that non-participants are significantly more likely to be: male, non-immigrants, and English-proficient. There were no significant differences in participation rates by race/ethnicity, low-income status or special education enrollment.

Yet performance figures from all three districts reveal that several of these subgroups remain significantly behind both in passing MCAS the first time, and in obtaining their competency determination. The following data, first published in the 2004 Addendum to *What We Know Now*, suggests that black and Hispanic minorities, those with low incomes, recent immigrants, ELLs, and SPED students are all more likely to fail the tenth grade test, and to remain without CD after re-tests.

CHARACTERISTICS BY MCAS STATUS, CLASS OF 2003 AND 2004 COMBINED FOR THE THREE *KTP* DISTRICTS

Student Characteristics	All students	Failed first time	Still no CD as of Summer '03
	n = 11,386	n = 6,272	n = 2,300
	%	%	%
Gender			
Male	48%	50%	53%
Female	52%	50%	47%
Race/ethnicity			
American Indian	0%	0%	0%
Asian/Pacific Islander	9%	6%	4%
Black	38%	45%	43%
White	27%	17%	13%
Hispanic	26%	33%	39%
Low income			
Not low income	38%	29%	26%
Low income	62%	71%	74%
Recent immigrants			
Not immigrant	82%	75%	77%
Immigrant	18%	25%	23%
English Language Learners			
Not ELL	76%	68%	66%
ELL	24%	32%	34%
Special Education			
Not Sped	87%	78%	65%
Sped	13%	22%	35%

Interestingly, the data also suggests that of these groups, only SPED students (and possibly Hispanic students — again, more work is currently being done with the *KTP* data) represent a significantly higher proportion of those without CD at graduation than they did of those failing MCAS the first time. Twenty-two percent of those who failed first time are SPED, while 35% of those without CD at the later date are SPED. It appears that SPED students are participating in remediation to the same degree as others, but that this participation is not helping to improve their performance to the same degree.

Together, these data help highlight which students present the greatest recruitment and teaching challenges for remediation programs. These subgroups will become an even greater focus for remediation managers as time goes on — for the best of reasons: an increasing number of students now pass MCAS on the first try, and an increasing number also pass on the first retest. Those students who will form the bulk of the population requiring remediation in the future will face higher personal hurdles, and therefore require schools to employ increasingly targeted and creative attempts to engage them and help them learn.

The three *KTP* districts have begun to address a number of these issues through efforts to get students with personal obstacles to participate in their general programs, and to offer those with learning challenges more tailored programs *(see below)*. Program managers stressed, however, that remediation for ELL and SPED students is still an area of substantial concern.

What *KTP* schools are doing

PROMISING STRATEGIES FOR:

Getting students with the highest hurdles to participate and succeed in remediation programs

KTP school(s) or district(s):

- **> Provide programs with alternative times, settings and contexts**
- **> Craft tailored approaches for at-risk subgroups**

STRATEGY 8.1

Provide programs with alternative times, settings and contexts

The three *KTP* districts, while placing emphasis on school-day and after-school remediation, have also launched new initiatives to appeal to students for whom in-school or after-school time is hard to come by, or who might respond better to a community setting or work-related context. These efforts include:

MCAS Nights

WPS

A new program started by the Worcester Public Schools during the 2003-2004 school year, "MCAS Nights" is intended to fill a void for those students in need of MCAS remediation but unable to attend the more popular offerings. For example, students who are not academically successful during their first two years of high school often have a full schedule during the day acquiring the specific academic credits they need to graduate. The after-school programs don't always work for students who play a sport, are involved in other extracurricular activities, need to work, watch their siblings, or take care of other family responsibilities (like interpreting for non-English-speaking family members at doctor and other appointments). MCAS Nights is also a good option for students who left school having completed their high school requirements but without their competency determination. In most cases it is inappropriate for these students to return to school during the day or afternoon for remediation.

The program runs for three hours every Monday evening from January through the March retest. Although housed at Burncoat and Worcester Vocational High Schools, eligible students from throughout the city can attend. ELA and math instruction is provided in a small group setting — typically with a 5:1 ratio — by certified math and English teachers. MCAS Nights targets tutoring services for seniors, as well as those who have left school. During its first year, MCAS Nights served 12 students who otherwise would

not have received remediation help. One hundred percent of these students passed the spring 2004 retest, including three from the class of 2003. Staff attribute this success to the very high quality of teachers and a low teacher/student ratio.

MCAS Saturdays

WPS

Another new remediation program offered in Worcester during 2003-2004 was called MCAS Saturdays. The program operated in conjunction with Pride Productions, Inc., a community agency that promotes and supports minority achievement. This program provided both MCAS tutoring and career exploration, and was created as another opportunity to target eleventh and twelfth grade students from all high schools who couldn't make it during the week, including those with school absentee problems. MCAS Saturdays also appealed to those who prefer a community setting and/or career component. The program ran from 9am to 3pm on Saturdays at the Fashion Mall in Worcester, and included three and a half hours of focused instruction as taught by certified English and math teachers from WPS. Lunch was then provided, followed by a two-hour career exploration component provided by Pride Productions Inc. Students who completed the program also received $50 mall gift certificates as a reward for their attendance.

SciTech

Springfield High School of Science and Technology also offers a Saturday MCAS class, though its origins are different from Worcester's Saturday program. A number of years ago, SciTech discovered an increasing number of students were failing classes as a result of too much tardiness and/or absence. To help students make up this missed class time, as well as providing a consequence for skipped detentions, SciTech instituted Saturday School. At around the same time passing MCAS became a graduation requirement, SciTech began requiring these Saturday school students — some of whom had never taken MCAS while others had taken it with mixed results — to work on MCAS preparation. In an attempt to expand remediation opportunities within existing resources and structures, the program is now open to all students, though still mandatory for those making up time due to absences, tardiness and skipped detentions. The class is comprised mostly of students making up time, with the addition of a few students who are attending of their own will for remediation. In either case, the remedial instruction provides another opportunity to engage these students.

STRATEGY 8.2

Craft tailored approaches to at-risk subgroup populations

Bilingual students

East Boston

Traditionally, students who learn and use English as a second language have done poorly on the MCAS, especially on the ELA component. This is of particular concern to East Boston High School, which is the site of a magnet program for students whose first language is Spanish. The director of the bilingual program at East Boston High School has worked closely with the MCAS coordinator as well as remediation staff to get these students to pass MCAS. According to bilingual program staff, all students in the program who have not passed MCAS are required to enroll in a remediation program. The director of the program calls parents to discuss remediation options and sends letters home to parents in their native language. *(See more on this communication strategy in Challenge IV, Question 6.)* East Boston High School has been very successful in getting bilingual education students to pass MCAS.

Special Education students

Preliminary inquiries in the *KTP* districts indicate that for SPED students who attend school regularly, remediation participation and attendance is no more of a challenge than for other students. Yet, despite similar involvement in remediation programs, they are less likely to pass retests than their classmates. Two of the *KTP* focus schools have begun to focus their attention on remediation instruction that is tailored to the needs of this group, in bids to help them more effectively.

East Boston

SPS

East Boston High School has created a separate SPED remediation class scheduled during the school day. While other students also attend in-school remediation, this particular class is taught by remediation staff in conjunction with SPED teachers. Springfield schools are also more likely to offer in-school remediation through SPED teachers. Springfield has also created an MCAS remediation summer school class taught by a team including an ELA, math, SPED and ELL teacher. These strategies are based on the belief that SPED teachers are more skilled at teaching students with learning disabilities, and that this extends into remedial learning.

Program Profiles

Program Profiles:

BOSTON PUBLIC SCHOOLS

District approach

Boston Public Schools' remediation programs are funded through the Boston Public Schools budget and the state's ASSP competitive grant program. The district leadership works on the principle that the best returns on any remediation investment are produced by directly supporting small-group teaching. Funding is focused on direct classroom instruction programs, including MCAS-specific remediation classes and before- and after-school tutoring services. Implementation of the direct instruction, however, is decentralized, with significant variation among schools. BPS also cooperates with the Boston Private Industry Council to offer MCAS remediation during the school year and summer in conjunction with a paid internship at a local business.

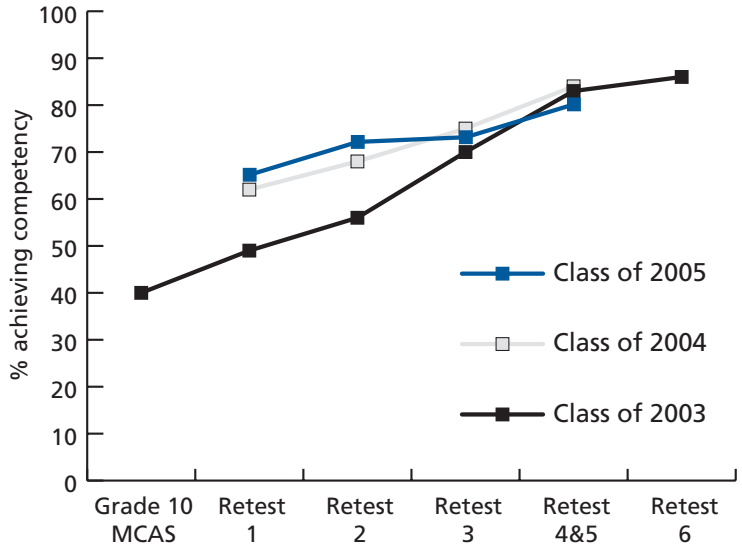
School-Determined Remediation Program Structure

High schools in the BPS system, like those in Springfield, are allowed significant freedom to determine appropriate MCAS remediation programs for their particular student populations. Some programs, such as the in-school remediation model, are developed at the district level. However, the district does not prescribe a specific curriculum for the in-school or summer programs, so individual schools and teachers have the leeway to try various approaches. Other program structures are created and implemented entirely by individual schools. sometimes in partnership with outside organizations.

Training for remediation staff is also left to the schools. The two high schools featured here — East Boston High and Charlestown High — offer three main types of MCAS remediation: in-school, after-school, and summer school programs.

Individual schools and teachers have leeway to try various approaches.

Remediation Progress for Boston Public Schools High School Students



Percent of BPS High School Students Achieving Competency Determination After Each Retest Opportunity

Changes Over Time: Impact of the State Cuts

Reduced funding due to budget cuts forced several changes:

- Elimination of early intervention programs. The 80% cutback in state funding for remediation programs in the FY04 budget compared to previous years resulted in drastic cutbacks for early intervention in all three *KTP* districts. Without ASSP funding for pre-eleventh grade remediation, in Boston, the elementary, middle, and ninth and tenth grade tutorial programs were completely eliminated.
- Monitoring of student progress severely undermined. In 2002-2003, each senior at Charlestown High who needed to pass the MCAS was set up with an MCAS advisor who met with students personally to review, plan and monitor progress as they prepared for the retests. In 2003-2004, although the test preparation programs were still offered, there was no longer staff responsible for monitoring individual student progress. Similarly, at East Boston, one administrator reported that the level of intensity and follow-up has been significantly scaled back from the previous year, thus compromising the continuity of services that had been viewed as very effective in the past.
- Fewer resources for special population services. SPED and ELL students were disproportionately impacted because of the amount of specialized services that they require.

What's Working in the Programs?

Boston Public Schools and its two *KTP* focus schools, East Boston High School and Charlestown High School, use a number of promising strategies in their delivery of remediation to at-risk students.

Look for the following Boston strategies highlighted in Part Two of this document:

Challenge I, Questions 1 and 2:
- Structure MCAS remediation during the regular school day
- Reallocate local funding to cover priority programs

Challenge II, Questions 3 and 4:
- Use data to tailor the content of remediation
- Incorporate MCAS preparation and remediation into the regular education classroom
- Frontload teachers gifted at addressing MCAS into ninth and tenth grade core classrooms
- Move toward smaller learning communities that foster integrated, individualized learning

Challenge IV, Question 6:
- Use whatever it takes to engage parents — from community connections to native language communications

Challenge V, Question 8:
- Craft tailored approaches to at-risk subgroup populations

East Boston High School, Boston

School and Community Profile

East Boston High School (EBHS) is one of twenty-six high schools in the Boston Public School District. It is a district magnet school for Spanish bilingual education students.

Whole School Approach

East Boston High School's MCAS remediation programs are just one aspect of a comprehensive schoolwide strategy designed to ensure student success. Despite the significant socio-demographic disadvantages of students and the disproportionately large Limited English Proficient (LEP) population, East Boston High School has significantly improved academic standards over the past several years.

In the face of statewide concern over the impact of MCAS on LEP students, East Boston's students are far exceeding expectations. Out of 51 juniors in the bilingual program in 2003-2004, only nine had not passed the math MCAS and 21 had not passed the ELA MCAS by the summer of 2004. The school's MCAS success rate is due in part to the bilingual program director, who advises students on MCAS preparation and helps them fully understand expectations for the MCAS exam. *(For more on this approach, see Challenge V, Question 8.).*

2003-2004 School Profile Information	School	District	State
	East Boston High School	Boston	Massachusetts
Number of Students	1,470	60,150	980,818
Number of Teachers	65	3,926	72,062
Teacher/ Student Ratio	22.6 to 1	15.3 to 1	13.6 to 1
% Core academic teachers highly qualified	91.9%	87.0%	93.9%
% Minority	77.3%	86.0%	25.4%
% Percent Low Income	61.6%	73.4%	27.2%
% Special Education	15.9 %	19.5%	15.6%
% Limited English Proficient	26.9%	19.0%	5.0%
Post Secondary Plans: 4- / 2-year college	1% / 0%	34% / 12%	56% / 19%
At-risk indicators (2002-03)			
Grade 9-12 Dropout Rate	6.1%	7.7%	3.3%
Attendance Rate	83.3%	91.9%	93.9%
Retention Rate	8.1%	7.1%	2.6%

BOSTON STUDENT PROFILE

Deciding to Go the Extra Mile

Currently a student at a community college in Massachusetts, "Greg" never gave up in his pursuit of a high school diploma. Calling himself "a fighter" and the MCAS "a combative test," Greg took the MCAS math three times and the ELA four times before finally passing.

Greg attended two different high schools in Boston. Mostly getting Bs and Cs in school, Greg enjoyed attending school for the friendships more than for the work, because "that's where the cool kids are," he says.

Greg found the MCAS tests a big hurdle to overcome. The first time he took them, he says he wasn't very focused, did no preparation, and just "covered what was easy and left everything else blank." One of the problems for Greg was that most of the tests that he had been accustomed to taking in school were nothing like the MCAS. So he took remediation programs specifically geared to preparing for the MCAS during school, after school, and then outside of school through the Princeton Review. These programs gave him individual attention in math and English, as well as strategies for approaching the MCAS's range of open-ended, essay, and multiple-choice questions.

It wasn't just that the MCAS was tough, he says; it was also his own "habit of not taking things seriously." He feels that he only began to take the MCAS seriously on his third try, when he finally passed the math section. Looking back, he says the MCAS pushed him to work harder. It was his own level of effort that was the key variable, and it took the graduation requirement to motivate him to put in the effort. By his senior year, Greg was putting in enough effort to make his school's honor roll.

Greg's plan is to transfer to a four-year college after doing two years at the community college. Greg had always wanted to go to a four-year college, but his SAT scores weren't good enough the first time he took them, he says, and he never re-took the SATs. Instead of working to raise his scores on the SATs, he opted to go to a two-year college first. In effect, he had an alternate route. It was different with the MCAS; the accountability associated with it pushed him to persist until he passed it. It was the wakeup call he needed to ask for extra help — and then the programs were there for the taking.

East Boston High School Remediation Program Structure

In-School Model

Type of instruction:	**Intensive MCAS English and math preparation classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**During school morning and afternoon**
Where offered:	**EBHS classrooms**
Length of class/x per week:	**45 minutes / five times per week (additional to regular math classes)**
Elapsed initial attendance time:	**Semester**
Target audience:	**Eleventh and twelfth grade students who previously failed one or both MCAS tests**
Size of classes:	**No more than 26 students per class for regular education; 11-12 for ESL and SPED classes**
Mandatory or voluntary:	**Mandatory attendance**
Part of regular class schedule:	**Yes**
What class or other time forgone for this activity:	**Different for each student — an elective or study period**
Credit offered or not:	**Yes, it is a credited course**
How program funded:	**Boston Public Schools**

After-School Model

Type of instruction:	**MCAS workshops**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**After school**
Where offered:	**EBHS classrooms**
Length of class/x per week:	**1.5 hours / four times per week**
Elapsed initial attendance time:	**Before March test and November retest**
Target audience:	**Eleventh and twelfth grade students who previously failed one or both MCAS tests**
Size of classes:	**Small group and individual**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funds (state)**

Summer Models

Traditional Summer School Program

Type of instruction:	**MCAS ELA and math remediation**
Instructional content:	**MCAS remediation in ELA and math, in addition to instruction in courses failed during the school year**
When offered:	**Four weeks during July**
Where offered:	**School classrooms**
Length of class/x per week:	**5 hours / 4 days per week**
Elapsed initial attendance time:	**100 possible hours of instruction total in all subjects**
Target audience:	**Eleventh or twelfth graders who failed one or both of the MCAS tests and have also failed any required course other than ELA or Math (such as science, history, etc.)**
Size of classes:	**Approximately ten students**
Mandatory or voluntary:	**Mandatory**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP**

Classroom at the Workplace

Type of instruction:	**MCAS preparation and school-to-work component**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**Summer**
Where offered:	**At cooperating businesses in Boston**
Length of class/x per week:	**90 min. / five days per week during summer**
Elapsed initial attendance time:	**52.5 hours over seven weeks during summer**
Target audience:	**Eleventh and twelfth graders**
Size of classes:	**Small groups**
Mandatory or voluntary:	**Mandatory part of internship program for students who have not passed the MCAS**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**NA**
Credit offered or not:	**No**
How program funded:	**Boston Private Industry Council**

Charlestown High School, Boston

School and Community Profile

Charlestown High School (CHS) is one of twenty-six high schools in the Boston Public School District. The school is the district's provider of the life skills curriculum for all qualifying BPS students.

Whole School Approach

Charlestown High School has achieved a reputation as a success story in the Boston Public Schools. (It was named a "Vanguard School" by Mass Insight Education in 2005.) Despite the significant socio-demographic disadvantages of students and its disproportionately large special education population, Charlestown High School has in fact improved its students achievement record substantially since MCAS testing began.

Charlestown's success, its leaders say, is due to a well-coordinated effort among staff to provide services specifically geared to student needs. Staff work closely together and share information about each student's strengths and weaknesses. A partnership with Bain and Co. provides staff with detailed MCAS data analysis, which teachers use to provide targeted instruction.

2003-2004 School Profile Information	School	District	State
	Charlestown High School	Boston	Massachusetts
Number of Students	1,255	60,150	980,818
Number of Teachers	58	3,926	72,062
Teacher/ Student Ratio	21.5 to 1	15.3 to 1	13.6 to 1
% Core academic teachers highly qualified	91.0%	87.0%	93.9%
% Minority	91.2% (46.9% Af-Am, 18.1% Asian, 25.9% Hispanic)	86.0% (28.3% Af-Am, 2.4% Asian, 48.5% Hispanic)	25.4% (8.8% Af-Am, 4.7% Asian, 11.5% Hispanic)
% Percent Low Income	64.4%	73.4%	27.2%
% Special Education	21.4 %	19.5%	15.6%
% Limited English Proficient	22.7%	19.0%	5.0%
Post Secondary Plans: 4- / 2-year college	40% / 10%	34% / 12%	56% / 19%
At-risk indicators (2002-03)			
Grade 9-12 Dropout Rate	10.5%	7.7%	3.3%
Attendance Rate	83.5%	91.9%	93.9%
Retention Rate	16.1%	7.1%	2.6%

Charlestown High School Remediation Program Structure

In-School Model

Type of instruction:	**Intensive MCAS English and math preparation classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**During school**
Where offered:	**CHS classrooms**
Length of class/x per week:	**45 minutes / five times per week (matched with regular classes)**
Elapsed initial attendance time:	**Course semester**
Target audience:	**Eleventh and twelfth grade students who previously failed one or both MCAS tests as well as ESL students, new arrivals into the system who never had an MCAS test, and Special Education students**
Size of classes:	**Approximately 25 students**
Mandatory or voluntary:	**Mandatory**
Part of regular class schedule:	**Yes**
What class or other time forgone for this activity:	**Different for each student — electives or study hall**
Credit offered or not:	**Yes**
How program funded:	**BPS**

After-School Model

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**After school**
Where offered:	**CHS classrooms**
Length of class/x per week:	**2 hours / 2 times per week**
Elapsed initial attendance time:	**N/A**
Target audience:	**Eleventh and twelfth grade students who previously failed one or both MCAS tests**
Size of classes:	**Approx. four to ten students**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funds**

Summer Models

Traditional Summer School Program

Type of instruction:	**MCAS ELA and math remediation**
Instructional content:	**MCAS remediation in ELA and math, in addition to instruction in courses failed during the school year**
When offered:	**Four weeks during July**
Where offered:	**School classrooms**
Length of class/x per week:	**Five hours / four days per week**
Elapsed initial attendance time:	**100 possible hours of instruction total in all subjects**
Target audience:	**Eleventh and twelfth graders who previously failed one or both MCAS tests and have also failed any required course other than ELA or Math (such as science, history, etc.)**
Size of classes:	
Mandatory or voluntary:	
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	
How program funded:	**ASSP**

Classroom at the Workplace

Type of instruction:	**MCAS preparation and school-to-work component**
Instructional content:	**Basic ELA and math content and test-taking strategies**
When offered:	**Summer**
Where offered:	**At cooperating businesses in Boston**
Length of class/x per week:	**90 min / five days per week during summer**
Elapsed initial attendance time:	**52.5 hours over seven weeks during summer**
Target audience:	**Eleventh and twelfth grade students**
Size of classes:	**Small groups**
Mandatory or voluntary:	**Mandatory part of internship program for students who have not passed the MCAS**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**Boston Private Industry Council**

JFYNET AT MADISON PARK TECHNICAL VOCATIONAL HIGH SCHOOL, BOSTON

Using Technology to Support Remediation

JFYNet, a nonprofit organization based in Boston, has implemented a customized PLATO program at Madison Park as a key tool in that high school's math remediation strategy. (East Boston, one of the KTP focus schools in Boston, also uses the program.) PLATO is a comprehensive curriculum containing more than 3,000 hours of instruction in all academic subjects at many grade levels. PLATO also has a structure that permits the lessons to be sequenced in alignment with the MCAS.

PLATO was originally used at Madison Park in the extra-help math classes for students who failed their first attempt on the 10th grade math MCAS. Teachers at Madison Park upload MCAS preparatory modules to the PLATO platform on all students' computers, and then customize additional modules on fractions or triangles, etc. depending on students' individual weaknesses. KTP researchers visited the school to observe the program being used in the spring of 2005.

Students work through each PLATO "lesson" or module at their own pace. The computer provides direct feedback, immediately letting students know if they chose the right or wrong answer, and providing explanations. Teachers in the program say that because students work independently, they are less likely to feel embarrassed to ask a teacher for help, or to worry about slowing down the rest of the classroom.

Teachers do not have to pace instruction for the slowest students; rather, the teacher, math coach, aides, and even parent assistants can easily walk around and monitor individual student progress going on at many different levels.

At Madison Park, where data show solid gains among students using the program, the school has moved use of the JFYNet/PLATO program into the tenth grade to help students even before they take the MCAS tests. Based on diagnostic assessments, students who need additional math instruction prior to the MCAS use PLATO twice a week for 45 minutes during the regular school day.

One Madison Park teacher told KTP researchers she finds JFYNet/PLATO a useful instructional tool "for teaching things that you can't draw accurately on a blackboard, like three-dimensional objects or movement." A student said she likes the program because it "gives details and hints that help you to figure out a problem. It also shows you what trick questions look like and lets you learn from mistakes." A sophomore added that PLATO "helps me understand math a lot better and breaks it down into steps. Sometimes the teacher goes too fast, and it remembers to tell you more points than a teacher." Yet he also stressed, "I still need a teacher to help me sometimes. Sometimes you need a person to show you how."

Program Profiles:

SPRINGFIELD PUBLIC SCHOOLS

District approach

While the Springfield Public Schools have not been able to match some other urban Massachusetts districts' 90% Competency Determination (graduation) rates, the district has worked hard to bring the 50-60% initial tenth grade MCAS passing rates of the classes of 2003 and 2004 to an 80% graduation rate. To accomplish that improvement, the district provided a variety of supports to help its at-risk students attain the state standards. The district utilizes a fairly decentralized model, more similar to Boston than to Worcester. The district does exert some control through a districtwide student progression plan for all K-12 schools, and student promotion policies that are standardized across all Springfield schools.

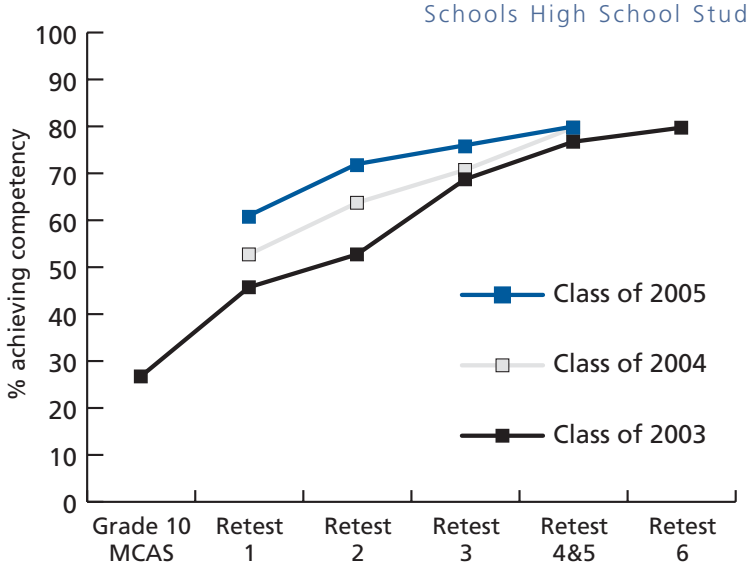
School-determined Remediation Program Structure

High schools in the SPS system are allowed significant latitude in determining appropriate MCAS remediation programs for their particular student populations. Some remediation models are administered through the district office. Others operate solely through the school. Still others are formed through partnerships with outside organizations. The two high schools featured here — High School of Commerce (Commerce) and High School of Science and Technology (SciTech) — offer various MCAS remediation programs: in-school, after-school, before-school, vacation, and summer school programs. Each consists of a variety of educational strategies and approaches.

Unlike other high schools in this study, SciTech does not currently offer in-school remediation classes for students who failed the MCAS. School day MCAS remediation classes were eliminated because students were in large number failing to attend these extra non-credit classes. Instead, the school offers several programs to reach students outside of the normal school day (i.e. before-school, after-school and during school vacations). There is a smooth transition between regular school and remediation

The district provides a variety of supports to help its at-risk students attain the state standards.

Remediation Progress for Springfield Public Schools High School Students



Percent of SPS High School Students Achieving Competency Determination After Each Retest Opportunity

classes since most remediation teachers also teach during the school day. The math and English department heads are also active participants in SciTech's MCAS remediation.

Changes Over Time

Reduced funding due to budget cuts has forced several changes:

- **Fewer program hours.** While student demand for remediation programs has increased, the number of program hours has decreased. This is particularly true of the summer school programs.
- **Elimination of incentives.** Most of the participation incentives — including gift certificates, transportation, paid internships, and others — have been eliminated from the after-school tutoring program over the past year.
- **Fewer proactive services.** Funding for MCAS preparation in ninth and tenth grades was reduced in the past year.

Nevertheless, at least one improvement is evident:

- **Greater acceptance of MCAS.** Teachers report that students are much more accepting of the MCAS now than they had been in the past. The result: Students work harder to pass since they know the MCAS will not disappear next year. (The final *KTP* report, due to be published in 2006, will present data from student surveys that probes these impressions.)

What's Working in the Programs?

Springfield Public Schools and its two *KTP* focus schools, High School of Commerce and High School of Science and Technology, use a number of promising strategies in their delivery of remediation to at-risk students.

Look for the following Springfield strategies highlighted in Part II of this document:

Challenge I, Questions 1 and 2:
- Stucture MCAS remediation during the regular school day
- Reallocate local funding to cover priority programs

Challenge II, Questions 3 and 4:
- Use data to tailor the content of remediation
- Provide one-to-one tutoring and counseling
- Promote standards-based teaching and learning approaches
- Incorporate MCAS preparation and remediation into the regular education classroom
- Frontload teachers gifted at addressing MCAS into ninth and tenth grade core classrooms
- Include math and English heads/senior teachers on the after-school remediation team
- Move toward smaller learning communities that foster integrated, individualized learning

Challenge III, Question 5:
- Provide time and supports for collaboration

Challenge IV, Questions 6 and 7:
- Leverage local media to reach out more effectively
- Use data to promote students' understanding of their strengths and weaknesses

Challenge V, Question 8:
- Provide programs with alternative times, settings and contexts
- Craft tailored approaches to at-risk subgroup populations

High School of Commerce, Springfield

School and Community Profile

The High School of Commerce (Commerce) is one of five high schools in the Springfield Public School District. Commerce's International Baccalaureate Magnet program draws top achieving students from throughout the city.

Whole School Approach

Although administrators and teachers at Commerce have worked hard to address the needs of students who require MCAS remediation, their work must be viewed in light of reforms taking place at the school as a whole. The school has focused much attention on developing the International Baccalaureate Programme and School for Advanced Studies (magnet school) housed within Commerce. The program offers a rigorous course of study for highly motivated students that is based on international standards of excellence designed to help students compete in a global economy. Students who successfully complete the requirements for an IB Diploma may receive a full year's worth of college credit from top colleges and universities throughout the world. In addition to the development of the IB magnet school, this year Commerce reorganized all classes into small learning communities. This model has allowed for better communication about teaching and individual student issues between teachers and guidance staff. Hiring math and English coordinators of Collaborative Professional Development and Training also has turned teaching into a more interactive process among peers. All of these changes, in addition to the development of MCAS remediation services for students failing MCAS, occurred after MCAS became a graduation requirement.

2003-2004 School Profile Information	School	District	State
	High School of Commerce	Boston	Massachusetts
Number of Students	1,722	60,150	980,818
Number of Teachers	132	3,926	72,062
Teacher/ Student Ratio	13.1 to 1	15.3 to 1	13.6 to 1
% Core academic teachers highly qualified	75.4%	87.0%	93.9%
% Minority	86.6%	86.0%	25.4%
% Percent Low Income	73.3%	73.4%	27.2%
% Special Education	17.8%	19.5%	15.6%
% Limited English Proficient	8.5%	19.0%	5.0%
Post Secondary Plans: 4- / 2-year college	31% / 25%	34% / 12%	56% / 19%
At-risk indicators (2002-03)			
Grade 9-12 Dropout Rate	5.4%	7.7%	3.3%
Attendance Rate	80.3%	91.9%	93.9%
Retention Rate	17.9%	7.1%	2.6%

SPRINGFIELD STUDENT PROFILE

Staying Focused on Long-Held Goals

We first met "Tonia," a member of the Class of 2004 in Springfield, Massachusetts, as a junior in high school. At the time, she had passed the ELA portion of the MCAS but was still struggling to pass the math. Though she scored a 254 on the ELA on her first try, she scored 218 on the math twice before passing with a 234 on her second retest.

The most positive aspect of the MCAS for Tonia was that it made her work harder. She really wanted to graduate and go to college, and knew that the only way to do that was to pass the MCAS. Tonia participated in the after-school MCAS preparation program at her high school, and also went to classes on Saturday. Her frustrations mounted, though, because of her difficulties in taking tests — "I get real nervous when I know I have to take a test" — and her belief that what she was learning in the remediation programs was not well connected to the questions that she was being asked on the MCAS. As a result, her motivation waned and her fears of never getting out of high school increased. While her grades in classes were good, she was scared that none of her work would be worth it if she couldn't pass the MCAS and get her diploma.

What made a big difference for Tonia in passing the MCAS, remaining motivated in school, and pushing toward college were individual teachers. Though there was a math teacher in the after-school program whom Tonia did not like — "She told me one day, 'If you don't get it now, you'll never get it, and you'll spend the rest of your life like that" — there were a number of other teachers who helped Tonia develop the skills she needed to pass the MCAS and prepare for college.

Today, Tonia is enrolled in a four-year degree program at a university outside of Massachusetts. Even in her first year at college, she still remembers her Algebra III teacher who taught in a way that helped her understand the math, and science teachers who helped her "really understand how this works." She participated in extra-help classes and other MCAS support programs organized by her school, but it was a few individual teachers she credits with not giving up on her, keeping her focused and dedicated to the goals she had long set for herself.

High School of Commerce Remediation Program Structure

After-School Model

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**After school from November to April**
Where offered:	**School classrooms**
Length of class/x per week:	**1 hour 45 minutes / twice per week**
Elapsed initial attendance time:	**Approximately 20 weeks; students who pass fall retest are not required to continue during the spring.**
Target audience:	**Tenth through twelfth graders who cannot attend remediation programs during the school day**
Size of classes:	**Approx six students**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funds**

Summer Models

Summer of Work and Learning Program

Type of instruction:	**School to work program**
Instructional content:	**MCAS remediation in ELA and math, plus career guidance and work experience**
When offered:	**July**
Where offered:	**At workplaces and local colleges**
Length of class/x per week:	**MCAS remediation in the morning, followed by internships in the afternoon, Monday - Thursday**
Elapsed initial attendance time:	**Approx. 57 hours over the five weeks**
Target audience:	**Entering eleventh or twelfth graders who failed MCAS and/or are performing below grade level and are interested in career guidance**
Size of classes:	**10 students to 1 teacher**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funder and employers**

MCAS Summer School Program

Type of instruction:	**Intensive math and ELA instruction**
Instructional content:	**Math and English subject material plus MCAS test taking strategies**
When offered:	**July**
Where offered:	**School classrooms at Commerce High School**
Length of class/x per week:	**4 hours day / 5 days per week**
Elapsed initial attendance time:	**50 hours over the 5 weeks**
Target audience:	**Tenth and eleventh graders who failed a section of the MCAS**
Size of classes:	**Approx ten students and two teachers per classroom; SPED inclusion classes**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**Yes**
How program funded:	**ASSP funds**

Other Models

School Day MCAS Tutoring

This past school year, the district hired two teachers per high school to tutor students and to teach MCAS preparation classes during the school day. These tutors worked with juniors and seniors who have not passed the math or ELA MCAS yet, and were unable to fit any other remediation course into their schedule. Students who could most benefit from small group instruction — six or fewer students per teacher — receive special consideration. The teachers use PLATO MCAS computer software. Self-assessments are administered throughout the program to gauge student progress and accomplishment.

UMass After-School Tutoring Program

One day a week after school, UMass Amherst students tutor Commerce students in basic English and math content and test taking skills. The tutoring session lasts 45 minutes and involves one-on-one interaction between tutor and student. The target audience is at-risk tenth graders with low academic performance or a history of poor MCAS test scores. The program uses TestU and PLATO software programs. Students also can access the program through the internet from home or at the library during the school year or summer.

High School of Science and Technology, Springfield

School and Community Profile

High School of Science and Technology (SciTech) is one of five high schools in the Springfield Public School District.

Whole School Approach

School year 2003-2004 saw many changes at SciTech. A new principal improved the school's organization and delivery of special programming. English and math teachers were shifted to better match teacher talents with student needs. Similarly, ninth and tenth grade teachers were permanently assigned a classroom instead of having to shuffle between different classrooms during the day. This allowed teachers more planning time between classes, the ability to construct permanent displays in the classroom, and most importantly, more time to counsel students between classes. In addition, ninth grade class sizes were reduced, and all ninth grade classes in all core subjects are now team taught — increasing classroom manageability even more.

2003-2004 School Profile Information	School	District	State
	SciTech	Boston	Massachusetts
Number of Students	1,853	60,150	980,818
Number of Teachers	134	3,926	72,062
Teacher/ Student Ratio	13.8 to 1	15.3 to 1	13.6 to 1
% Core academic teachers highly qualified	90.9%	87.0%	93.9%
% Minority	76.4%	86.0%	25.4%
% Percent Low Income	64.6%	73.4%	27.2%
% Special Education	20.1 %	19.5%	15.6%
% Limited English Proficient	8.7%	19.0%	5.0%
Post Secondary Plans: 4- / 2-year college	39% / 37%	34% / 12%	56% / 19%
At-risk indicators (2002-03)			
Grade 9-12 Dropout Rate	3.2%	7.7%	3.3%
Attendance Rate	83.6%	91.9%	93.9%
Retention Rate	10.4%	7.1%	2.6%

High School of Science and Technology Remediation Program Structure

After-School Model

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**After school from November to April**
Where offered:	**School classrooms**
Length of class/x per week:	**1 hour 30 minutes / twice per week**
Elapsed initial attendance time:	**Approximately 20 weeks; students who pass fall retest are not required to continue during the spring.**
Target audience:	**Eleventh and twelfth graders who failed MCAS and tenth graders at risk for failing MCAS**
Size of classes:	**Approx six students**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funds**

Before-School Model

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**Before school from November to April**
Where offered:	**SciTech school classrooms**
Length of class/x per week:	**1 hour / three times per week**
Elapsed initial attendance time:	**Approximately 20 weeks; students who pass fall retest are not required to continue during the spring.**
Target audience:	**Eleventh and twelfth graders who failed MCAS and tenth graders at risk for failing MCAS**
Size of classes:	**Approx six students**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funds**

Summer Models

Vacation Model

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**Basic ELA and math content and test taking strategies**
When offered:	**February vacation week**
Where offered:	**SciTech school classrooms**
Length of class/x per week:	**4 hours / 5 days during the week**
Elapsed initial attendance time:	**20 total hours of remediation**
Target audience:	**Eleventh and twelfth graders who failed MCAS and tenth graders at risk for failing MCAS**
Size of classes:	**Approx six students**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funds**

Summer Success Program

Type of instruction:	**School to work program**
Instructional content:	**MCAS remediation in ELA and math, plus career guidance and work experience**
When offered:	**July**
Where offered:	**At workplaces and local colleges**
Length of class/x per week:	**MCAS remediation in the morning, followed by internships in the afternoon, Monday - Thursday**
Elapsed initial attendance time:	**Approx. 57 hours over the five weeks**
Target audience:	**Entering eleventh or twelfth graders who failed MCAS and/or are performing below grade level and are interested in career guidance**
Size of classes:	**10 students to 1 teacher**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**No**
How program funded:	**ASSP funder and employers**

MCAS Summer School Program

Type of instruction:	**Intensive math and ELA instruction**
Instructional content:	**Math and English subject material plus MCAS test taking strategies**
When offered:	**July**
Where offered:	**School classrooms at Commerce High School**
Length of class/x per week:	**4 hours day / 5 days per week**
Elapsed initial attendance time:	**50 hours over the 5 weeks**
Target audience:	**Tenth and eleventh graders who failed a section of the MCAS**
Size of classes:	**Approx ten students and two teachers per classroom; SPED inclusion classes**
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**Yes**
How program funded:	**ASSP funds**

Other Models

Saturday MCAS Program

SciTech also has a Saturday MCAS class. For a number of years SciTech had a Saturday detention school as an alternative to in-school and at-home suspension. When MCAS came along, SciTech began requiring Saturday suspension students to work on MCAS preparation. Now the program is open to all, though still mandatory for suspended students. *See Challenge IV for more information on weekend programs.*

Gear Up Tutoring

Although not directly an MCAS remediation program, Gear Up offers a wide range of voluntary one-on-one tutoring and counseling services to students who attended particular middle schools in the city. Gear Up tutors and counselors work closely with students to help them achieve in their classes, pass the MCAS, graduate, and apply to colleges. *See Challenge IV for more details.*

Program Profiles:

WORCESTER PUBLIC SCHOOLS

District approach

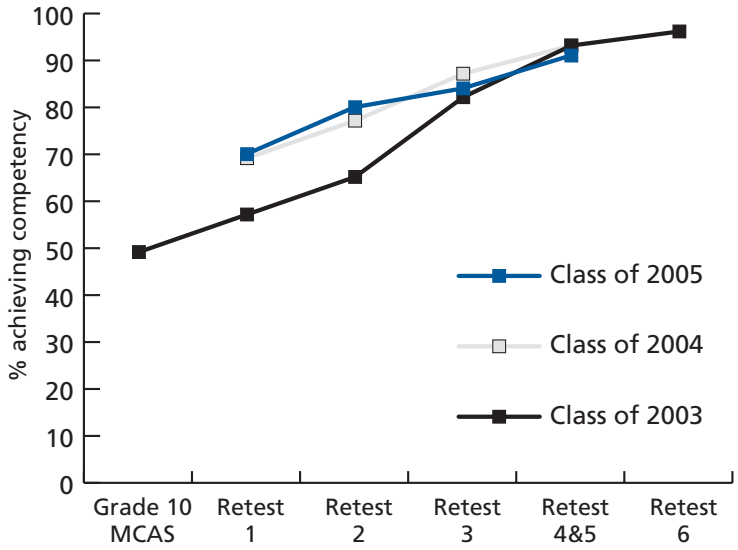
The Worcester Public School district takes a centralized and standardized approach to remediation across the city. The central office determines remediation policies and programs, creating a consistent remediation structure. *(For more on Worcester district policies, structures, and communication systems, see Challenge I, Question 1.)* As a result, the broad outline of remediation services looks similar at all district high schools. *KTP* researchers looked in detail at two Worcester high schools: the Worcester Vocational High School (WVHS) and Burncoat High School (BHS).

The district takes a centralized and standardized approach to remediation.

Districtwide Remediation Program Structure

There are three main models within the Worcester school remediation offering: the in-school, after-school, and summer program models. Worcester Public Schools has recently also added two additional programs — MCAS Nights and Saturday MCAS — for students who find the more traditional programs difficult or inappropriate to attend. For full details on the different models, please see the program tables at the end of this section. (Please note, however, that as funding has been reduced, a number of these services have been cut back — see next section.)

Remediation Progress for Worcester Public Schools High School Students



Percent of WPS High School Students Achieving Competency Determination After Each Retest Opportunity

Changes Over Time

The program details discussed in this report reflect circumstances that in some cases changed from FY03 to FY04 (with one or two recent updates for FY05). Some of the FY04 changes are worth noting, as they directly impacted the strategies being employed to reach students at risk:

- **Decrease in hours of service/increase in class size**. Compared with the recent past, fewer hours of service are offered and, with fewer remediation staff available, some class sizes have increased significantly. This is particularly true for the after-school programs, where more fluctuations in student attendance exist. After-school remediation staff was dramatically reduced, from six teachers in FY03 to two in FY04. Programs are now offered two days per week, down from three. (The summer programs were also decreased from 20 days to 15.) At times, class sizes have been very large — 15:1 ratio — thus eliminating one of the most effective tutoring/support strategies — small size, individual support.
- **Loss of incentives**. Most of the incentives for students to participate in remediation programs — gift certificates, transportation, paid internships, and others — were eliminated during FY04 due to budget constraints. Program managers felt this was problematic not only for motivation, but for those students who need to choose between after-school work and tutoring. These incentives have been restored in FY05.

What's Working in the Programs?

Worcester Public Schools and its two *KTP* focus schools, Worcester Vocational and Burncoat, use a number of promising strategies in their delivery of remediation to at-risk students.

Look for the following Worcester strategies highlighted in Part II of this document.

Challenge I, Questions 1 and 2:

- Centralizing remediation policies and management to coordinate standardized programs
- Structuring MCAS remediation during the school day
- Utilize local college and community volunteers to provide additional student services
- Reallocate local funding to provide priority services

Challenge II, Questions 3 and 4:

- Teaming remediation teachers to encourage specialization
- Teaching test-taking techniques and addressing psychological barriers to success
- Promoting standards-based teaching and learning approaches
- Incorporating MCAS preparation and remediation into the regular education classroom
- Using MCAS to help bring vocational-technical and academic education together
- Moving toward smaller learning communities that foster integrated, individualized learning

Challenge III, Question 5:

- Mandating comprehensive, customized teacher training
- Providing on-going opportunities and support for collaboration
- Running content-oriented MCAS workshops

Challenge IV, Questions 6 and 7:

- Doing whatever it takes to engage parents
- Craft supportive and effective programs
- Maximize opportunities for remediation staff to become familiar with students
- Present MCAS scores in a positive way to encourage students
- Use learning contracts to convey to students that learning is a two-way street

Challenge V, Question 8:

- Provide alternative programs to address specific student needs

- **Restrictions on students served**. Prior to 2004, remediation services were available to qualifying tenth graders through the state ASSP grant. In 2004, new state criteria specified that only eleventh and twelfth graders who had already failed MCAS are eligible to participate; as a result: (1) fewer students being served this year compared to last year — particularly tenth graders, and (2) fewer teachers hired from the start, resulting in a "reactive" environment. (Worcester Public Schools did, however, apply for and receive permission in April of FY04 to use remaining ASSP funds for tenth graders.)
- **Decrease in staff development**. Funding cuts have also resulted in less opportunity for staff development. Remediation teachers now receive less training, modeling of effective teaching strategies, and other school and district guidance.
- **Loss of community programs**. In the past, Worcester's Burncoat High School ran additional small programs in partnership with Quinsigamond Community College and a local housing project. The first was geared to twelfth graders, who received both MCAS support and preparation to take the community college entry exam. In the second program, select tenth and eleventh graders who resided in the housing project received MCAS math tutoring there after school. Due to budget cuts, neither was offered from FY04.

Worcester Vocational High School, Worcester

School and Community Profile

Worcester Vocational High School (WVHS) serves ninth to twelfth grade students from throughout the City of Worcester. During their four years at WVHS, students enroll in both core academic classes (i.e. math, English, social studies, and science) and vocational education classes providing the skills and experiences necessary to master a trade. The school has begun reorganizing their school structure — including the academic and trade programs — around four tenth to twelfth grade academies as part of the WPS Smaller Learning Communities Initiative: the Alden Design Academy, the Allied Health and Human Services Academy, the Construction Academy, and the Information Technology and Business Services Academy. In addition, the school has a separate Academic Preparatory Academy for ninth graders.

Whole School Approach

As a vocational school, WVHS must provide both high-level technical/trade skills and ample academic/MCAS preparation to its students. Juniors and seniors must commit significant school hours to gaining work experience in the community (e.g. seniors spend alternate weeks switching between WVHS and a job site) — which makes finding time to implement in-school remediation programs particularly tricky. As a partial solution, WVHS has done away with study halls. The school is also promoting enhanced interaction and understanding between academic and trade teachers by making all teachers responsible for MCAS. In another move, WVHS now requires its students to take four years of math and science, even though the district graduation requirement is only three years. As a result, ninth and tenth graders now take math and English daily every week; a change from their previous every-other-week schedule.

WVHS has experienced great success with MCAS testing, with 96% of the class of 2003 and 93% of class of 2004 earning their competency determination by the end of FY04.

2003-2004 School Profile Information	School	District	State
	Worcester Vocational HS	Worcester	Massachusetts
Number of Students	1,017	25,055	980,818
Number of Teachers	122	1,892	72,062
Teacher/ Student Ratio	8.3 to 1	13.2 to 1	13.6 to 1
% Core academic teachers highly qualified	91.5%	92.4%	93.9%
% Minority	42.8%	51.8%	25.4%
% Percent Low Income	66.2%	60.4%	27.2%
% Special Education	18.8%	18.3%	15.6%
% Limited English Proficient	2.9%	13.5%	5.0%
Post Secondary Plans: 4- / 2-year college	18% / 52%	47% / 31%	56% / 19%
At-risk indicators (2002-03)			
Grade 9-12 Dropout Rate	3.8%	5.1%	3.3%
Attendance Rate	92.5%	93.9%	93.9%
Retention Rate	3.2%	4.0%	2.6%

WORCESTER STUDENT PROFILE

Success and the Close Attention of Teachers

"Afryea," a native of Africa who moved to Worcester with her family when she was a teenager, was in the first class of Massachusetts high school seniors who were required to pass the MCAS math and English/Language Arts in order to get a diploma. Now a student at a Massachusetts state college, her feelings about the MCAS, even two years after graduation from high school, are mixed. She continues to believe that the MCAS should not be "the only thing that should determine if the students get the diploma" — but recognizes that her desire to get to college, and therefore her need to pass the MCAS, pushed her to work hard and learn more throughout high school.

The biggest challenge for Afryea was the disjuncture she faced between the MCAS and her school work: what was tested on the MCAS, she says, was very different from what she was learning in her classes. In fact, she was doing well in her classes but failed the MCAS when she took it the first time. To pass the MCAS meant that she had to put a great deal of focus on preparing for the tests, she says, and less on the curricula being taught in her regular classes.

The sharper, more intensive focus on preparing for the MCAS paid off for Afryea. She passed the ELA portion of the MCAS on her second try, jumping from a 218 on the initial 10th grade MCAS to a 234 on her next attempt. It took her four tries to pass the math test, starting with a 212 on her initial effort and finally achieving a 230 on her third retest. Afryea credits a number of factors outside of her regular classes as playing important roles in passing the MCAS: in-school extra-help classes, after-school support, summer programs, the work of her teachers, the support of her friends (a community of students also from her home country who first told her about the after-school help that was available), and her persistent and positive attitude. These various resources — and the high stakes connected to the MCAS — made her work harder and learn more in high school, she says, than she might have without the MCAS.

Interestingly, it was not just the availability of remediation and preparation programs that helped Afryea, but the different ways in which teachers interacted with students outside of class that she found most beneficial: "Teachers out of their classroom are different, too, because it's like they get more personal, they get more closer. They get to know where your problems really are and they get to teach you the way they want to teach you." Feeling a personal connection to the teachers is very important to Afryea; in her native country, "teachers are like parents" and Afryea believes that the relationship should be the same here. Her experience working with teachers in MCAS support programs was that they acted like parents, constantly there and working with her, always pushing her to work harder. And they went beyond simply focusing on MCAS remediation. "They were willing," she told KTP interviewers, "to help us with any other classes we were struggling with." She credits this close attention from dedicated teachers with helping her to pass the MCAS and get to where she is today — in a four-year college working toward a Bachelors degree.

Burncoat High School, Worcester

School and Community Profile

Burncoat Senior High School (BHS) is one of the four comprehensive high schools in the Worcester Public School system. Because Burncoat is fed by the largest public housing project in Worcester, the balance of its population is shifting over time toward minority students. BHS has begun reorganizing the school structure around three academies as part of the WPS Smaller Learning Communities Initiative: the Patriot Academy of Mathematics and Science, the Academy of Business and Finance, and the Fine Arts Academy.

Whole School Approach

Although BHS's success is due in part to district-inspired remediation programs, the school has been simultaneously engaged in larger school reform efforts aimed at raising academic standards and overall student success. As a result, remediation approaches and strategies have not been implemented in isolation. Rather, they fit under an umbrella of broader changes at BHS, including a large-scale effort to restructure high schools into more personalized learning environments, first under the district's Carnegie Foundation grant, and continuing under the federal Smaller Learning Communities initiative. These initiatives are described by the BHS Principal as, "nicely fitting together under the broad definition of school changes for improved learning. The Carnegie grant now supports the MCAS changes we already had on line. … The Smaller Learning Communities initiative will also support that. It's only going to help us better identify kids [who need extra help]."

2003-2004 School Profile Information	School	District	State
	Burncoat Senior HS	Worcester	Massachusetts
Number of Students	1,299	25,055	980,818
Number of Teachers	89	1,892	72,062
Teacher/ Student Ratio	14.6 to 1	13.2 to 1	13.6 to 1
% Core academic teachers highly qualified	83.9%	92.4%	93.9%
% Minority	49.6%	51.8%	25.4%
% Percent Low Income	43.6%	60.4%	27.2%
% Special Education	16.9%	18.3%	15.6%
% Limited English Proficient	7.9%	13.5%	5.0%
Post Secondary Plans: 4- / 2-year college	52% / 29%	47% / 31%	56% / 19%
At-risk indicators (2002-03)			
Grade 9-12 Dropout Rate	5.5%	5.1%	3.3%
Attendance Rate	91.4%	93.9%	93.9%
Retention Rate	7.6%	4.0%	2.6%

Worcester Public Schools Remediation Program Structure

In-School Model

Type of instruction:	**Intensive MCAS English and math tutoring classes**
Instructional content:	**ELA and math content focused around individual student needs; test taking strategies**
When offered:	**During school day**
Where offered:	**At WVHS: school classroom. At BHS: school library study room.**
Length of class/x per week:	**BHS: 50 minutes, five days per week. WVHS: Two 40-minute periods a day/five days a week, every other week.** (WVHS students meet with tutors on their academic schedule, which alternates by week with their vocational schedule.)
Elapsed initial attendance time:	**Eight to twelve weeks by fall re-test; students often continue if they don't pass**
Target audience:	**Initially, twelfth graders with failing scores in one or both content areas; as some pass, slots are filled by eleventh graders**
Size of classes:	**Typically 4-8 students**
Mandatory or voluntary:	**Mandatory attendance for all those who have not yet passed MCAS; same requirements as any class**
Part of regular class schedule:	**Yes**
What class or other time forgone for this activity:	**Very different for each student. Typically an elective or open period.**
Credit offered or not:	**Yes**
How program funded:	**Combination of state ASSP funds and district funds**

After-School Model

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**Focused ELA and math content; test taking strategies**
When offered:	**Immediately after school (2:00 p.m.)**
Where offered:	**School classroom**
Length of class/x per week:	**One hour/twice per week, followed by a half hour/twice per week for staff session**
Elapsed initial attendance time:	**Eight to twelve weeks by fall re-test; students often continue if they don't pass**
Target audience:	**During fall, eleventh and twelfth graders with failing scores in one or both content areas who can't attend in-school tutoring sessions; during FY04 also available to tenth graders beginning in the spring**
Size of classes:	**Approx eight students; fluctuates and is typically larger at key times** (e.g. as re-test approaches)
Mandatory or voluntary:	**Voluntary**
Part of regular class schedule:	**No**
What class or other time forgone for this activity:	**Accommodations are made with coaches and extra-curricula advisors to allow students to participate in both if possible.**
Credit offered or not:	**No**
How program funded:	**State ASSP funds**

Special Note on Worcester Schools

Keep the Promise researchers looked in detail at two focus high schools in each of the three districts — Boston, Springfield and Worcester. For Boston and Springfield, focus school program charts are reported separately, because each school designed and manages their programs individually. For Worcester, because much of the program design and management is consistent district-wide, program charts, are provided only once. Any significant differences between the two focus schools are noted in the tables.

Summer Models

Two main options are available to students over the summer, depending on their grade level. Ninth and tenth graders have access to the MCAS Summer School, and eleventh and twelfth graders (as well as recent graduates still hoping to pass MCAS) can attend the district-wide College Community Connection Program. *(See program summaries to the right.)*

Other Models

MCAS Nights

The Worcester Public Schools started a new program this past year called MCAS Nights, which was created to attract "hard to reach" eleventh and twelfth graders in need of MCAS remediation, but unable to attend the in-school or after-school program options. *(See Question 9 for more information on this promising remediation strategy.)*

Saturday MCAS

Worcester Public Schools offered a new Saturday MCAS tutoring and career exploration program this year, which was created to appeal to those students with school absentee problems who perhaps need an non-high school campus setting to succeed in remediation. The program operated in conjunction with Pride Productions Inc, a community agency that promotes minority achievement. *(See Question 9 for more information on this promising remediation strategy.)*

BHS MCAS Summer School Program

Type of instruction:	**MCAS English and math tutoring classes**
Instructional content:	**English and math**
When offered:	**July**
Where offered:	**BHS/WVHS classrooms**
Length of class/x per week:	**8:30 - 11:30 each morning, four days per week**
Elapsed initial attendance time:	**Four weeks**
Target audience:	**Ninth and tenth graders identified as at-risk from eighth grade MCAS scores and by middle/high school teachers. Older students also invited if they can't attend another program.**
Size of classes:	**Approximately 12-18 students per class**
Mandatory or voluntary:	**Optional to take program, mandatory attendance if student does take program**
Part of regular class schedule:	**N/A**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**Yes under certain circumstances**
How program funded:	**Combined ASSP, district and other grant funds**

College Community Connection Summer Program

Type of instruction:	**Academic support and connecting activities**
Instructional content:	**MCAS support and work internships**
When offered:	**July**
Where offered:	**One of eleven local colleges, universities or agencies in Worcester**
Length of class/x per week:	**MCAS remediation in the morning from 8:30 - 11:30, followed by internships in afternoons from 12:00 - 3:00; Monday - Thursday**
Elapsed initial attendance time:	**Four weeks**
Target audience:	**Eleventh and twelfth graders**
Size of classes:	**Approximately 12 students in class. Internships are individual placements with one to five students per site.**
Mandatory or voluntary:	**Optional to take program, mandatory attendance if student does take program**
Part of regular class schedule:	**N/A**
What class or other time forgone for this activity:	**N/A**
Credit offered or not:	**Yes under certain circumstances**
How program funded:	**ASSP funds**

Appendix

Sample Research from Mass Insight Education's Building Blocks Initiative for Standards-Based Reform

Since 2000-2001, Mass Insight Education has conducted research into the organizational and instructional strategies of nearly 40 "Vanguard" model schools and districts in the Commonwealth. All Vanguard models were producing achievement results that were significantly superior to other schools and districts serving similar student populations at the time they were named, as measured by MCAS scores averaged over the previous two years. Vanguard models have also been selected (by an independent panel of nine expert judges) because they clearly demonstrate a set of coherent, focused strategies that have helped to produce these exemplary achievement outcomes.

We have included two sample Building Blocks strategies in this Appendix. One describes the model in place at University Park Campus School in Worcester — a "regular" (non-charter) public school that serves students from one of the city's most disadvantaged neighborhoods. The other describes strategies put in place by Blackstone Valley Regional Vocational Technical School. Both schools offer vivid evidence that students entering middle and high school with substantially below-grade-level skills can make up those deficits by the time they graduate. They both use remediation strategies that go way beyond traditional notions of after-school classes, and in fact have incorporated some of the most effective elements of remediation programs (individualized student attention, self-paced mastery learning, focused use of data, etc.) into the heart of their whole-school approach.

Strategies from 2001-2004, including the University Park strategies, are now available at www.buildingblocks.org. Strategies from the 2005 round of research, including the Blackstone Valley strategy, are being posted to the site over the course of the 2005-2006 school year.

Vanguard Model Practice / Blackstone Valley Regional Vocational Technical High School

As many as 40% of incoming students at Blackstone Valley Regional Vocational Technical High School (BVT) begin their freshman year reading at a fourth-grade level. Recognizing reading skills as the key to students' overall success, the administration hired a team of specialists to develop a data-driven remediation program. In addition to providing individualized reading services, the school also integrated reading instruction and support across the academic and vocational curriculum. The dual approach — remediation and integration — proved so effective that it was replicated in math and writing. Valley Tech produces student achievement outcomes that are dramatically higher than similar voc-tech schools; those results are available at a number of sites, including www.doe.mass.edu, www.boston.com, and www.just4kids.org.

Creating a dual approach to the development of basic skills: individualized remediation and reinforcement across the curriculum

Note: This material is based on research conducted in 2005. These strategies and nearly 100 others like it are available at www.buildingblocks.org.

Step One: Administer diagnostic assessments to target remedial instruction and measure progress. All incoming freshmen are given Stanford diagnostic exams in reading and math in March of their eighth-grade year. The performance data from these assessments enable the school to schedule at-risk students into one of several remedial programs from the day they arrive.

The Blueprint:

1. **Use a variety of diagnostic tools to assess the needs of new students.** The BVT staff relies upon Stanford Diagnostic Reading and Math tests, as well as a Wilson Reading screening, to assess the skill levels of incoming students. Assistant Principal and Curriculum Coordinator Anthony Steele feels the Stanford is a more accurate measure of reading skills than the 7th or 8th grade MCAS. A team composed of staff from the reading, math, guidance and student services departments reviews the data, together with existing IEP and 504 plans. Students who score poorly on the Wilson screening are further tested with a more extensive Wilson tool, the WADE. Guidance counselors also conduct transition meetings with each individual student at their sending schools.

2. **Schedule the appropriate remedial coursework into students' school day, and utilize software to individualize the program.** Any student who scores two or more years below grade level in reading is automatically scheduled into one of three types of remedial reading classes: a standard reading class with an emphasis on comprehension, small group instruction, or individual instruction. All the classes include computer reading labs using SuccessMaker software, which individualizes the instruction program for each student. Students showing low achievement in math are scheduled into small-group remedial math in addition to their regular math class. The remedial class takes the place of an elective. These classes utilize Riverdeep's "Destination Math" software, a program of sequenced, prescriptive instruction and assessments.

3. **Retest students regularly and monitor MCAS data to measure individual student progress.** BVT follows a schedule of diagnostics and assessments at each grade level, with a special emphasis on the progress of at-risk students. The Stanford Diagnostic reading and math tests are given again to all freshmen in the spring. Reading students in grades ten, eleven and twelve are also retested. Students remain in reading classes if they score two or more years below grade level. Individualized Student Success Plans are developed for all students who fail the tenth grade MCAS. These students are immediately rescheduled into remedial sessions during the school day. Parents are also notified by mail about after-school help sessions.

Step Two: Move to a modified long-block schedule and lengthen the school year to allow for additional academic instructional time.

BVT students split their time between academic and vocational subjects. In order to bring up students' academic skills, administrators had to build more instructional time into the schedule. They replaced their old short block schedule with a modified long block schedule, and negotiated the phase-in of a longer school year.

The Blueprint:

1. **Refine the block schedule to increase time on math and English.** By replacing the short block schedule with long blocks, administrators were able to give teachers extended periods for instruction and maximize time spent on math and English. All freshmen and sophomores attend double periods (or "long blocks") in both subjects three days a week. Upper-level students attend the long blocks in math and English twice a week. The new schedule also reduced the amount of time allowed for changing classes by nine minutes a day, thereby gaining an additional 14.5 hours of instructional time annually.

2. **Negotiate a longer school year.** Since word got out that Superintendent Michael Fitzpatrick successfully negotiated a 15-day increase in BVT's school year with the local teacher's union, some 135 school systems from around the country have contacted his office asking for pointers. The key to the 1995 contract change, Fitzpatrick said, was the system's ability to pay teachers more money for the additional time. The state does not provide additional funding for the longer year, but the 13 communities in BVT's regional district agreed to foot the bill. After a gradual phase-in, the school year was fully extended to 195 days in 1997-98. Two of the additional days are solely for teachers' planning and professional development purposes.

Step Three: Create resource "toolboxes" that aid vocational as well as academic teachers in integrating reading, writing and math into their lesson plans

BVT faculty work together to merge academics and vocational training by emphasizing reading, writing and math skills across the curriculum. Using staff-developed resource binders, or "toolboxes," vocational teachers are able to work math problems into their shop instruction, and history teachers are able to hold students to a higher standard in writing assignments. The toolbox is "a way of bringing everyone onto the same page," said Nancy Lea, the Reading Team Leader. "It gives us a common language."

The Blueprint:

1. **Assemble multi-disciplinary teams to identify specific areas in need of improvement.** BVT used teams of teachers to evaluate MCAS data for each discipline and identify weaknesses in basic skills. The teams then focused their efforts on finding examples of outstanding teaching practices in the identified areas. Participating teachers received small stipends for their time.

2. **Create teacher "toolboxes" that address weak areas.** The teams assembled the collected information in binders divided into three sections: a how-to section on basic skills; practice problems/exercises for rote skills; concrete applications for integration into other subjects. Teachers worked together to develop specific examples of how to apply the concepts in different class settings. For example, proportions might be reinforced in auto shop with algebra problems asking students to figure the rate at which a car is burning oil or losing tire tread. A machine shop instructor might ask students for daily written reflections of their work. The finished toolboxes were tested in a limited pilot program first, and their effectiveness measured with pre- and post-tests.

3. **Train teachers in use of toolboxes to ensure instructional consistency.** The development teams trained the entire staff in how to use the toolboxes before their implementation system-wide. All teachers, for example, received training in the John Collins writing method, enabling them to use the same rubric in every classroom. The consistency is extremely helpful for students — the rubric "becomes part of their being — they expect it right away," said Science Team Leader Francine Breger.

4. **Seek additional integration opportunities through partnerships with elementary and middle schools.** As part of its integration effort, BVT has incorporated themes developed around scientific expeditions conducted by the nationally acclaimed JASON Project. Teachers work cooperatively with elementary and middle schools on projects that put BVT students at the head of the classroom. As part of an Alaska unit, for example, carpentry students helped elementary students build an Inuit home using components constructed by various tech departments. Asking students to teach requires them to truly master the material and inevitably boosts their self-confidence, teachers said.

Vanguard Model / University Park Campus School, Worcester

Despite daunting demographics, not a single Class of 2007 student at University Park Campus School failed the 2005 English or math 10th grade MCAS tests. The roots for this stunning success go back to 1996, when Donna Rodrigues was given the rare opportunity of creating a small, urban neighborhood school from scratch. Her ambitious goal: to prepare and enable each one of her students to attend college. The result is a tight-knit school serving 220 students in grades 7-12 with small classes, a longer school day, a partnership with nearby Clark University, a collegial faculty, and an environment where everyone is deeply invested in high student achievement.

Creating a neighborhood high school that meets the needs of disadvantaged urban students.

Note: This material is based on research conducted in 2001-2002. It was updated two years later. These strategies and nearly 100 others like it are available at www.buildingblocks.org.

Step One: Develop a schedule that works for students — and promotes good teaching. 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. (Note: Rodrigues has since left the school to join Jobs for the Future, a Boston non-profit; the current principal at the school in December, 2005 is June Eressy.)

The Blueprint:

1. **Provide a longer school day.** The official school day runs from 8:00 a.m. to 4:00 p.m. on Monday, Tuesday, Thursday, and Friday — with before- and after-school programs keeping the school open from 7:30 a.m. to as late as 6:00 p.m. The school does, of course, have to pay for these hours; teachers receive 19% additional compensation because of the extended day. Like all aspects of the school's programming, the longer day was approved by both the school committee and the local teachers union. (Note: Due to budget cuts in the 2002-2003 school year, UPCS has since had to eliminate its longer day. The school continues to offer before- and after-school programming, but regular school hours were cut back.)

2. **Use Wednesdays for common planning and special help.** The Wednesday schedule runs from 8:30 a.m. to 2:30 p.m. (again with before- and after-school activities keeping school doors open even longer). Specialists come in Wednesday morning, which frees up classroom teachers for common planning time and data analysis. On Wednesday afternoons, students are grouped with teachers to focus on areas of special need. "Wednesday is just about the craziest day," says Rodrigues. But it was the only way to fit in common planning time — an essential component of a strong school.

3. **Teach in 90-minute blocks.** The longer blocks of time 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.

Step Two: Encourage close student-teacher relationships

"It's all about personalization — how many adults in the building touch each child," insists Principal Donna Rodrigues. When students know that at least one adult is there to provide guidance and to keep an eye on them, they work actively to earn and maintain the respect of that adult. They exhibit improved behavior, and they put much greater effort into their schoolwork. A walk around the school provides proof: All students in all classrooms appear to be on task, taking an active role in the learning process.

The Blueprint:

1. **Keep the school small.** With just 220 students, University Park Campus School maintains a small, family-like feel. Every teacher knows every student and vice versa. When the school first opened in 1997, with just two seventh-grade classrooms, it held just 35 students. Each year, the school added one new grade level. In the 2002-03 school year, with the addition of twelfth-grade, the school reached full growth. (Note: While not all schools can start small, they can break apart into smaller learning communities — a practice Rodrigues highly encourages.)

2. **Keep class sizes small.** A typical UPCS class serves fewer than 20 students. The result: Teachers can and do give a hands-on focus to classes, and every student gets close attention.

3. **Loop students a minimum of two years with the same teacher.** Transitioning from one teacher to another each year wastes valuable learning time, as students get to know the new adult, and the teacher discovers more about the students, their capabilities, and their needs. With looping, students start most of their years at UPCS with a familiar adult, and learning commences immediately.

4. **Create a model that serves students in grades 7-12.** Even harder than getting to know a new teacher is getting familiar with the systems and rules of a whole new school. A grade seven-to-twelve school allows students to stay with the same school "family" for six years.

   It also gives older students a chance to mentor - both academically and socially, formally and informally — the younger students. At UPCS, every seventh-grader is paired with an older student, who helps the younger student understand and reach the school's rigorous academic expectations (all classes are honors classes) and behavior rules — so that they become engrained in the school culture. "The eleventh-graders here now didn't come in this way," recalls Principal Rodrigues. They were hitting, swearing, and acting out in other ways — but the culture of the school, promoted by both teachers and students, discourages that type of behavior.

5. **Provide a required August Academy for incoming seventh-graders.** Every August seventh-graders join UPCS teachers, the principal, and some older students for an August Academy. Teachers determine students' academic level, and students are introduced to the requirements, expectations, and opportunities of the school. The experience also helps students, who are entering from a broad range of feeder schools, get acquainted, so that they don't enter school without knowing anyone else. The English teacher involves students in summer reading, and the math teacher gets students started on CCC (the Computer Corporation Curriculum). All incoming students are required to participate. The program is funded through a Balfour Foundation grant.

6. **Encourage teachers to eat lunch with students.** At UPCS, adult attention is not limited to the classroom. Teachers sit down to lunch at the same tables as the students in the small cafeteria. (Teachers are encouraged, though not required, to do so.) Teachers and students seem clearly at ease with one another — chatting amiably about such mundane topics as the nutritional value of a bag of chips and the latest fashions.

Step Three: Build strong connections to the neighborhood

By serving as an active force within the neighborhood, UPCS leverages additional resources to help students, and students develop a greater sense of pride in their school and community.

The Blueprint:

1. **Limit student enrollment to neighborhood kids only.** UPCS enrollment is limited to residents of the Main South neighborhood — a fairly rough, somewhat crime-ridden part of Worcester. All students walk to school — an option clearly not available to all schools. But teachers at UPCS claim that it makes a significant difference. Long bus rides

do not provide an optimal start to a long school day, but walkers arrive ready to learn, said one teacher. Walkers also have more flexibility: they can stay late or arrive early without the worry of transportation issues.

2. **Build formal partnerships with the community.** UPCS enjoys an unusually strong partnership with Clark University. In fact, the university played a key role in getting the school started, and it continues to help the school — by providing interns to serve as tutors and mentors, professional development to teachers, free classes to eleventh — and twelfth-graders, and free tuition to all neighborhood students accepted by the university.

3. **Be visible in the neighborhood.** Donna Rodrigues makes herself known in the community. She serves as a strong advocate — leading a grassroots effort to build a much-needed health center in the neighborhood, for example. She offers a friendly presence — walking door to door to meet parents of prospective students or to discuss neighborhood issues. She even, as necessary, plays a policing role — speaking up to local gang members who were harassing her students, for instance.

Step Four: Encourage parental involvement by meeting the needs of families

Even before the school opened, outreach was a key ingredient in the success of the school. Because UPCS was a new enterprise, Rodrigues had to recruit students to attend. To convince parents to enroll their children, Rodrigues literally went door to door describing her plans. "The first year, this was a leap of faith for parents," recalls Rodrigues. But parents quickly jumped on board — captivated by the opportunities of a small learning environment and the partnership with Clark University.

The Blueprint:

1. **Involve parents even before the school year begins.** At UPCS, parent involvement is a requirement - not an option. Demand for the school is very high, and before a student can apply to join the school, a parent or guardian must attend an introductory meeting. At this meeting, Rodrigues makes clear the expectations — both academic and behavioral — and opportunities of her school. Students and their parents then submit an application, and students are selected by lottery. Around 50% (though it varies quite a bit year to year) of eligible families apply each year.

2. **Call parents often - with good news and bad.** To sustain parental involvement, the principal and teachers call parents often. Rodrigues expects teachers to call parents the minute they see a student in trouble. "I don't want the end of term to come with a student failing — and to find out that the parent didn't get a phone call." But she also encourages teachers to call with good news — when a student is showing significant improvement, meets a particular benchmark, etc.

3. **Provide or promote services for parents.** When some parents complained about the waiting list for the GED and ESL programs at the downtown community centers, Rodrigues convinced the Greater Worcester Community Foundation to help create new programs right at the school. The program (now funded by the Worcester Public Schools) doesn't just educate parents; it also gets them into their child's school — increasing their interest in their children's learning.

4. **Offer translators.** When non-English speaking parents are expected to attend meetings, Rodrigues always provides translators.

5. **Accommodate parents' needs and schedules.** Rodrigues knows that parents can't always visit the school during the day, so she arranges meetings at night or on Saturday mornings. She also provides babysitters, so that parents can bring younger children. The result: Rodrigues gets 100% parental participation in the life of the school. "They come because it's part of the relationship," notes Rodrigues.

6. **Create a relaxed, parent-friendly atmosphere.** Despite her non-relenting "no-excuses" approach to education, Rodrigues is friendly and approachable. Most days, she doesn't get too dressed up, because she wants parents to feel comfortable with her. Parents know they are welcome, and they are happy to be asked to take part in their child's education.

Step Five: Let the teachers focus on teaching

Teachers who join UPCS know that they'll be working longer hours than they might at other schools. But they also know that they won't have to deal with various distracting issues — like discipline, regulations, and internal politics — that they might at other locations. As one educator said of the two teachers who joined the school the first year: They "wanted to get away from the bells. They just wanted to teach." And at UPCS, they got just that.

The Blueprint:

1. **Take discipline issues out of the classroom.** Rodgrigues takes charge of discipline issues — so that teachers can focus on teaching. The small family-like environment of the school helps control behavior problems (students don't want to disappoint the principal or teachers). But Rodrigues is also careful to set clear expectations early, and she responds immediately and consistently to behavior problems. Kids understand from the very start that boxing and street language do not have a place on school grounds. They know that in school, they "need to verbalize and negotiate," in Rodrigues's words. "And if they can't do it, they need to find a teacher who can help." Because Rodrigues responds immediately to behavior problems, conflicts have no opportunity to escalate — and students quickly learn that she will never turn a blind eye to behavior transgressions.

2. **Encourage staff collaboration.** Like the student-to-teacher relationships, teacher-to-teacher relationships are also close-knit. Teachers constantly seek advice from one another. They sit in on other teachers' classes to learn new strategies, or they welcome other teachers into their class to team-teach a particular unit. Whenever needed, Rodrigues is ready and willing to fill in for a teacher to encourage collegiality.

3. **Let teachers own the curriculum.** Rodrigues admits that she doesn't want the responsibility of taking charge of the curriculum. She treats teachers as the experts in their subject areas, and lets them plan the curriculum. She also encourages teachers to go to every conference they want, and she covers their classes while they are gone.

4. **Provide teachers with plenty of positive feedback.** Rodrigues isn't shy about helping teachers get constructive assistance when they need to improve — but she's also quick to offer praise when she sees them working well in their classrooms.

Final note: Over and over again, Principal Rodrigues hears educators, amazed at the achievement of students at the school, dismiss the replicability of the school's approach. It is true that UPCS enjoys certain advantages — including the small school environment where all of the students have parents involved enough to at least show up at an initial orientation. But this reality remains: 66% of the school population is minority, 65% do not speak English at home, and 78% receive free lunch; all of the students hail from the Main South neighborhood — the most crime-ridden area of Worcester; and 90% of the first wave of seventh-graders entered with a third-grade reading level or below. Yet, despite all of this, students excel. Such achievement isn't merely the result of a few fortunate circumstances. As Rodrigues continually asserts, the school employs research-driven, largely replicable strategies that work.

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The Mass Insight Education and Research Institute is a nonprofit organization, founded in 1997, that is focused on improving student achievement in public schools through the effective implementation of standards-based reform.

Our work supports and is informed by close partnerships with 30 school districts in Massachusetts (the Coalition for Higher Standards), representing more than 300,000 students. Our programs concentrate on school reform in Massachusetts, but have been held up as national models and increasingly will support effective implementation of higher standards in other states.

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Researchers and communicators: A key source of information and field research on education reform in Massachusetts — for interested stakeholders at all levels, from parents to policymakers — and a national resource for information on the effective implementation of higher standards, through our Building Blocks Initiative for Standards-Based Reform.

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See www.massinsight.org and www.buildingblocks.org for details.

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